

# CONTENIDO

## Introducción

- Esto es CoroKey
- Lista de referencia cruzada de material
- Información general

## Torneado

- Cómo se utiliza esta guía
- Plaquetas negativas exteriores/interiores
- Portaherramientas para plaquetas negativas
- Plaquetas positivas interiores/exteriores
- Portaherramientas para plaquetas positivas

## Tronzado y ranurado

- Cómo se utiliza esta guía
- Tronzado poco profundo
- Tronzado medio
- Tronzado profundo
- Ranurado
- Perfilado
- Torneado
- Portaherramientas

## Roscado

- Roscado exterior
- Roscado interior

## Fresado

- Cómo se utiliza esta guía
- Planeado
- Fresado en escuadra
- Fresado de perfiles y planeado
- Herramientas para fresar con cabeza intercambiable

## Taladrado

- Cómo se utiliza esta guía
- Brocas de metal duro
- Brocas de plaquita intercambiable

## Sistema de herramientas modular

## Consejos prácticos

## Fórmulas

## Índice

|     | P   | M   | K   | N   | S   | H   |
|-----|-----|-----|-----|-----|-----|-----|
| 2   |     |     |     |     |     |     |
| 6   |     |     |     |     |     |     |
| 8   |     |     |     |     |     |     |
| 12  |     |     |     |     |     |     |
| 22  |     |     |     |     |     |     |
| 58  | 24  | 32  | 40  | –   | 50  | 56  |
| 96  | 70  | 76  | 82  | 88  | 90  | 94  |
| 106 |     |     |     |     |     |     |
| 106 | 108 | 108 | –   | 108 | 108 | –   |
|     | 110 | 110 | 110 | –   | 110 | –   |
|     | 112 | 112 | 112 | 112 | 112 | –   |
|     | 114 | 114 | 114 | 114 | 114 | 114 |
|     | 116 | 116 | 116 | 118 | 116 | 116 |
| 122 | 120 | 120 | 120 | 120 | 120 | –   |
| 132 |     |     |     |     |     |     |
|     | 134 | 134 | 134 | 134 | 134 | –   |
|     | 136 | 136 | 136 | 136 | 136 | –   |
| 138 |     |     |     |     |     |     |
| 140 | 145 | 145 | 145 | 169 | 148 | 145 |
|     | 151 | 151 | 151 | 156 | 156 | 151 |
|     | 163 | 163 | 163 | 166 | 166 | 163 |
|     | 171 | 171 | 171 | 171 | 171 | 171 |
| 178 |     |     |     |     |     |     |
| 179 | 182 | 182 | 182 | 182 | 182 | 182 |
|     | 194 | 194 | 194 | 194 | 194 | 194 |
| 202 |     |     |     |     |     |     |
| 204 |     |     |     |     |     |     |
| 210 |     |     |     |     |     |     |
| 213 |     |     |     |     |     |     |



# ESTO ES COROKEY

**FÁCIL DE ELEGIR**

**FÁCIL DE USAR**

## 1. MATERIALES DE LAS PIEZAS

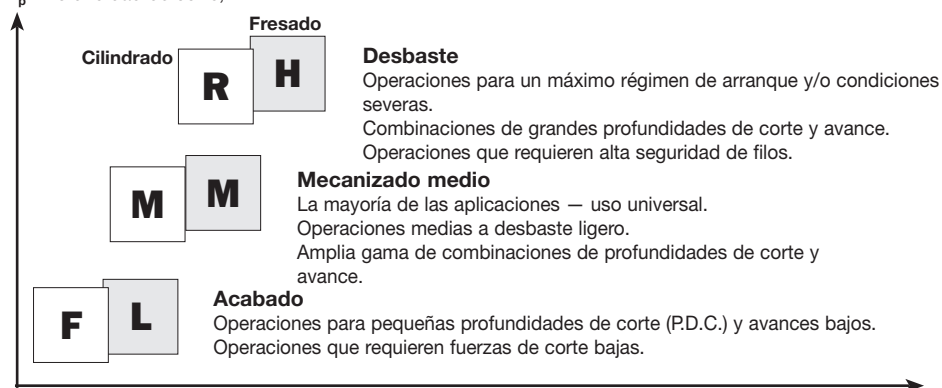
|              |                                                                                                                      |              |                                                                                                       |
|--------------|----------------------------------------------------------------------------------------------------------------------|--------------|-------------------------------------------------------------------------------------------------------|
| <b>ISO P</b> | <b>Acero</b><br>Material de referencia:<br>Acero de baja aleación, CMC02.1/ HB 180                                   | <b>ISO N</b> | <b>Aleaciones de aluminio</b><br>Material de referencia:<br>Fundición, no envejecida, CMC 30.21/HB 75 |
| <b>ISO M</b> | <b>Acero inoxidable</b><br>Material de referencia:<br>Acero inoxidable austenítico, CMC 05.21/ HB 180                | <b>ISO S</b> | <b>Aleaciones termorresistentes</b><br>Material de referencia:<br>Base de Ni, CMC 20.22/HB 350        |
| <b>ISO K</b> | <b>Fundición</b><br>Material de referencia:<br>Fundición gris, CMC 08.2/HB 220<br>Fundición nodular, CMC 09.2/HB 250 | <b>ISO H</b> | <b>Acero templado</b><br>Material de referencia:<br>Templado y revenido, CMC 04.1/HRC 60              |

Sandvik Coromant introducirá de manera gradual una nueva clasificación de materiales con códigos MC que sustituirá al sistema actual de códigos CMC.

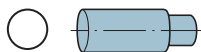
Los códigos MC, con más subgrupos, ofrecerán recomendaciones de datos de corte más específicas que las que se consiguen con la clasificación CMC.

## 2. TIPO DE APLICACIÓN (CILINDRADO / FRESADO)

$a_p$  Profundidad de corte, mm

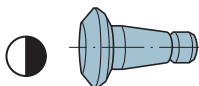


## 3. CONDICIONES DE MECANIZADO



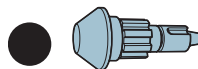
### Condiciones buenas

Cortes continuos. Altas velocidades. Pieza premechanizada. Excelente sujeción de la pieza. Pequeños voladizos.



### Condiciones normales

Perfilados. Velocidades moderadas. Pieza forjada o fundida. Buena sujeción de la pieza.



### Condiciones difíciles

Cortes interrumpidos. Bajas velocidades. Costra de fundición o escama de forjado pesada en la pieza. Mala sujeción de la pieza.



# ESTO ES COROKEY



**FÁCIL DE ELEGIR.**  
**FÁCIL DE USAR.**

## 4. DATOS DE CORTE

En las cajas de las plaquitas se incluyen valores de partida recomendados para velocidad de corte y avance, junto con la gama de trabajo (máx. – mín.), lo que facilita y agiliza el inicio del mecanizado.



Material de la pieza de trabajo  
Tipo de aplicación  
Condiciones de mecanizado

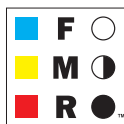
Plaquetas para  
cilindrar

Plaquetas para  
fresar

$a_p$  = Profundidad de corte (mm, pulgada)  
 $f_n$  = Avance (mm/r, pulgada/r)  
 $v_c$  = Velocidad de corte (m/min, pie/min)

$f_z$  = Avance/diente (mm/pulgada)  
 $v_c$  = Velocidad de corte (m/min, pie/min)





# ESTO ES COROKEY

FÁCIL DE ELEGIR

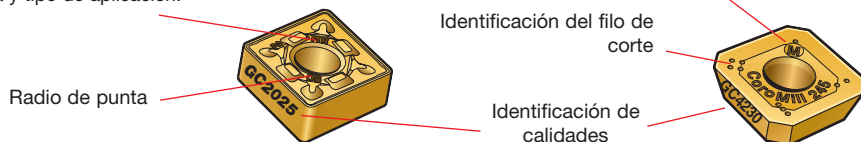
FÁCIL DE USAR

## 5. IDENTIFICACIÓN DE LAS PLAQUITAS

Los datos de la plaquita aparecen marcados permanentemente en la misma con su geometría y su calidad, radio de punta y arista de corte.

Identificación de geometría: material de la pieza y tipo de aplicación.

Identificación de la geometría: tipo de aplicación



## 6. PRODUCTOS ESPECÍFICOS

Geometrías y calidades de plaquita especiales para condiciones de mecanizado y materiales específicos.

¡Primera elección!

| ISO/ANSI P ACERO                     |                                       |                                      |
|--------------------------------------|---------------------------------------|--------------------------------------|
| Acabado                              | Mecanizado medio                      | Desbaste                             |
| -WF / GC4215<br>-PF / GC4215         | -WMX / GC4205<br>-PM / GC4215         | WR / GC4205<br>-PR / GC4215          |
| <br>-WF / GC4215<br><br>-PF / GC4215 | <br>-WMX / GC4215<br><br>-PM / GC4225 | <br>-WR / GC4215<br><br>-PR / GC4225 |
| -WF / GC4225<br>-PF / GC4225         | -WMX / GC4225<br>-PM / GC4235         | -WR / GC4225<br>-PR / GC4235         |

Una sola cara  
Doble cara  
Una sola cara

CONDICIONES

## ¿Cómo puede mejorarla?

### ¿Qué significa productividad?

Hay varias definiciones posibles de productividad, para Sandvik Coromant es la relación entre resultado e inversión.

Hacer más con menos.

El resultado se ve influido por distintos factores, como:

- Selección del método de mecanizado y del recorrido de la herramienta
- Elección de herramienta, geometría de plaquita y calidad de metal duro
- Datos de corte (velocidad, avance y profundidad de corte)
- Bajo número de rechazos
- Menos cambios de herramienta, más tiempo de mecanizado
- Disponibilidad de productos, menos inventario
- Formación técnica, mejores conocimientos

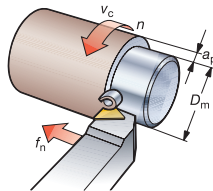
Un factor clave es la velocidad de arranque de viruta "Q", que se puede medir como cantidad de material eliminado en un periodo de tiempo dado • (cm<sup>3</sup>/min).



### Torneado:

Velocidad de arranque de viruta cm<sup>3</sup>/min

$$Q = v_c \times a_p \times f_n$$



$a_e$  = profundidad de corte radial (mm)

$a_p$  = profundidad de corte axial (mm)

$D_c$  = diámetro de broca (mm)

$f_n$  = avance (mm/rev)

$n$  = velocidad del husillo (rpm)

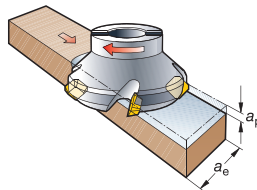
$v_c$  = velocidad de corte (m/min)

$v_f$  = avance de mesa (mm/min)

### Fresado:

Velocidad de arranque de viruta cm<sup>3</sup>/min

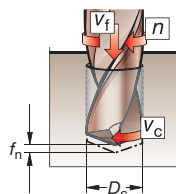
$$Q = \frac{a_p \times a_e \times v_f}{1000}$$



### Drilling:

Metal removal rate cm<sup>3</sup>/min

$$Q = \frac{v_c \times D_c \times f_n}{4}$$





# Lista de referencia cruzada de material

| CMC <sup>(1)</sup> | Gran<br>Bretaña   | Suecia | EE UU     | Alemania          | Francia    | Italia      | España      | Japón           |               |                  |
|--------------------|-------------------|--------|-----------|-------------------|------------|-------------|-------------|-----------------|---------------|------------------|
|                    | Estándar          |        |           |                   |            |             |             |                 |               |                  |
|                    | BS                | EN     | SS        | AISI/SAE          | W.-nr.     | DIN         | AFNOR       | UNI             | UNE           | JIS              |
| ISO<br>P<br>02.1   | 4360 43C          |        | 1412      | A573-81           | 1.0144     | S275J2G3    | E 28-3      | -               | -             | SM 400A;B;C      |
|                    | 4360 50B          |        | 2132      | -                 | 1.0570     | S355J2G3+CP | E36-3       | Fe52BFN/Fe52CFN | -             | SM490A;B;C;YA;YB |
|                    | 150 M 19          |        | 2172      | 5120              | 1.0841     | S355J2G3    | 20 MC 5     | Fe52            | F-431         | -                |
|                    | 250A53            | 45     | 2085      | 9255              | 1.5026     | 55Si7       | 55S7        | 55Si8           | 56Si7         | -                |
|                    | -                 | -      | -         | 9262              | 1.0961     | 60SiCr7     | 60SC7       | 60SiCr8         | 60SiCr8       | -                |
|                    | 534A99            | 31     | 2258      | 52100             | 1.3505     | 100Cr6      | 100C6       | 100Cr6          | F.131         | SUJ2             |
|                    | 1501-240          | -      | 2912      | ASTM A204GrA      | 1.5415     | 16Mo3       | 15D3        | 16Mo3KW         | 16Mo3         | -                |
|                    | 1503-245-420      | -      | -         | 4520              | 1.5423     | 16Mo5       | -           | 16Mo5           | 16Mo5         | -                |
|                    | -                 | -      | -         | ASTM A350LF5      | 1.5622     | 14Ni6       | 16N6        | 14Ni6           | 15Ni6         | -                |
|                    | 805M20            | 362    | 2506      | 8620              | 1.6523     | 21NiCrMo2   | 20NCD2      | 20NiCrMo2       | 20NiCrMo2     | SNCM220(H)       |
|                    | 311-Type 7        | -      | -         | 8740              | 1.6546     | 40NiCrMo22  | -           | 40NiCrMo2(KB)   | 40NiCrMo2     | SNCM240          |
|                    | 820A16            | -      | -         | -                 | 1.6587     | 17CrNiMo6   | 18NCD6      | -               | 14NiCrMo13    | -                |
|                    | 523M15            | -      | -         | 5015              | 1.7015     | 15Cr3       | 12C3        | -               | -             | SCr415(H)        |
|                    | -                 | -      | 2245      | 5140              | 1.7045     | 42Cr4       | -           | -               | 42Cr4         | SCr440           |
|                    | 527A60            | 48     | -         | 5155              | 1.7176     | 55Cr3       | 55C3        | -               | -             | SUP9(A)          |
|                    | -                 | -      | 2216      | -                 | 1.7262     | 15CrMo5     | 12CD4       | -               | 12CrMo4       | SCM415(H)        |
|                    | 1501-620Gr27      | -      | -         | ASTM A182 F11;F12 | 1.7335     | 13CrMo4-5   | 15CD3.5     | 14CrMo4 5       | 14CrMo45      | -                |
|                    | -                 | -      | -         | ASTM A182 F22     | -          | -           | 15CD4.5     | -               | -             | -                |
|                    | 1501-622 Gr.31;45 | -      | 2218      | ASTM A182 F22     | 1.7380     | 10CrMo9 10  | 12CD9, 10   | 12CrMo9, 10     | TU.H          | -                |
|                    | 1503-660-440      | -      | -         | -                 | -          | 14MoV6 3    | -           | -               | 13MoCrV6      | -                |
|                    | 722 M 24          | -      | 2240      | -                 | 1.8515     | 31CrMo12    | 30 CD 12    | 30CrMo12        | F-1712        | -                |
|                    | 897M39            | 40C    | -         | -                 | 1.8523     | 39CrMoV13 9 | -           | 36CrMoV12       | -             | -                |
|                    | 524A14            | -      | 2092      | L1                | 1.7039     | 41CrS4      | -           | 105WCR 5        | -             | -                |
|                    | 605A32            | -      | 2108      | 8620              | 1.5419     | 22Mo4       | -           | -               | F520.S        | -                |
|                    | -                 | -      | -         | -                 | 1.7323     | 20MoCrMo16  | -           | -               | -             | -                |
|                    | 823M30            | 33     | 2512      | -                 | 1.7228     | 50CrMo4     | -           | 653M31          | -             | -                |
|                    | -                 | -      | 2127      | -                 | 1.2713     | 55NiCrMo16  | -           | -               | -             | -                |
|                    | -                 | -      | -         | -                 | 1.7139     | 16MnCrS5    | -           | -               | -             | -                |
|                    | -                 | -      | -         | -                 | 1.5755     | 31NiCr14    | -           | -               | -             | -                |
|                    | 830 M 31          | -      | 2534      | -                 | -          | 31NiCrMo134 | -           | -               | F-1270        | -                |
|                    | -                 | -      | 2550      | L6                | 1.2721     | 50NiCr13    | 55NCV6      | -               | F-528         | -                |
|                    | 816M40            | 110    | -         | 9840              | 1.6511     | 36CrNiMo4   | 40NCD3      | 38NiCrMo4(KB)   | 35NiCrMo4     | -                |
|                    | 817M40            | 24     | 2541      | 4340              | 1.6582     | 34CrNiMo6   | 35NCD6      | 35NiCrMo6(KB)   | -             | -                |
|                    | 530A32            | 18B    | -         | 5132              | 1.7033     | 34Cr4       | 32C4        | 34Cr4(KB)       | 35Cr4         | SCr430(H)        |
|                    | 530A40            | 18     | -         | 5140              | 1.7035     | 41Cr4       | 42C4        | 41Cr4           | 42Cr4         | SCr440(H)        |
|                    | (527M20)          | -      | 2511      | 5115              | 1.7131     | 16MnCr5     | 16MC5       | 16MnCr5         | 16MnCr5       | -                |
| 1717CDS110         | -                 | 2225   | 4130      | 1.7218            | 25CrMo4    | 25CD4       | 25CrMo4(KB) | 55Cr3           | SCM420;SCM430 |                  |
| 708A37             | 19B               | 2234   | 4137;4135 | 1.7220            | 34CrMo4    | 35CD4       | 35CrMo4     | 34CrMo4         | AM26CrMo4     |                  |
| 708M40             | 19A               | 2244   | 4140;4142 | 1.7223            | 41CrMo4    | 42CD4TS     | 41CrMo4     | 42CrMo4         | SCM432;SCCRM3 |                  |
| 708M40             | 19A               | 2244   | 4140      | 1.7225            | 42CrMo4    | 42CD4       | 42CrMo4     | 42CrMo4         | SCM 440       |                  |
| 722M24             | 40B               | 2240   | -         | 1.7361            | 32CrMo12   | 30CD12      | 32CrMo12    | F.124.A         | SCM440(H)     |                  |
| 735A50             | 47                | 2230   | 6150      | 1.8159            | 51CrV4     | 50CV4       | 50CrV4      | 51CrV4          | SUP10         |                  |
| 905M39             | 41B               | 2940   | -         | 1.8509            | 41CrAlMo7  | 40CAD6, 12  | 41CrAlMo7   | 41CrAlMo7       | -             |                  |
| BL3                | -                 | -      | L3        | 1.2067            | 100Cr6     | Y100C6      | -           | 100Cr6          | -             |                  |
| -                  | -                 | 2140   | -         | -                 | 1.2419     | 105WCr6     | 105WC13     | 105WCr5         | SKS31         |                  |
| -                  | -                 | -      | -         | -                 | -          | -           | 107WCr5KU   | -               | SKS2, SKS3    |                  |
| -                  | -                 | -      | L6        | 1.2713            | 55NiCrMoV6 | 55NCDV7     | -           | F.520.S         | SKT4          |                  |

<sup>1)</sup> = Clasificación de Materiales Coromant

# Lista de referencia cruzada de material



| CMC <sup>(1)</sup> | Gran Bretaña |      | Suecia       | EE UU     | Alemania           |                   | Francia         | Italia         | España                     | Japón    |
|--------------------|--------------|------|--------------|-----------|--------------------|-------------------|-----------------|----------------|----------------------------|----------|
|                    | Estándar     |      |              |           |                    |                   |                 |                |                            |          |
|                    | BS           | EN   | SS           | AISI/SAE  | W.-nr.             | DIN               | AFNOR           | UNI            | UNE                        | JIS      |
| ISO M<br>05.21     | 304S11       | -    | 2352         | 304L      | 1.4306             | X2CrNi 19-11      | Z2CN18-10       | X2CrNi18 11    | -                          | -        |
|                    | 304S31       | 58E  | 2332/2333    | 304       |                    |                   | Z6CN18.09       | X5CrNi18 10    | F.3551<br>F.3541<br>F.3504 | SUS304   |
|                    | 303S21       | 58M  | 2346         | 303       | 1.4305             | X8CrNiS 18-9      | Z10CNF 18.09    | X10CrNiS 18.09 | F.3508                     | SUS303   |
|                    | 304S15       | 58E  | 2332         | 304       | 1.4301             | X5CrNi 18-10      | Z6CN18.09       | X5CrNi18 10    | F.3551                     | SUS304   |
|                    | 304C12       | -    | 2333         |           |                    |                   | Z3CN19.10       | -              | -                          | SUS304L  |
|                    | 304S12       | -    | 2352         | 304L      | 1.4306             | X2CrNi 18 9       | Z2CrNi18 10     | X2CrNi18 11    | F.3503                     | SCS19    |
|                    | -            | -    | 2331         | 301       | 1.4310             | X9CrNi 18-8       | Z12CN17.07      | X12CrNi17 07   | F.3517                     | SUS301   |
|                    | 304S62       | -    | 2371         | 304LN     | 1.4311             | X2CrNiN 18 10     | Z2CN18.10       | -              | -                          | SUS304LN |
|                    | 316S16       | 58J  | 2347         | 316       | 1.4401             | X5CrNiMo17-12-2   | Z6CND17.11      | X5CrNiMo17 12  | F.3543                     | SUS316   |
|                    | -            | -    | 2375         | 316LN     | 1.4429             | X2CrNiMoN 17-13-2 | Z2CND17.13      | -              | -                          | SUS316LN |
|                    | 316S13       | -    | 2348         | 316L      | 1.4404             | X2CrNiMo17-12-2   | Z2CND17-12      | X2CrNiMo1712   | -                          | -        |
|                    | 316S13       | -    | 2353         | 316L      | 1.4435             | X2CrNiMo18-14-3   | Z2CND17.12      | X2CrNiMo17 12  | -                          | SCS16    |
|                    |              |      |              |           |                    |                   | -               | -              | -                          | SUS316L  |
|                    | 316S33       | -    | 2343<br>2347 | 316       | 1.4436             | X4CrNiMo17-13-3   | Z6CND18-12-03   | X8CrNiMo1713   | -                          | -        |
|                    |              |      |              | V 0890A   |                    |                   |                 |                |                            |          |
|                    | 321S12       | 58B  | 2337         | 321       | 1.4541             | X6CrNiTi18-10     | Z6CNT18.10      | X6CrNiTi18 11  | F.3553<br>F.3523           | SUS321   |
|                    | 347S17       | 58F  | 2338         | 347       | 1.4550             | X10CrNiNb 18 9    | Z6CNNb18.10     | X6CrNiNb18 11  | F.3552<br>F.3524<br>F.3535 | SUS347   |
| 320S17             | 58J          | 2350 | 316Ti        | 1.4571    | X6CrNiMoTi 17-12-2 | Z6NDT17.12        | X6CrNiMoTi17 12 | F.3535         | -                          |          |
| -                  | -            | -    | 318          | 1.4583    | X10CrNiMoNb 18 12  | Z6CNDNb17 13B     | X6CrNiMoNb17 13 | -              | -                          |          |
| 309S24             | -            | -    | 309          | 1.4828    | X15CrNiSi 20 12    | Z15CNS20.12       | -               | -              | SUH309                     |          |
| 310S24             | -            | 2361 | 310S         | 1.4845    | X8CrNi 25-21       | Z12CN25 20        | X6CrNi25 20     | F.331          | SUH310                     |          |
| 301S21             | 58C          | 2370 | 308          | 1.4406    | X2CrNiMoN 17-11-2  | Z1NCDU25.20       | -               | F.8414         | SCS17                      |          |
| -                  | -            | 2387 | -            | 1.4418    | X4CrNiMo 16-5-1    | Z6CND16-04-01     |                 |                |                            |          |
| K<br>08.2          | Grade 300    | -    | 0130         | No 45 B   | 0.6030             | EN-GJL-300        | Ft 30 D         | G 30           | FG 30                      | FC300    |
| 09.2               | Grade 350    | -    | 0135         | No 50 B   | 0.6035             | EN-GJL-350        | Ft 35 D         | G 35           | FG 35                      | FC350    |
|                    | Grade 400    | -    | 0140         | No 55 B   | 0.6040             | EN-JL-Z           | Ft 40 D         | -              | -                          | -        |
| -                  | SNG 600/3    | -    | 0732-03      | -         | 0.7060             | EN-GJS-600-3      | FGS 600-3       | -              | -                          | FCD600   |
| -                  | SNG 700/2    | -    | 0737-01      | 100-70-03 | 0.7070             | EN-GJS-700-2      | FGS 700-2       | GS 700-2       | FGS 70-2                   | FCD700   |
| N<br>30.21         | LM25         | -    | 4244         | 356.1     |                    |                   |                 |                |                            | A5052    |
|                    |              | -    | 4247         | A413.0    | 3.2582.05          | GD-AISI12         |                 |                |                            | A6061    |
|                    | LM24         | -    | 4250         | A380.1    | 3.2162.05          | GD-AISI8Cu3       |                 |                |                            | A7075    |
|                    | LM20         | -    | 4260         | A413.1    |                    | G-AISI12(Cu)      |                 |                |                            | ADC12    |
|                    | LM6          | -    | 4261         | A413.2    | 3.2982             | AlSi12Cu1         |                 |                |                            |          |
|                    | LM9          | -    | 4253         | A360.2    | 3-2382             | AlSi10MgFe        |                 |                |                            |          |
| S<br>20.22         | -            | -    | -            | 5660      | 2.4662             | Nimonic alloy 901 | ZSNCDT42        | -              | -                          |          |
|                    | 3146-3       | -    | -            | 5391      |                    |                   | NC12AD          | -              | -                          |          |
|                    | HR8          | -    | -            | 5383      | 2.4668             | Inconel 718       | -               | -              | -                          |          |
|                    | 3072-76      | -    | -            | 4676      | 2.4375             | Monel alloy K-500 | -               | -              | -                          |          |
|                    | Hr401,601    | -    | -            | -         | 2.4631             | Nimonic alloy 80A | NC20TA          | -              | -                          |          |
|                    | -            | -    | -            | AMS 5399  | 2.4973             | NiCr19Co11MoTi    | NC19KDT         | -              | -                          |          |
|                    | -            | -    | AMS 5544     |           |                    | NC20K14           | -               | -              |                            |          |
| H<br>04.1          | -            | -    | 2258-08      | 440A      | 1.4108             | X100CrMo13        | -               | -              | -                          | C4BS     |
|                    | -            | -    | 2534-05      | 610       | 1.4111             | X110CrMoV15       | -               | -              | -                          | AC4A     |
|                    | -            | -    | 2541-06      | 0-2       | -                  | X65CrMo14         | -               | -              | -                          | AC4A     |
|                    |              |      |              |           | 1.1740             | C60W              |                 |                |                            |          |
|                    |              |      |              | 1.2067    | 100Cr6             |                   |                 |                |                            |          |
|                    |              |      |              |           | 1.2419             | 10 5WCr6          |                 |                |                            |          |



# Información general

## Tabla de conversión para escalas de dureza

En la industria existen diversos sistemas para medir la dureza de los materiales. La siguiente tabla compara tres de los sistemas utilizados con mayor frecuencia.

Las recomendaciones de datos de corte CoroKey se ofrecen en Dureza Brinell (HB).

- HB 180 para acero (código CMC 02.1)
- HB 180 para acero inoxidable (código CMC 05.21)
- HB 220 para fundición gris (código CMC 08.2)
- HB 250 para fundición nodular (código CMC 09.2)
- HB 75 para aluminio y materiales no féreos (código CMC 30.21)
- HB 350 para super aleaciones termorresistentes (código CMC 20.22)
- HRC 60 para materiales templados (código CMC 04.1)

CMC = Clasificación de materiales Coromant. Consulte la lista de referencia de materiales en la página 6.

| Resistencia<br>a la trac-<br>ción<br>N/mm² | Vickers | Brinell | Rockwell |       | Resistencia<br>a la trac-<br>ción<br>N/mm² | Vickers | Brinell | Rockwell |
|--------------------------------------------|---------|---------|----------|-------|--------------------------------------------|---------|---------|----------|
|                                            | HV      | HB      | HRC      | HRB   |                                            | HV      | HB      | HRC      |
| 255                                        | 80      | 76.0    | –        | –     | 1030                                       | 320     | 304     | 32.2     |
| 270                                        | 85      | 80.7    | –        | 41.0  | 1060                                       | 330     | 314     | 33.3     |
| 285                                        | 90      | 85.5    | –        | 48.0  | 1095                                       | 340     | 323     | 34.4     |
| 305                                        | 95      | 90.2    | –        | 52.0  | 1125                                       | 350     | 333     | 35.5     |
| 320                                        | 100     | 95.0    | –        | 56.2  | 1155                                       | 360     | 342     | 36.6     |
| 350                                        | 110     | 105     | –        | 62.3  | 1190                                       | 370     | 352     | 37.7     |
| 385                                        | 120     | 114     | –        | 66.7  | 1220                                       | 380     | 361     | 38.8     |
| 415                                        | 130     | 124     | –        | 71.2  | 1255                                       | 390     | 371     | 39.8     |
| 450                                        | 140     | 133     | –        | 75.0  | 1290                                       | 400     | 380     | 40.8     |
| 480                                        | 150     | 143     | –        | 78.7  | 1320                                       | 410     | 390     | 41.8     |
| 510                                        | 160     | 152     | –        | 81.7  | 1350                                       | 420     | 399     | 42.7     |
| 545                                        | 170     | 162     | –        | 85.0  | 1385                                       | 430     | 409     | 43.6     |
| 575                                        | 180     | 171     | –        | 87.5  | 1420                                       | 440     | 418     | 44.5     |
| 610                                        | 190     | 181     | –        | 89.5  | 1485                                       | 460     | 437     | 46.1     |
| 640                                        | 200     | 190     | –        | 91.5  | 1555                                       | 480     | –       | 47.7     |
| 660                                        | 205     | 195     | –        | 92.5  | 1595                                       | 490     | –       | 48.4     |
| 675                                        | 210     | 199     | –        | 93.5  | 1630                                       | 500     | –       | 49.1     |
| 690                                        | 215     | 204     | –        | 94.0  | 1665                                       | 510     | –       | 49.8     |
| 705                                        | 220     | 209     | –        | 95.0  | 1700                                       | 520     | –       | 50.5     |
| 720                                        | 225     | 214     | –        | 96.0  | 1740                                       | 530     | –       | 51.1     |
| 740                                        | 230     | 219     | –        | 96.7  | 1775                                       | 540     | –       | 51.7     |
| 770                                        | 240     | 228     | 20.3     | 98.1  | 1810                                       | 550     | –       | 52.3     |
| 800                                        | 250     | 238     | 22.2     | 99.5  | 1845                                       | 560     | –       | 53.0     |
| 820                                        | 255     | 242     | 23.1     | –     | 1880                                       | 570     | –       | 53.6     |
| 835                                        | 260     | 247     | 24.0     | (101) | 1920                                       | 580     | –       | 54.1     |
| 850                                        | 265     | 252     | 24.8     | –     | 1955                                       | 590     | –       | 54.7     |
| 865                                        | 270     | 257     | 25.6     | (102) | 1995                                       | 600     | –       | 55.2     |
| 900                                        | 280     | 266     | 27.1     | –     | 2030                                       | 610     | –       | 55.7     |
| 930                                        | 290     | 276     | 28.5     | (105) | 2070                                       | 620     | –       | 56.3     |
| 950                                        | 295     | 280     | 29.2     | –     | 2105                                       | 630     | –       | 56.8     |
| 965                                        | 300     | 285     | 29.8     | –     | 2145                                       | 640     | –       | 57.3     |
| 995                                        | 310     | 295     | 31.0     | –     | 2180                                       | 650     | –       | 57.8     |

# Información general

## Diferencia en la dureza del material a mecanizar, HB



Los datos de corte se indican en las páginas del catálogo en función de la calidad de la plaquita recomendada como primera elección en combinaciones con la dureza (HB) que figura en la tabla.

Si la dureza del material que se está mecanizando es distinta a dichos valores, la velocidad de corte recomendada debe multiplicarse por un factor obtenido en la tabla.

| ISO/<br>ANSI | CMC <sup>1)</sup> | HB <sup>2)</sup>     | Menor dureza      |      |      |     |      | Mayor dureza |      |      |      |  |
|--------------|-------------------|----------------------|-------------------|------|------|-----|------|--------------|------|------|------|--|
|              |                   |                      | -60 <sup>3)</sup> | -40  | -20  | 0   | +20  | +40          | +60  | +80  | +100 |  |
| P            | 02.1              | HB <sup>2)</sup> 180 | 1,44              | 1,25 | 1,11 | 1,0 | 0,91 | 0,84         | 0,77 | 0,72 | 0,67 |  |
| M            | 05.21             | HB <sup>2)</sup> 180 | 1,42              | 1,24 | 1,11 | 1,0 | 0,91 | 0,84         | 0,78 | 0,73 | 0,68 |  |
| K            | 08.2              | HB <sup>2)</sup> 220 | 1,21              | 1,13 | 1,06 | 1,0 | 0,95 | 0,90         | 0,86 | 0,82 | 0,79 |  |
|              | 09.2              | HB <sup>2)</sup> 250 | 1,33              | 1,21 | 1,09 | 1,0 | 0,91 | 0,84         | 0,75 | 0,70 | 0,65 |  |
| N            | 30.21             | HB <sup>2)</sup> 75  |                   |      | 1,05 | 1,0 | 0,95 |              |      |      |      |  |
| S            | 20.22             | HB <sup>2)</sup> 350 |                   |      | 1,12 | 1,0 | 0,89 |              |      |      |      |  |
| H            | 04.1              | HRC <sup>3)</sup> 60 |                   |      | 1,07 | 1,0 | 0,97 |              |      |      |      |  |

<sup>1)</sup> = Clasificación de Materiales Coromant

<sup>2)</sup> = Dureza Brinell

<sup>3)</sup> = Dureza Rockwell

Ejemplo:

Si elige la plaquita CNMG 120416-PM para su operación de cilindrado, los datos de corte CoroKey recomendados se indican para la calidad como primera elección GC4225 y un acero de baja aleación (código CMC 02.1) de HB 180:

Profundidad de corte ( $a_p$ ) = 3 mm

Avance ( $f_n$ ) = 0,40 mm/rev

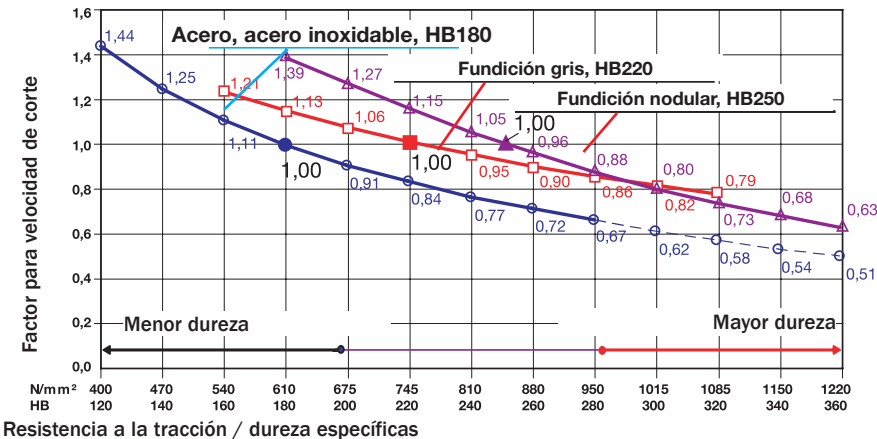
Velocidad de corte ( $v_c$ ) = 305 m/min.

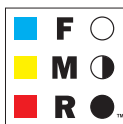
Si el material de la pieza a trabajar tiene otra dureza, por ejemplo HB 240, la diferencia entre la dureza indicada, HB 180 y HB 240, es +60.

El factor de corrección en la tabla es 0,77.

La velocidad de corte ajustada a HB 240 = 305 m/min x 0,77 = 234,85 m/min  $\approx$  235 m/min

### Diagrama de la tabla anterior para P, M y K





## Información general

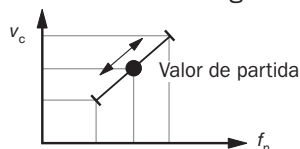
Tabla de conversiones

Velocidad de corte ( $v_c$ ) — Revoluciones por minuto (RPM)

| Componente/<br>fresa | Velocidad de corte ( $v_c$ ), metros/min. |      |      |      |      |      |      |       |       |       |       |
|----------------------|-------------------------------------------|------|------|------|------|------|------|-------|-------|-------|-------|
| $\varnothing$        | 30                                        | 40   | 50   | 100  | 150  | 200  | 300  | 400   | 500   | 600   | 700   |
| 12                   | 795                                       | 1060 | 1326 | 2652 | 3979 | 5305 | 7957 | 10610 | 13262 |       |       |
| 16                   | 597                                       | 795  | 995  | 1989 | 2984 | 3978 | 5968 | 7957  | 9947  | 11936 |       |
| 20                   | 477                                       | 637  | 796  | 1591 | 2387 | 3183 | 4774 | 6366  | 7957  | 9549  | 11140 |
| 25                   | 382                                       | 509  | 637  | 1273 | 1910 | 2546 | 3819 | 5092  | 6366  | 7639  | 8912  |
| 32                   | 298                                       | 398  | 497  | 994  | 1492 | 1989 | 2984 | 3978  | 4973  | 5968  | 6963  |
| 40                   | 239                                       | 318  | 398  | 795  | 1194 | 1591 | 2387 | 3183  | 3978  | 4774  | 5570  |
| 50                   | 191                                       | 255  | 318  | 636  | 955  | 1272 | 1909 | 2546  | 3183  | 3819  | 4456  |
| 63                   | 151                                       | 202  | 253  | 505  | 758  | 1010 | 1515 | 2021  | 2526  | 3031  | 3536  |
| 80                   | 119                                       | 159  | 199  | 397  | 597  | 795  | 1193 | 1591  | 1989  | 2387  | 2785  |
| 100                  | 95                                        | 127  | 159  | 318  | 477  | 636  | 952  | 1273  | 1591  | 1909  | 2228  |
| 125                  | 76                                        | 109  | 124  | 255  | 382  | 509  | 764  | 1018  | 1237  | 1527  | 1782  |
| 160                  | 60                                        | 80   | 99   | 198  | 298  | 397  | 596  | 795   | 994   | 1193  | 1392  |
| 175                  | 55                                        | 71   | 91   | 182  | 273  | 363  | 544  | 727   | 909   | 1091  | 1273  |
| 200                  | 48                                        | 64   | 80   | 160  | 239  | 318  | 476  | 636   | 795   | 954   | 1114  |

Ejemplo: Está utilizando una fresa de 80 mm de diámetro. El valor de partida de la velocidad de corte ( $v_c$ ) que figura en la caja de la plaquita es de 200 m/min. Encuentre el tamaño de fresa en la columna de la izquierda y la velocidad de corte en la fila superior y visualice las RPM del husillo en la intersección: 795 revoluciones por minuto.

## Recomendaciones generales



Con el fin de mantener la formación de viruta cuando se cambian los datos de corte, aumente/disminuya ambos valores  $v_c$  y  $f_n$ .

## Fórmulas

### Velocidad de corte, m/min.

$$v_c = \frac{\pi \times D_c \times n}{1000}$$

$v_c$  = velocidad de corte: m/min

$n$  = revoluciones / min.

$D_c$  = Diámetro mm

### Velocidad del husillo, rpm

$$n = \frac{v_c \times 1000}{\pi \times D_c}$$

$n$  = velocidad del husillo, revoluciones/min.

$v_c$  = velocidad de corte m/min

$D_c$  = diámetro mm

### Avance de la mesa, mm/min.

$$v_f = n \times z \times f_z$$

$v_f$  = avance de la mesa mm/min.

$n$  = revoluciones/min.

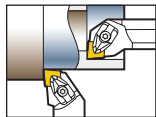
$z$  = número de dientes

$f_z$  = avance mm/diente





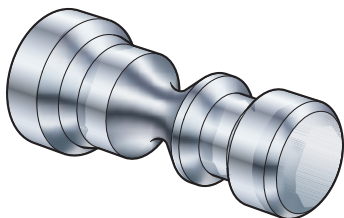
CoroTurn® RC



## Herramientas para torneear

Cómo elegir la herramienta adecuada para su operación

## MECANIZADO EXTERIOR

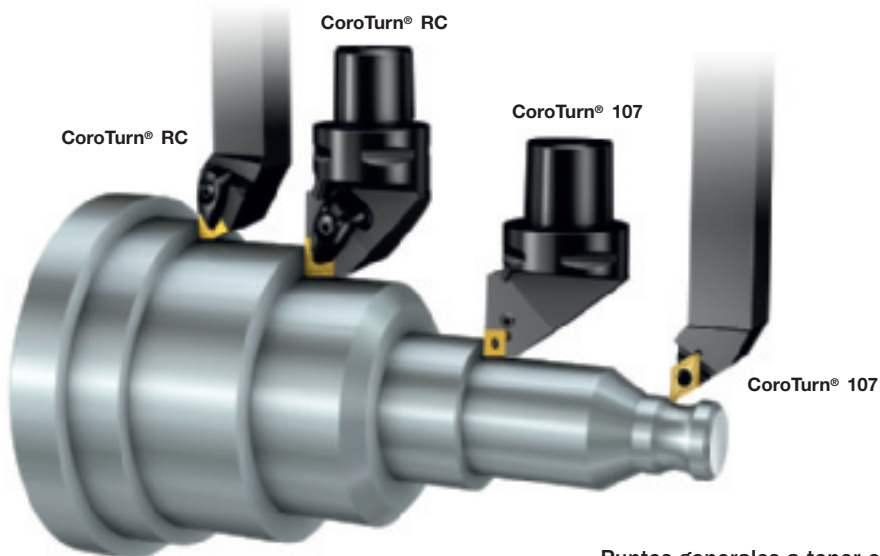


### CoroTurn® RC

– Mecanizado exterior, de desbaste a acabado

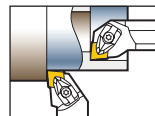
### CoroTurn® 107

– Mecanizado exterior de componentes pequeños, largos y esbeltos



### Puntos generales a tener en cuenta

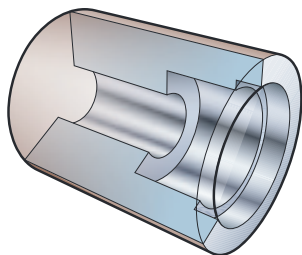
Si es posible, utilice un ángulo de posición menor de 90°. Se reduce el impacto y las fuerzas en la arista de corte.



## Herramientas para tornear

Cómo elegir la herramienta adecuada para su operación

### MECANIZADO INTERIOR

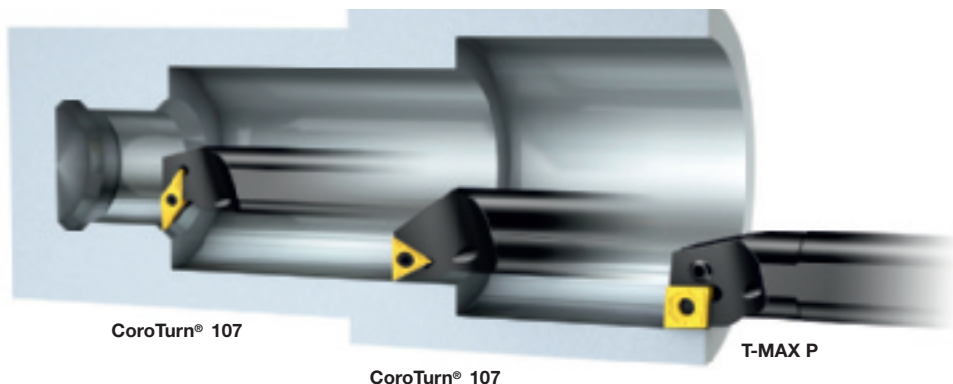


#### CoroTurn® 107

- Primera elección en mecanizado interior de agujeros de diámetro pequeño y mediano y en casos de voladizos grandes

#### T-MAX P

- Mecanizado interior de agujeros grandes con voladizos cortos y condiciones estables.



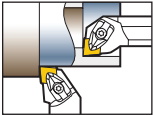
CoroTurn® 107

CoroTurn® 107

T-MAX P

#### Puntos generales a tener en cuenta

Utilice un ángulo de posición cercano a los 90°. Se reduce el impacto y las fuerzas radiales en la arista de corte. Utilice la barra del mayor tamaño posible y con el voladizo más pequeño posible a fin de lograr la máxima estabilidad.



# Herramientas para torneear

Clave de códigos para plaquitas y portaplaquitas  
Extracto de ISO 1832-1991

Tolerancias                      Espesor de plaquita

## PLAQUITA

|   |   |   |   |    |    |    |   |    |
|---|---|---|---|----|----|----|---|----|
| C | N | M | G | 09 | 03 | 08 | - | PF |
| 1 | 2 | 3 | 4 | 5  | 6  | 7  |   | 8  |

1. Forma de la plaquita

5. Tamaño de plaquita = longitud de arista de corte

2. Ángulo de incidencia de la plaquita

## PORTAPLAQUITAS

Exterior

|   |   |   |   |   |    |    |   |    |
|---|---|---|---|---|----|----|---|----|
| D | C | L | N | R | 16 | 16 | H | 09 |
| B | 1 | C | 2 | D | E  | F  | G | 5  |

C3-  
A

Interior

|   |    |   |   |   |   |   |   |    |
|---|----|---|---|---|---|---|---|----|
| A | 25 | T | S | C | L | C | R | 09 |
| H | J  | G | B | 1 | C | 2 | D | 5  |

Diámetro de barra

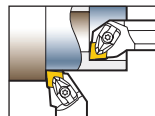
S = Barra de acero enterizo  
A = Barra de acero con suministro de refrigerante

Tipo de porta-plaquitas

Coromant Capto®  
Tamaño del aco-  
plamiento

# Herramientas para torneear

Clave de códigos para plaquitas y portaplaquitas  
Extracto de ISO 1832-1991



## 1. FORMA DE LA PLAQUITA



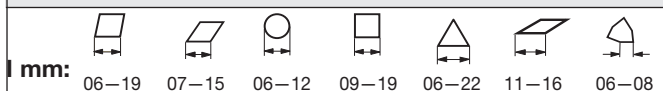
## 2. ÁNGULO DE INCIDENCIA DE LA PLAQUITA



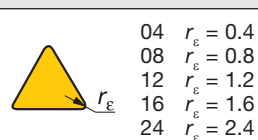
## 4. TIPO DE PLAQUITA



## 5. TAMAÑO DE PLAQUITA = LONGITUD DE ARISTA DE CORTE



## 7. RADIO DE PUNTA



## Recomendaciones primera elección para el radio de la punta:

|          | T-MAX P | CoroTurn 107 |
|----------|---------|--------------|
| ACABADO  | 08      | 04           |
| MEDIO    | 08      | 08           |
| DESBASTE | 12      | 08           |

## 8. GEOMETRÍA – OPCIÓN DEL FABRICANTE

El fabricante puede añadir otros dos símbolos al código para describir la geometría de la plaquita, por ejemplo,

-PF = ISO P Acabado,

-MR = ISO M Desbaste

## B. SISTEMA DE SUJECIÓN



Sujeción rígida (RC)



Sujeción por cara superior  
y por el agujero



Sujeción por el agujero



Sujeción por tornillo

## D. SENTIDO DE LA HERRAMIENTA



A derecha



a Izquierda



Neutro

## E. ALTURA DEL MANGO

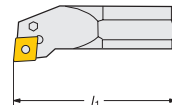
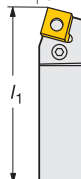


## F. ANCHURA DEL MANGO

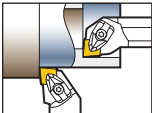


## G. LONGITUD DE LA HERRAMIENTA

Longitud de  
la herramienta  
=  $l_1$  en mm



|         |         |
|---------|---------|
| H = 100 | S = 250 |
| K = 125 | T = 300 |
| M = 150 | U = 350 |
| P = 170 | V = 400 |
| Q = 180 | W = 450 |
| R = 200 | Y = 500 |



# Herramientas para tornear

## T-MAX P El concepto de cilindrado con plaquitas negativas

Acero, acero inoxidable y fundición — ISO P, M y K

### Cómo realizar la mejor elección para sus operaciones de cilindrado

En los gráficos siguientes se ofrecen las combinaciones recomendadas de geometrías y calidades.

#### BUENAS CONDICIONES

Cortes continuos. Altas velocidades de corte. Materiales pre-mecanizados y con costra de fundición/escama ligera de forjado. Sujeción segura del componente.

#### CONDICIONES NORMALES

Primera elección para operaciones de uso general. Perfilado y cortes discontinuos ligeros. Velocidades de corte moderadas. Materiales forjados y fundidos. Buena sujeción del componente.

#### CONDICIONES DIFÍCILES

Cortes discontinuos o desbaste pesado. Velocidades de corte bajas. Materiales con costra de fundición y escama pesada de forjado. Pésima sujeción del componente.

¡Primera elección!

¡Primera elección!

¡Primera elección!

| ISO/ANSI <b>P</b> ACERO      |                               |                                 |
|------------------------------|-------------------------------|---------------------------------|
| Acabado                      | Mecanizado medio              | Desbaste                        |
| -WF / GC4215<br>-PF / GC4215 | -WMX / GC4205<br>-PM / GC4015 | -WR / GC4205<br>-PR / GC4215    |
| <br>-WF / GC4215             | <br>-WMX / GC4215             | <br>Una sola cara               |
| <br>-PF / GC4215             | <br>-PM / GC4225              | <br>Doble cara<br>Una sola cara |
| -WF / GC4225<br>-PF / GC4225 | -WMX / GC4225<br>-PM / GC4235 | -WR / GC4225<br>-PR / GC4235    |



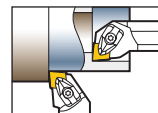
| ISO/ANSI <b>M</b> ACERO INOXIDABLE |                               |                                 |
|------------------------------------|-------------------------------|---------------------------------|
| Acabado                            | Mecanizado medio              | Desbaste                        |
| -WF / GC2015<br>-MF / GC2015       | -WMX / GC2015<br>-MM / GC2015 | -MR / GC2025                    |
| <br>-WF / GC2015                   | <br>-WMX / GC2015             | <br>Doble cara<br>Una sola cara |
| <br>-MF / GC2015                   | <br>-MM / GC2025              | <br>Doble cara<br>Una sola cara |
| -WF / GC2015<br>-MF / GC2025       | -WMX / GC2015<br>-MM / GC2035 | -MR / GC2025<br>-MR / GC2035    |



| ISO/ANSI <b>K</b> FUNDICIÓN GRIS |                               |                                 |
|----------------------------------|-------------------------------|---------------------------------|
| Acabado                          | Mecanizado medio              | Desbaste                        |
| -WF / GC3215<br>NGA / CC650      | -WMX / GC3215<br>NGA / CC6190 | -KR / GC3205                    |
| <br>-WF / GC3215                 | <br>-WMX / GC3215             | <br>Doble cara<br>Una sola cara |
| <br>-KF / GC3215                 | <br>-KM / GC3205              | <br>Doble cara<br>Una sola cara |
| -WF / GC3215<br>-KF / GC3215     | -WMX / GC3215<br>-KM / GC3215 | -KR / GC3215                    |



Plaquetas rascadoras Wiper para la máxima productividad y el mejor acabado superficial, geometría -WF y -WMX.



## Herramientas para torneear

### CoroTurn® 107 El concepto de cilindrado con plaquitas positivas

Acero, acero inoxidable y fundición — ISO P, M y K

#### Cómo realizar la mejor elección para sus operaciones de cilindrado

En los gráficos siguientes se ofrecen las combinaciones recomendadas de geometrías y calidades.

#### BUENAS CONDICIONES

Cortes continuos. Altas velocidades de corte. Materiales pre-mecanizados y con costra de fundición / escama ligera de forjado. Sujeción segura del componente.

¡Primera elección!

#### ISO/ANSI P ACERO

| Acabado                      | Mecanizado medio             | Desbaste         |
|------------------------------|------------------------------|------------------|
| -WF / GC4215<br>-PF / GC4215 | -WM / GC4215<br>-PM / GC4215 | -PR / GC4215     |
| <br>-WF / GC4215             | <br>-WM / GC4215             |                  |
| <br>-PF / GC4215             | <br>-PM / GC4225             | <br>-PR / GC4225 |
| -WF / GC4215<br>-PF / GC4225 | -WM / GC4225<br>-PM / GC4235 | -PR / GC4235     |

CONDICIONES DE MECANIZADO

#### CONDICIONES NORMALES

Primera elección para operaciones de uso general. Perfilado y cortes discontinuos ligeros. Velocidades de corte moderadas. Materiales forjados y fundidos. Buena sujeción del componente.

¡Primera elección!

#### ISO/ANSI M ACERO INOXIDABLE

| Acabado                      | Mecanizado medio             | Desbaste         |
|------------------------------|------------------------------|------------------|
| -WF / GC2015<br>-MF / GC2015 | -WM / GC2015<br>-MM / GC2015 | -MR / GC2015     |
| <br>-WF / GC2015             | <br>-WM / GC2015             |                  |
| <br>-MF / GC2015             | <br>-MM / GC2025             | <br>-MR / GC2025 |
| -MF / GC2025                 | -MM / GC2035                 | -MR / GC2035     |

CONDICIONES DE MECANIZADO

#### CONDICIONES DIFÍCILES

Cortes discontinuos o desbaste pesado. Velocidades de corte bajas. Materiales con costra de fundición y escama pesada de forjado. Pésima sujeción del componente.

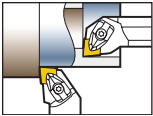
¡Primera elección!

#### ISO/ANSI K FUNDICIÓN GRIS

| Acabado                      | Mecanizado medio             | Desbaste         |
|------------------------------|------------------------------|------------------|
| -WF / GC3215<br>-KF / GC3005 | -WM / GC3215<br>-KM / GC3005 | -KR / GC3210     |
| <br>-WF / GC3215             | <br>-WM / GC3215             |                  |
| <br>-KF / GC3205             | <br>-KM / GC3215             | <br>-KR / GC3210 |
| -WF / GC3215                 | -WM / GC3215<br>-KM / GC3215 | -KR / GC3215     |

CONDICIONES DE MECANIZADO

Plaquetas rascadoras Wiper para la máxima productividad y el mejor acabado superficial, geometría -WF y -WM.



## Herramientas para torneear

¿Cómo puede mejorarla?

### Mayor arranque del metal

Si se desea modificar la velocidad de corte para obtener volúmenes de arranque del metal más elevados, los nuevos valores de velocidad de corte pueden calcularse con la ayuda de la siguiente tabla.

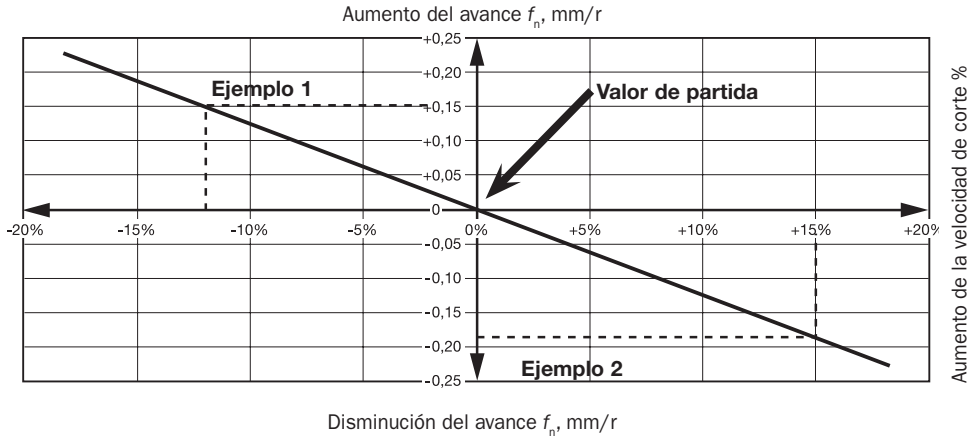
|                               |      |     |      |      |      |      |      |
|-------------------------------|------|-----|------|------|------|------|------|
| Vida de la herramienta (Min.) | 10   | 15  | 20   | 25   | 30   | 45   | 60   |
| Factor de corrección          | 1,11 | 1,0 | 0,93 | 0,88 | 0,84 | 0,75 | 0,70 |

**Ejemplo:** Si la velocidad de corte recomendada en la tabla es = 225 m/min, y deseamos calcular la velocidad de corte para una vida de filo de 10 min., la nueva velocidad de corte será:  $225 \times 1,11 \approx 250$  m/min.

**¡Atención!** Cuando se aumenta el avance ( $f_n$  mm/rev), deberá disminuirse la velocidad de corte ( $v_c$  m/min), y viceversa, tal como se indica en las recomendaciones de datos de corte.

|       |                        |     |     |
|-------|------------------------|-----|-----|
|       | Avance $\rightarrow$   |     |     |
| $f_n$ | 0,25                   | 0,4 | 0,7 |
| $v_c$ | 310                    | 265 | 210 |
|       | $\leftarrow$ Velocidad |     |     |

### Compensación de datos de velocidad de corte y avance para cilindrado



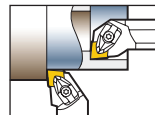
#### Cómo utilizar el diagrama

En este diagrama se observa una manera simplificada de ajustar el valor de partida para las recomendaciones de velocidad de corte y avance. Los datos de corte que figuran en los dispensadores de plaquitas se basan en una vida de la herramienta de 15 minutos y seguirán siendo los mismos con los valores tomados de este diagrama.

**Ejemplo 1:** aumente el avance 0,15 mm/r (+0,15).  
Resultado: disminuya la velocidad de corte un 12%.

**Ejemplo 2:** aumente la velocidad de corte un 15%.  
Resultado: disminuya el avance 0,18 mm/r.





## Herramientas para torner

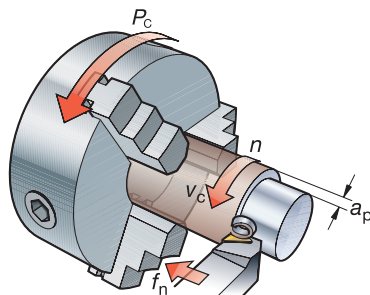
### Cálculo del requisito de potencia

Potencia bruta aprox. (kW) requerida M/C 80% efíc.

| Mecanizado de desbaste y medio |       |                                                  |           |           |
|--------------------------------|-------|--------------------------------------------------|-----------|-----------|
|                                | $v_c$ | $a_p \times f_n$ (profundidad de corte x avance) |           |           |
|                                |       | 2 x 0.2                                          | 4 x 0.3   | 6 x 0.5   |
| <b>P</b>                       | 150   | 3.4                                              | 9.2       | 20.3      |
|                                | 200   | 4.5                                              | 12.3      | 27.1      |
|                                | 250   | 5.7                                              | 15.4      | 33.8      |
|                                | 300   | 6.8                                              | 18.5      | 40.6      |
|                                | 350   | 7.9                                              | 21.5      | 47.4      |
|                                | 400   | 9.1                                              | 24.6      | 54.1      |
| <b>M</b>                       | 150   | 3.8                                              | 10.3      | 23.2      |
|                                | 200   | 5.0                                              | 13.8      | 31.0      |
|                                | 250   | 6.3                                              | 17.2      | 38.7      |
| <b>K</b>                       | 150   | 2.3/2.8                                          | 6.2/7.6   | 13.4/16.5 |
|                                | 200   | 3.1/3.8                                          | 8.3/10.15 | 17.9/21.9 |
|                                | 250   | 3.9/4.7                                          | 10.3/12.7 | 22.4/27.4 |
|                                | 300   | 4.6/5.7                                          | 12.4/15.2 | 26.8/32.9 |
| <b>N</b>                       | 500   | 4.0                                              | 10.9      | 23.9      |
|                                | 1000  | 8.0                                              | 21.7      | 47.8      |
|                                | 1500  | 12.0                                             | 32.6      | 71.6      |
|                                | 2000  | 16.0                                             | 43.4      | 95.5      |
| <b>S</b>                       | 20    | 0.8                                              | 2.1       |           |
|                                | 45    | 1.7                                              | 4.7       |           |
|                                | 90    | 3.5                                              | 9.4       |           |
| <b>H</b>                       | 60    | 3.4                                              | 9.1       |           |
|                                | 120   | 6.7                                              | 18.2      |           |
|                                | 180   | 10.1                                             | 27.4      |           |

2.3 = con rompevirutas

2.8 = sin rompevirutas



La potencia neta ( $P_C$ ) en kW que se requiere para mecanizar interesa sobre todo al desbaste, donde es esencial garantizar que la máquina tenga potencia suficiente para la operación. El factor de eficiencia de la máquina también tiene una gran importancia.

$a_p$  = profundidad de corte axial (mm)

$v_c$  = velocidad de corte (m/min)

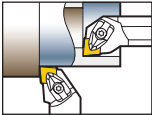
$f_n$  = avance (mm/rev)

$k_C$  = fuerza de corte específica (N/mm<sup>2</sup>)

$n$  = velocidad del husillo (rpm)

$P_C$  = potencia neta (kW)

$$P_C = \frac{v_c \times a_p \times f_n \times k_C}{60 \times 10^3} \text{ kW}$$



## Herramientas para tornear

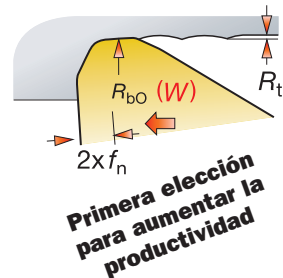
Reglas prácticas para plaquitas rascadoras Wiper

### Mejoras en la productividad con las plaquitas rascadoras Wiper

Las plaquitas rascadoras Wiper están destinadas a obtener alta productividad en torneado de acabado y semi-acabado. Gracias a un cambio sutil en el radio de punta de las plaquitas, el avance por revolución  $f_n$  puede duplicarse sin que se modifique el acabado superficial.

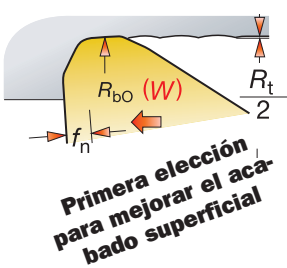
#### Geometría Wiper

Dos veces el avance

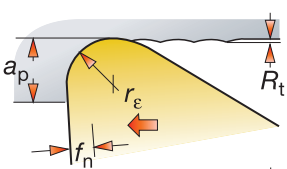


#### Geometría Wiper

El mismo avance

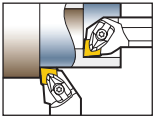


#### Radio del vértice estándar



### Comparación de plaquitas estándar y plaquitas Wiper

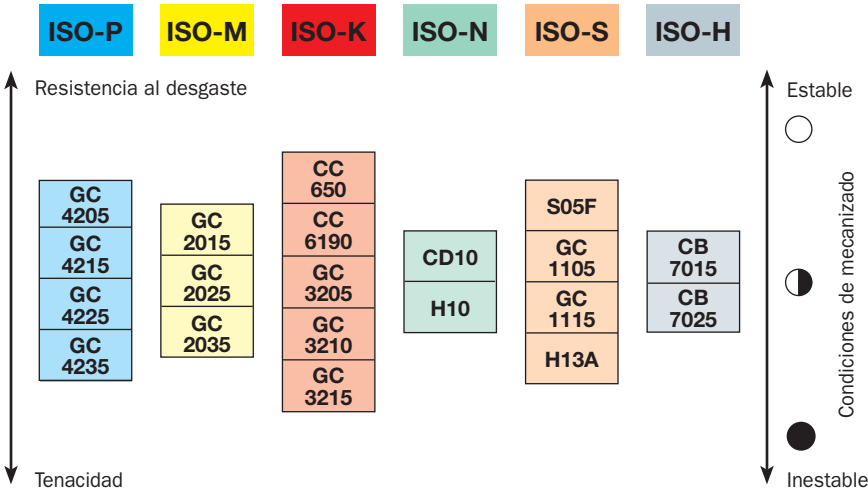
| Avance, $f_n$ | Estándar                          | Wiper<br>(WF/WM)                  | Estándar                          | Wiper<br>(WMX)                    | Estándar                          | Wiper<br>(WMX)                    |
|---------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| mm/rev        | $r_\epsilon$ 0.4<br>$R_a$ $\mu$ m | $r_\epsilon$ 0.4<br>$R_a$ $\mu$ m | $r_\epsilon$ 0.8<br>$R_a$ $\mu$ m | $r_\epsilon$ 0.8<br>$R_a$ $\mu$ m | $r_\epsilon$ 1.2<br>$R_a$ $\mu$ m | $r_\epsilon$ 1.2<br>$R_a$ $\mu$ m |
| 0.07          | 0.31                              | 0.30                              | –                                 | –                                 | –                                 | –                                 |
| 0.10          | 0.63                              | 0.32                              | 0.31                              | –                                 | –                                 | –                                 |
| 0.12          | 0.90                              | 0.45                              | 0.45                              | –                                 | –                                 | –                                 |
| 0.15          | 1.41                              | 0.70                              | 0.70                              | 0.25                              | 0.47                              | –                                 |
| 0.18          | 2.03                              | 1.00                              | 1.01                              | 0.30                              | 0.68                              | –                                 |
| 0.20          | 2.50                              | 1.25                              | 1.25                              | 0.35                              | 0.83                              | 0.30                              |
| 0.22          | 3.48                              | 1.74                              | 1.74                              | 0.40                              | 1.16                              | 0.30                              |
| 0.25          | –                                 | –                                 | 2.25                              | 0.45                              | 1.50                              | 0.40                              |
| 0.28          | –                                 | –                                 | 2.82                              | 0.50                              | 1.88                              | 0.40                              |
| 0.30          | –                                 | –                                 | 3.23                              | 0.55                              | 2.16                              | 0.40                              |
| 0.35          | –                                 | –                                 | 4.40                              | 0.60                              | 2.93                              | 0.50                              |
| 0.40          | –                                 | –                                 | 5.75                              | 0.70                              | 3.83                              | 0.65                              |
| 0.45          | –                                 | –                                 | 8.54                              | 1.10                              | 5.70                              | 0.85                              |
| 0.50          | –                                 | –                                 | 10.55                             | 1.30                              | 7.03                              | 1.15                              |
| 0.55          | –                                 | –                                 | –                                 | –                                 | 8.51                              | 1.20                              |
| 0.60          | –                                 | –                                 | –                                 | –                                 | 10.13                             | 1.30                              |

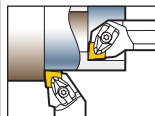


# Herramientas para torneear

Calidades para cilindrado

## Resumen de calidades



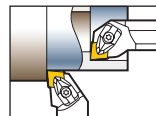


## Herramientas para torneear

### Cómo elegir la plaquita y el portaplaquetas

| Defina el tipo de material | <b>Plaquetas negativas T-MAX P</b><br>Consulte la página de plaquetas y seleccione la geometría, la calidad y los datos de corte. |                                                                                                                             |                                                                                                                | <b>Plaquetas positivas CoroTurn 107</b><br>Consulte la página de plaquetas y seleccione la geometría, la calidad y los datos de corte. |                                                                                                                           |                                                                                                            | <b>Portaplaquetas</b><br>Consulte la página de portaherramientas. Elija el tipo y tamaño de portaplaquetas.                                                                                                                                                                                                                                |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>P</b>                   | Acabado<br><br>Página 24                         | Mecaniza-<br>do medio<br><br>Página 26     | Desbaste<br><br>Página 28, 30 | Acabado<br><br>Página 70                              | Mecaniza-<br>do medio<br><br>Página 72   | Desbaste<br><br>Página 74 | <b>Mecanizado exterior</b><br><br><b>Portaplaquetas para plaquetas negativas</b><br> Herramientas con mango<br>Páginas 58-62<br> Coromant Capto<br>Páginas 59-63         |
| <b>M</b>                   | Acabado<br><br>Página 32                         | Mecaniza-<br>do medio<br><br>Página 34     | Desbaste<br><br>Página 36, 38 | Acabado<br><br>Página 76                              | Mecaniza-<br>do medio<br><br>Página 78   | Desbaste<br><br>Página 80 | <b>Portaplaquetas para plaquetas positivas</b><br> Herramientas con mango<br>Páginas 96-100<br> Coromant Capto<br>Páginas 97-101                                         |
| <b>K</b>                   | Acabado<br><br>Página 40                         | Mecaniza-<br>do medio<br><br>Página 42, 44 | Desbaste<br><br>Página 46, 48 | Acabado<br><br>Página 82                              | Mecaniza-<br>do medio<br><br>Página 84   | Desbaste<br><br>Página 86 |                                                                                                                                                                                                                                                                                                                                            |
| <b>N</b>                   |                                                                                                                                   |                                                                                                                             |                                                                                                                | Mecaniza-<br>do medio<br><br>Página 88              |                                                                                                                           |                                                                                                            | <b>Mecanizado interior</b><br><br><b>Portaplaquetas para plaquetas positivas</b><br> Herramientas con mango<br>Páginas 102-104<br> Coromant Capto<br>Páginas 103-105 |
| <b>S</b>                   | Acabado<br><br>Página 50                       | Mecaniza-<br>do medio<br><br>Página 52   | Desbaste<br><br>Página 54   | Acabado<br><br>Página 90                            | Mecaniza-<br>do medio<br><br>Página 92 |                                                                                                            | <b>Portaplaquetas para plaquetas negativas</b><br> Herramientas con mango<br>Páginas 65-68<br> Coromant Capto<br>Páginas 64-66                                       |
| <b>H</b>                   | Acabado<br><br>Página 56                       |                                                                                                                             |                                                                                                                | Acabado<br><br>Página 94                            |                                                                                                                           |                                                                                                            |                                                                                                                                                                                                                                                                                                                                            |

## Herramientas para torneear

Cilindrado con plaquitas T-Max P y CoroTurn<sup>®</sup> 107

## MECANIZADO EXTERIOR

(Páginas 58 - 63)

**CoroTurn<sup>®</sup> RC**

|              |              |              |              |
|--------------|--------------|--------------|--------------|
| <b>C</b> 95° | <b>W</b> 95° | <b>D</b> 93° | <b>V</b> 93° |
| <b>T</b> 93° | <b>T</b> 91° | <b>T</b> 91° | <b>S</b> 75° |
| <b>S</b> 75° | <b>S</b> 45° |              |              |

## MECANIZADO INTERIOR

(Páginas 64 - 69)

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| <b>C</b> 95° | <b>W</b> 95° | <b>D</b> 93° | <b>T</b> 91° | <b>S</b> 75° |
|--------------|--------------|--------------|--------------|--------------|

## MECANIZADO INTERIOR

(Páginas 102 - 105)

**CoroTurn 107**  
Fijación por tornillo

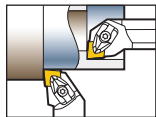
|                 |              |              |              |              |
|-----------------|--------------|--------------|--------------|--------------|
| <b>V</b> 107,5° | <b>C</b> 95° | <b>D</b> 93° | <b>V</b> 93° | <b>T</b> 91° |
| <b>S</b> 75°    |              |              |              |              |

## MECANIZADO EXTERIOR

(Páginas 96 - 101)

|                 |              |              |              |              |
|-----------------|--------------|--------------|--------------|--------------|
| <b>V</b> 107,5° | <b>C</b> 95° | <b>D</b> 93° | <b>V</b> 93° | <b>T</b> 91° |
| <b>T</b> 91°    | <b>S</b> 75° | <b>S</b> 45° | <b>R</b> 90° | <b>R</b> 27° |

Forma de la plaquita: **C** = rómbica de 80°, **D** = rómbica de 55°, **R** = redonda, **S** = cuadrada,  
**T** = triangular, **V** = rómbica de 35°, **W** = trigonal



## ACABADO DE ACERO

Acero de baja aleación, HB 180

ISO/  
ANSI

**P**

**F**

### T-MAX P

Doble  
cara

CNMG 12 04 08-WF

$a_p = 0,25 - 4,0$  mm

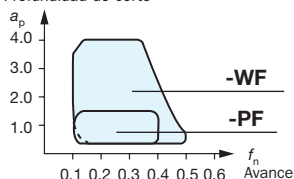
$f_n = 0,1 - 0,5$  mm/r

CNMG 12 04 08-PF

$a_p = 0,3 - 1,5$  mm

$f_n = 0,1 - 0,4$  mm/r

Profundidad de corte



### WF – para un cilindrado en acabado productivo

**Operaciones:** cilindrado longitudinal y refrentado

**Componentes:** husillos rígidos, ejes, cubos, engranajes, etc.

**Ventajas:** Avances convencionales dobles con el mismo acabado superficial o la mitad de los valores de acabado superficial con el mismo avance.

### -PF

**Operaciones:** cilindrado longitudinal, refrentado, torneado de la cara trasera y perfilado

**Componentes:** ejes, engranajes donde resulta prioritario un buen acabado superficial

**Ventajas:** geometría de corte ligero, bajas fuerzas de corte adecuadas para ejes esbeltos, componentes de paredes finas y piezas con una sujeción inestable.

### CONDICIONES BUENAS



- Cortes continuos
- Premecanizado o costra ligera de forjado.

#### AVANCE ELEVADO



-WF / GC4215

#### AVANCE NORMAL



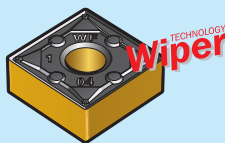
-PF / GC4215

### Primera elección CONDICIONES NORMALES



Operaciones de uso general.

#### AVANCE ELEVADO



-WF / GC4215

#### AVANCE NORMAL



-PF / GC4215

### CONDICIONES DIFÍCILES



- Cortes intermitentes
- Escama gruesa de forjado.

#### AVANCE ELEVADO



-WF / GC4225

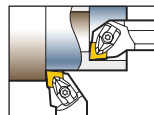
#### AVANCE NORMAL



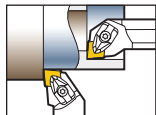
-PF / GC4225

ISO/  
ANSI**P F****ACABADO DE ACERO**

Plaquetas con forma básica negativa



| CÓDIGO DE PEDIDO                                                                       |             |        |        |        | DATOS DE CORTE, CMC 02.1 / HB 180 |                   |        |        |
|----------------------------------------------------------------------------------------|-------------|--------|--------|--------|-----------------------------------|-------------------|--------|--------|
|                                                                                        |             | GC4215 | GC4215 | GC4225 | Velocidad de corte $v_c$ (m/min)  |                   |        |        |
| Doble cara                                                                             | $r_c$       |        |        |        | Profundidad de corte $a_p$ mm     | Avance $f_n$ mm/r | GC4215 | GC4225 |
| <b>CNMG</b><br><b>DNMX</b><br><b>TNMX</b><br><b>WNMG</b>                               | 09 03 04-WF | ☆      | ★      |        | 0.5 (0.3-1.5)                     | 0.15 (0.05-0.25)  | 515    |        |
|                                                                                        | 09 03 08-WF | ☆      | ★      | ☆      | 1 (0.3-2)                         | 0.3 (0.1-0.5)     | 415    | 345    |
|                                                                                        | 12 04 04-WF | ☆      | ★      | ☆      | 0.4 (0.25-3)                      | 0.15 (0.05-0.25)  | 515    | 425    |
|                                                                                        | 12 04 08-WF | ☆      | ★      | ☆      | 1 (0.25-4)                        | 0.3 (0.1-0.5)     | 415    | 345    |
|                                                                                        | 12 04 12-WF | ☆      | ★      | ☆      | 1.5 (0.4-4)                       | 0.5 (0.2-0.6)     | 335    | 275    |
|                                                                                        | 11 04 04-WF | ☆      | ★      | ☆      | 1 (0.2-1.5)                       | 0.2 (0.08-0.3)    | 475    | 395    |
|                                                                                        | 11 04 08-WF | ☆      | ★      | ☆      | 1 (0.2-3)                         | 0.3 (0.1-0.4)     | 415    | 345    |
|                                                                                        | 15 06 04-WF | ☆      | ★      |        | 0.8 (0.2-3)                       | 0.2 (0.08-0.3)    | 475    |        |
|                                                                                        | 15 06 08-WF | ☆      | ★      | ☆      | 1.5 (0.2-3)                       | 0.3 (0.1-0.4)     | 415    | 345    |
|                                                                                        | 15 06 12-WF | ☆      | ★      | ☆      | 1.5 (0.4-3.5)                     | 0.4 (0.15-0.55)   | 370    | 305    |
|                                                                                        | 16 04 04-WF | ☆      | ★      | ☆      | 1 (0.2-3)                         | 0.2 (0.08-0.3)    | 475    | 395    |
|                                                                                        | 16 04 08-WF | ☆      | ★      | ☆      | 1.5 (0.2-3)                       | 0.3 (0.1-0.4)     | 415    | 345    |
|                                                                                        | 06 04 04-WF | ☆      | ★      | ☆      | 0.4 (0.25-2)                      | 0.15 (0.05-0.25)  | 515    | 425    |
|                                                                                        | 06 04 08-WF | ☆      | ★      | ☆      | 1 (0.25-3)                        | 0.3 (0.1-0.5)     | 415    | 345    |
|                                                                                        | 08 04 04-WF | ☆      | ★      | ☆      | 0.4 (0.25-3)                      | 0.15 (0.05-0.25)  | 515    | 425    |
| <b>CNMG</b><br><b>DNMG</b><br><b>SNMG</b><br><b>TNMG</b><br><b>VNMG</b><br><b>WNMG</b> | 09 03 04-PF | ☆      | ★      | ☆      | 0.4 (0.25-1.5)                    | 0.15 (0.07-0.3)   | 515    | 425    |
|                                                                                        | 09 03 08-PF | ☆      | ★      | ☆      | 0.4 (0.3-1.5)                     | 0.15 (0.1-0.3)    | 515    | 425    |
|                                                                                        | 12 04 04-PF | ☆      | ★      | ☆      | 0.4 (0.25-1.5)                    | 0.15 (0.07-0.3)   | 515    | 425    |
|                                                                                        | 12 04 08-PF | ☆      | ★      | ☆      | 0.4 (0.3-1.5)                     | 0.2 (0.1-0.4)     | 475    | 395    |
|                                                                                        | 12 04 12-PF | ☆      | ★      | ☆      | 0.8 (0.35-1.5)                    | 0.25 (0.15-0.5)   | 445    | 365    |
|                                                                                        | 11 04 04-PF | ☆      | ★      | ☆      | 0.4 (0.25-1.5)                    | 0.15 (0.07-0.3)   | 515    | 425    |
|                                                                                        | 11 04 08-PF | ☆      | ★      | ☆      | 0.4 (0.3-1.5)                     | 0.2 (0.1-0.4)     | 475    | 395    |
|                                                                                        | 11 04 12-PF | ☆      | ★      | ☆      | 0.8 (0.35-1.5)                    | 0.25 (0.15-0.5)   | 445    | 365    |
|                                                                                        | 15 04 04-PF | ☆      | ★      | ☆      | 0.4 (0.25-1.5)                    | 0.15 (0.07-0.3)   | 515    | 425    |
|                                                                                        | 15 04 08-PF | ☆      | ★      | ☆      | 0.4 (0.3-1.5)                     | 0.2 (0.1-0.4)     | 475    | 395    |
|                                                                                        | 15 04 12-PF | ☆      | ★      | ☆      | 0.8 (0.35-1.5)                    | 0.25 (0.15-0.5)   | 445    | 365    |
|                                                                                        | 15 06 04-PF | ☆      | ★      | ☆      | 0.4 (0.25-1.5)                    | 0.15 (0.07-0.3)   | 515    | 425    |
|                                                                                        | 15 06 08-PF | ☆      | ★      | ☆      | 0.4 (0.3-1.5)                     | 0.2 (0.1-0.4)     | 475    | 395    |
|                                                                                        | 15 06 12-PF | ☆      | ★      | ☆      | 0.8 (0.35-1.5)                    | 0.25 (0.15-0.5)   | 445    | 365    |
|                                                                                        | 12 04 08-PF | ☆      | ★      | ☆      | 0.4 (0.3-1.5)                     | 0.2 (0.1-0.4)     | 475    | 395    |
|                                                                                        | 12 04 12-PF | ☆      | ★      | ☆      | 0.8 (0.35-1.5)                    | 0.25 (0.15-0.5)   | 445    | 365    |
|                                                                                        | 16 04 04-PF | ☆      | ★      | ☆      | 0.4 (0.35-1.5)                    | 0.15 (0.07-0.3)   | 515    | 425    |
|                                                                                        | 16 04 08-PF | ☆      | ★      | ☆      | 0.4 (0.3-1.5)                     | 0.2 (0.1-0.4)     | 475    | 395    |
|                                                                                        | 16 04 12-PF | ☆      | ★      | ☆      | 0.8 (0.35-1.5)                    | 0.25 (0.15-0.5)   | 445    | 365    |
|                                                                                        | 22 04 08-PF | ☆      | ★      | ☆      | 0.4 (0.3-1.5)                     | 0.2 (0.1-0.4)     | 475    | 395    |
|                                                                                        | 22 04 12-PF | ☆      | ★      | ☆      | 0.8 (0.35-1.5)                    | 0.25 (0.15-0.5)   | 445    | 365    |
|                                                                                        | 16 04 04-PF | ☆      | ★      | ☆      | 0.4 (0.25-1.5)                    | 0.15 (0.07-0.3)   | 515    | 425    |
|                                                                                        | 16 04 08-PF | ☆      | ★      | ☆      | 0.4 (0.3-1.5)                     | 0.2 (0.1-0.4)     | 475    | 395    |
|                                                                                        | 06 04 04-PF | ☆      | ★      | ☆      | 0.4 (0.25-1.5)                    | 0.15 (0.07-0.3)   | 515    | 425    |
|                                                                                        | 06 04 08-PF | ☆      | ★      | ☆      | 0.4 (0.3-1.5)                     | 0.2 (0.1-0.4)     | 475    | 395    |
|                                                                                        | 06 04 12-PF | ☆      | ★      | ☆      | 0.8 (0.4-1.5)                     | 0.25 (0.15-0.5)   | 445    |        |
|                                                                                        | 08 04 04-PF | ☆      | ★      | ☆      | 0.4 (0.25-1.5)                    | 0.15 (0.07-0.3)   | 515    | 425    |
|                                                                                        | 08 04 08-PF | ☆      | ★      | ☆      | 0.4 (0.3-1.5)                     | 0.2 (0.1-0.4)     | 475    | 395    |
|                                                                                        | 08 04 12-PF | ☆      | ★      | ☆      | 0.8 (0.4-1.5)                     | 0.25 (0.15-0.5)   | 445    | 365    |



## MECANIZADO MEDIO DE ACERO

Acero de baja aleación, HB 180

ISO/  
ANSI

**P**

**M**

### T-MAX P

Doble  
cara

#### CNMG 12 04 08-WMX

$a_p = 0,5 - 5,0 \text{ mm}$

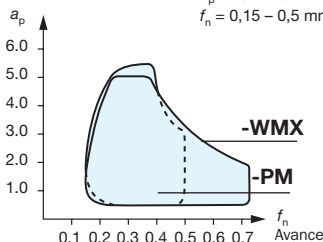
$f_n = 0,15 - 0,6 \text{ mm/r}$

#### CNMG 12 04 08-PM

$a_p = 0,5 - 5,5 \text{ mm}$

$f_n = 0,15 - 0,5 \text{ mm/r}$

Profundidad de corte



### WMX – para un cilindrado medio productivo

**Operaciones:** cilindrado longitudinal y refrentado

**Componentes:** husillos rígidos, ejes, cubos, engranajes, etc.

**Ventajas:** Triplica la velocidad de avance convencional con mejor acabado superficial. Ideal si es prioritario un buen acabado superficial. Puede sustituir a la operación de rectificado. Rotura de viruta mejorada por la mayor velocidad de avance. Mayor duración de la herramienta (piezas/filo) gracias a la reducción del tiempo de empuñe del filo.

**-PM**

**Operaciones:** cilindrado longitudinal, refrentado y perfilado

**Componentes típicos:** ejes, cubos, engranajes, etc. en acero

**Ventajas:** altamente fiable debido a un mecanizado sin problemas

### CONDICIONES BUENAS



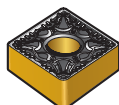
- Cortes continuos
- Premecanizado o costra ligera de forjado.

#### AVANCE ELEVADO



-WMX / GC4205

#### AVANCE NORMAL



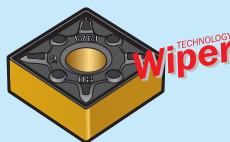
-PM / GC4215

### CONDICIONES NORMALES



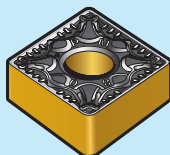
Operaciones de uso general.

#### AVANCE ELEVADO



-WMX / GC4215

#### AVANCE NORMAL



-PM / GC4225

### CONDICIONES DIFÍCILES



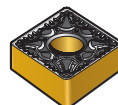
- Cortes intermitentes
- Escama gruesa de forjado.

#### AVANCE ELEVADO



-WMX / GC4225

#### AVANCE NORMAL

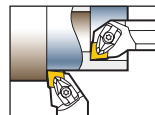


-PM / GC4235

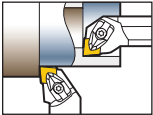


ISO/  
ANSI**P M****MECANIZADO MEDIO DE ACERO**

Plaquitas con forma básica negativa



| CÓDIGO DE PEDIDO                                                                    |             |                                                                                   |       |        |        |        | DATOS DE CORTE, CMC 02.1 / HB 180 |        |             |                               |                   |        |        |        |        |
|-------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------|-------|--------|--------|--------|-----------------------------------|--------|-------------|-------------------------------|-------------------|--------|--------|--------|--------|
|                                                                                     |             |                                                                                   |       |        |        |        | Velocidad de corte $v_c$ (m/min)  |        |             |                               |                   |        |        |        |        |
| Doble cara                                                                          |             |  | $r_e$ | GC4205 | GC4215 | GC4215 | GC4225                            | GC4225 | GC4235      | Profundidad de corte $a_p$ mm | Avance $f_n$ mm/r | GC4205 | GC4215 | GC4225 | GC4235 |
|    | CNMG        | 12 04 08-WMX                                                                      | ☆     |        | ★      |        | ☆                                 |        |             | 3 (0.5-5)                     | 0.45 (0.15-0.7)   | 390    | 350    | 290    |        |
|                                                                                     |             | 12 04 12-WMX                                                                      |       |        | ★      |        | ☆                                 |        |             | 3.5 (0.8-6)                   | 0.5 (0.2-0.75)    | 370    | 335    | 275    |        |
|                                                                                     |             | 16 06 08-WMX                                                                      | ☆     |        | ★      |        | ☆                                 |        |             | 3 (0.5-5)                     | 0.45 (0.15-0.7)   | 390    | 350    | 290    |        |
|                                                                                     |             | 16 06 12-WMX                                                                      | ☆     |        | ★      |        | ☆                                 |        |             | 3.5 (0.8-6)                   | 0.5 (0.2-0.75)    | 370    | 335    | 275    |        |
|    | DNMX        | 15 06 08-WMX                                                                      | ☆     |        | ★      |        | ☆                                 |        |             | 3 (0.5-5)                     | 0.45 (0.15-0.7)   | 390    | 350    | 290    |        |
|                                                                                     |             | 15 06 12-WMX                                                                      | ☆     |        | ★      |        | ☆                                 |        |             | 3.5 (0.8-6)                   | 0.5 (0.2-0.75)    | 370    | 335    | 275    |        |
|                                                                                     |             | 15 06 16-WMX                                                                      | ☆     |        | ★      |        | ☆                                 |        |             | 3.5 (0.5-6)                   | 0.5 (0.2-0.8)     | 370    | 335    | 275    |        |
|    | TNMX        | 16 04 08-WMX                                                                      | ☆     |        | ★      |        | ☆                                 |        |             | 3 (0.5-5)                     | 0.45 (0.15-0.7)   | 390    | 350    | 290    |        |
|                                                                                     |             | 16 04 12-WMX                                                                      | ☆     |        | ★      |        | ☆                                 |        |             | 3.5 (0.8-6)                   | 0.5 (0.2-0.75)    | 370    | 335    | 275    |        |
|    | WNMG        | 06 04 08-WMX                                                                      | ☆     |        | ★      |        | ☆                                 |        |             | 3 (0.5-5)                     | 0.45 (0.15-0.7)   | 390    | 350    | 290    |        |
|                                                                                     |             | 06 04 12-WMX                                                                      | ☆     |        | ★      |        | ☆                                 |        |             | 3.5 (0.8-6)                   | 0.5 (0.2-0.75)    | 370    | 335    | 275    |        |
|                                                                                     |             | 08 04 08-WMX                                                                      | ☆     |        | ★      |        | ☆                                 |        |             | 3 (0.5-5)                     | 0.45 (0.15-0.7)   | 390    | 350    | 290    |        |
|                                                                                     |             | 08 04 12-WMX                                                                      | ☆     |        | ★      |        | ☆                                 |        |             | 3.5 (0.8-6)                   | 0.5 (0.2-0.75)    | 370    | 335    | 275    |        |
|    | CNMG        | 09 03 04-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 2 (0.4-4)                     | 0.2 (0.1-0.3)     |        | 475    | 395    | 240    |
|                                                                                     |             | 09 03 08-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 2 (0.5-4)                     | 0.3 (0.15-0.5)    |        | 415    | 345    | 210    |
|                                                                                     |             | 12 04 04-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 3 (0.4-5.5)                   | 0.2 (0.1-0.3)     |        | 475    | 395    | 240    |
|                                                                                     |             | 12 04 08-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 3 (0.5-5.5)                   | 0.3 (0.15-0.5)    |        | 415    | 345    | 210    |
|                                                                                     |             | 12 04 12-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 3 (0.8-5.5)                   | 0.35 (0.18-0.6)   |        | 390    | 325    | 195    |
|                                                                                     |             | 12 04 16-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 3 (1-5.5)                     | 0.4 (0.23-0.65)   |        | 370    | 305    | 185    |
|                                                                                     |             | 16 06 08-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 4 (0.5-7.2)                   | 0.3 (0.15-0.5)    |        | 415    | 345    | 210    |
|                                                                                     |             | 16 06 12-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 4 (0.8-7.2)                   | 0.35 (0.18-0.6)   |        | 390    | 325    | 195    |
|                                                                                     |             | 16 06 16-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 4 (1-7.2)                     | 0.4 (0.23-0.65)   |        | 370    | 305    | 185    |
|                                                                                     | DNMG        | 11 04 04-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 2 (0.4-5)                     | 0.2 (0.1-0.3)     |        | 475    | 395    | 240    |
|                                                                                     |             | 11 04 08-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 2 (0.5-5)                     | 0.3 (0.15-0.5)    |        | 415    | 345    | 210    |
|                                                                                     |             | 11 04 12-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 2 (0.8-5)                     | 0.35 (0.18-0.5)   |        | 390    | 325    | 195    |
|                                                                                     |             | 15 06 04-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 3 (0.4-6)                     | 0.2 (0.1-0.3)     |        | 475    | 395    | 240    |
|                                                                                     |             | 15 06 08-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 3 (0.5-6)                     | 0.3 (0.15-0.5)    |        | 415    | 345    | 210    |
|                                                                                     |             | 15 06 12-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 3 (0.8-6)                     | 0.35 (0.18-0.6)   |        | 390    | 325    | 195    |
|                                                                                     |             | 15 06 16-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 3 (1-6)                       | 0.4 (0.23-0.65)   |        | 370    | 305    | 185    |
|                                                                                     | SNMG        | 09 03 04-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 2 (0.4-4.5)                   | 0.2 (0.1-0.3)     |        | 475    | 395    | 240    |
|                                                                                     |             | 09 03 08-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 2 (0.5-4.5)                   | 0.3 (0.15-0.5)    |        | 415    | 345    | 210    |
| 12 04 04-PM                                                                         |             |                                                                                   | ☆     | ★      |        | ☆      |                                   |        | 3 (0.4-6)   | 0.2 (0.1-0.3)                 |                   | 475    | 395    | 240    |        |
| 12 04 08-PM                                                                         |             |                                                                                   | ☆     | ★      |        | ☆      |                                   |        | 3 (0.5-6)   | 0.3 (0.15-0.5)                |                   | 415    | 345    | 210    |        |
| 12 04 12-PM                                                                         |             |                                                                                   | ☆     | ★      |        | ☆      |                                   |        | 3 (0.8-6)   | 0.35 (0.18-0.6)               |                   | 390    | 325    | 195    |        |
| 12 04 16-PM                                                                         |             |                                                                                   | ☆     | ★      |        | ☆      |                                   |        | 3 (1-6)     | 0.4 (0.23-0.65)               |                   | 370    | 305    | 185    |        |
| 15 06 12-PM                                                                         |             |                                                                                   | ☆     | ★      |        | ☆      |                                   |        | 4 (0.8-7.5) | 0.35 (0.18-0.6)               |                   | 390    | 325    | 195    |        |
| 15 06 16-PM                                                                         |             |                                                                                   | ☆     | ★      |        | ☆      |                                   |        | 4 (1-7.5)   | 0.4 (0.23-0.65)               |                   | 370    | 305    |        |        |
| TNMG                                                                                | 16 04 04-PM |                                                                                   | ☆     | ★      |        | ☆      |                                   |        | 3 (0.4-5)   | 0.2 (0.1-0.3)                 |                   | 470    | 395    | 240    |        |
|                                                                                     | 16 04 08-PM |                                                                                   | ☆     | ★      |        | ☆      |                                   |        | 3 (0.5-5)   | 0.3 (0.15-0.5)                |                   | 415    | 345    | 210    |        |
|                                                                                     | 16 04 12-PM |                                                                                   | ☆     | ★      |        | ☆      |                                   |        | 3 (0.8-5)   | 0.35 (0.18-0.6)               |                   | 390    | 325    | 195    |        |
|                                                                                     | 22 04 04-PM |                                                                                   | ☆     | ★      |        | ☆      |                                   |        | 4 (0.4-6.6) | 0.2 (0.1-0.3)                 |                   | 475    | 395    | 240    |        |
|                                                                                     | 22 04 08-PM |                                                                                   | ☆     | ★      |        | ☆      |                                   |        | 4 (0.5-6.6) | 0.3 (0.15-0.5)                |                   | 415    | 345    | 210    |        |
|                                                                                     | 22 04 12-PM |                                                                                   | ☆     | ★      |        | ☆      |                                   |        | 4 (0.8-6.6) | 0.35 (0.18-0.6)               |                   | 390    | 325    | 195    |        |
|                                                                                     | 22 04 16-PM |                                                                                   | ☆     | ★      |        | ☆      |                                   |        | 4 (1-6.6)   | 0.4 (0.23-0.65)               |                   | 370    | 305    | 185    |        |
| VNMG                                                                                | 16 04 08-PM |                                                                                   | ☆     | ★      |        | ☆      |                                   |        | 2 (0.5-4)   | 0.3 (0.15-0.5)                |                   | 415    | 345    | 210    |        |
|                                                                                     | 16 04 12-PM |                                                                                   | ☆     | ★      |        | ☆      |                                   |        | 2 (0.8-4)   | 0.35 (0.18-0.6)               |                   | 390    | 325    | 195    |        |
|  | WNMG        | 06 04 08-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 2 (0.5-3)                     | 0.3 (0.15-0.5)    |        | 415    | 345    | 210    |
|                                                                                     |             | 06 04 12-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 2 (0.8-3)                     | 0.35 (0.18-0.6)   |        | 390    | 325    | 195    |
|                                                                                     |             | 08 04 08-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 2.5 (0.5-4)                   | 0.3 (0.15-0.5)    |        | 415    | 345    | 210    |
|                                                                                     |             | 08 04 12-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 2.5 (0.8-4)                   | 0.35 (0.18-0.6)   |        | 390    | 325    | 195    |
|                                                                                     |             | 08 04 16-PM                                                                       |       | ☆      | ★      |        | ☆                                 |        |             | 3 (1-4)                       | 0.4 (0.23-0.65)   |        | 370    | 305    |        |



DESBASTE DE ACERO

Acero de baja aleación, HB 180

ISO/  
ANSI

P

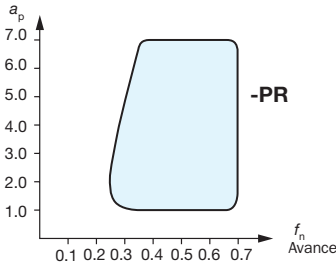
R

T-MAX P

Doble  
cara

CNMG 12 04 12-PR  
 $a_p = 1,0 - 7,0 \text{ mm}$   
 $f_n = 0,25 - 0,7 \text{ mm/r}$

Profundidad de corte



-PR

Operaciones: cilindrado longitudinal, refrentado y perfilado

Componentes: ejes, cubos, engranajes, etc. en acero

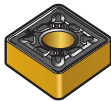
Ventajas: para uso universal, geometría de plaquita de doble cara con gran capacidad de desbaste que contribuye a una buena economía en el mecanizado

CONDICIONES BUENAS



- Cortes continuos
- Premecanizado o costra ligera de forjado.

AVANCE NORMAL



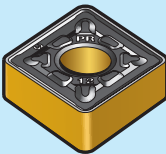
-PR / GC4215

CONDICIONES NORMALES



Operaciones de uso general.

AVANCE NORMAL



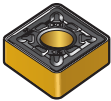
-PR / GC4225

CONDICIONES DIFÍCILES



- Cortes intermitentes
- Escama gruesa de forjado.

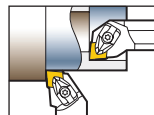
AVANCE NORMAL



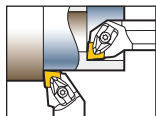
-PR / GC4235

ISO/  
ANSI**P R****DESBASTE DE ACERO**

Plaquitas con forma básica negativa



| CÓDIGO DE PEDIDO                                                                    |                                                                                   |             |                                                                                   |                                                                                   |                                                                                   | DATOS DE CORTE, CMC 02.1 / HB 180 |                      |                                  |        |        |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------|----------------------|----------------------------------|--------|--------|
| Doble cara                                                                          |  | $r_e$       |  |  |  | Profundidad de corte<br>$a_p$ mm  | Avance<br>$f_r$ mm/r | Velocidad de corte $v_c$ (m/min) |        |        |
|                                                                                     |                                                                                   |             | GC4215                                                                            | GC4225                                                                            | GC4235                                                                            |                                   |                      | GC4215                           | GC4225 | GC4235 |
|    | CNMG                                                                              | 12 04 08-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 4 (0.7-7)                         | 0.35 (0.2-0.5)       | 390                              | 325    | 195    |
|                                                                                     |                                                                                   | 12 04 12-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 4 (1-7)                           | 0.4 (0.25-0.7)       | 370                              | 305    | 185    |
|                                                                                     |                                                                                   | 12 04 16-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 4 (1.5-7)                         | 0.5 (0.32-0.75)      | 335                              | 275    | 170    |
|                                                                                     |                                                                                   | 16 06 08-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 5 (0.7-8)                         | 0.35 (0.2-0.5)       | 390                              | 325    | 195    |
|                                                                                     |                                                                                   | 16 06 12-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 5 (1-8)                           | 0.4 (0.25-0.7)       | 370                              | 305    | 185    |
|                                                                                     |                                                                                   | 16 06 16-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 5 (1.5-8)                         | 0.5 (0.3-0.8)        | 335                              | 275    | 170    |
|                                                                                     |                                                                                   | 16 06 24-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 5 (2-8)                           | 0.5 (0.32-0.9)       | 335                              | 275    | 170    |
|                                                                                     |                                                                                   | 19 06 08-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 5 (0.7-10)                        | 0.35 (0.2-0.5)       | 390                              | 325    | 195    |
|                                                                                     |                                                                                   | 19 06 12-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 5 (1-10)                          | 0.4 (0.25-0.7)       | 370                              | 305    | 185    |
|                                                                                     |                                                                                   | 19 06 16-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 5 (1.5-10)                        | 0.5 (0.3-0.8)        | 335                              | 275    | 170    |
| 19 06 24-PR                                                                         | ☆                                                                                 | ★           | ☆                                                                                 | 5 (2-10)                                                                          | 0.5 (0.32-0.9)                                                                    | 335                               | 275                  | 170                              |        |        |
|    | DNMG                                                                              | 15 06 08-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 4 (0.7-6)                         | 0.35 (0.2-0.5)       | 390                              | 325    | 195    |
|                                                                                     |                                                                                   | 15 06 12-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 4 (1-6)                           | 0.4 (0.25-0.7)       | 370                              | 305    | 185    |
|                                                                                     |                                                                                   | 15 06 16-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 4 (1.5-6)                         | 0.5 (0.32-0.75)      | 335                              | 275    | 170    |
|    | SNMG                                                                              | 12 04 08-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 4 (0.7-7)                         | 0.35 (0.2-0.5)       | 390                              | 325    | 195    |
|                                                                                     |                                                                                   | 12 04 12-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 4 (1-7)                           | 0.4 (0.25-0.7)       | 370                              | 305    | 185    |
|                                                                                     |                                                                                   | 15 06 08-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 5 (1.5-8)                         | 0.35 (0.2-0.5)       | 390                              | 325    | 195    |
|                                                                                     |                                                                                   | 15 06 12-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 5 (1-8)                           | 0.4 (0.25-0.7)       | 370                              | 305    | 185    |
|                                                                                     |                                                                                   | 15 06 16-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 5 (1.5-8)                         | 0.5 (0.3-0.8)        | 335                              | 275    | 170    |
|                                                                                     |                                                                                   | 15 06 24-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 5 (2-8)                           | 0.5 (0.32-0.9)       | 335                              | 275    | 170    |
|                                                                                     |                                                                                   | 19 06 12-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 5 (1-10)                          | 0.4 (0.25-0.7)       | 370                              | 305    | 185    |
|                                                                                     |                                                                                   | 19 06 16-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 5 (1.5-10)                        | 0.5 (0.3-0.8)        | 335                              | 275    | 170    |
| 19 06 24-PR                                                                         | ☆                                                                                 | ★           | ☆                                                                                 | 5 (2-10)                                                                          | 0.5 (0.32-0.9)                                                                    | 335                               | 275                  | 170                              |        |        |
|   | TNMG                                                                              | 16 04 08-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 3 (0.7-6)                         | 0.35 (0.2-0.55)      | 390                              | 325    | 195    |
|                                                                                     |                                                                                   | 16 04 12-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 3 (1-6)                           | 0.4 (0.25-0.65)      | 370                              | 305    | 185    |
|                                                                                     |                                                                                   | 22 04 08-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 4 (0.7-7)                         | 0.35 (0.2-0.55)      | 390                              | 325    | 195    |
|                                                                                     |                                                                                   | 22 04 12-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 4 (1-7)                           | 0.4 (0.25-0.65)      | 370                              | 305    | 185    |
|                                                                                     |                                                                                   | 22 04 16-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 4 (1.5-7)                         | 0.5 (0.32-0.75)      | 335                              | 275    | 170    |
|  | WNMG                                                                              | 06 04 08-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 3 (0.7-3.5)                       | 0.3 (0.2-0.45)       | 415                              | 345    | 210    |
|                                                                                     |                                                                                   | 06 04 12-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 3 (0.8-3.5)                       | 0.35 (0.25-0.55)     | 390                              | 325    |        |
|                                                                                     |                                                                                   | 08 04 08-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 4 (0.7-5)                         | 0.35 (0.2-0.55)      | 390                              | 325    | 195    |
|                                                                                     |                                                                                   | 08 04 12-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 4 (1-5)                           | 0.4 (0.25-0.7)       | 370                              | 305    | 185    |
|                                                                                     |                                                                                   | 08 04 16-PR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 4 (1.5-5)                         | 0.5 (0.32-0.75)      | 335                              | 275    | 170    |



## DESBASTE DE ACERO

Acero de baja aleación, HB 180

ISO/  
ANSI

**P**

**R**

### T-MAX P

Una sola cara

CNMM 12 04 12-WR

$a_p = 1,0 - 5,0 \text{ mm}$

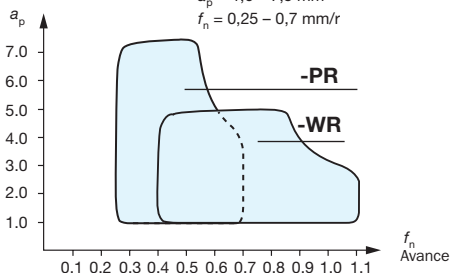
$f_n = 0,4 - 1,1 \text{ mm/r}$

CNMM 12 04 12-PR

$a_p = 1,0 - 7,5 \text{ mm}$

$f_n = 0,25 - 0,7 \text{ mm/r}$

Profundidad de corte



### WR – para un cilindrado en desbaste productivo

Operaciones: cilindrado longitudinal y refrentado

Componentes: husillos, ejes, engranajes, etc.

Ventajas: geometría robusta de plaqueta de una cara para un elevado régimen de arranque del metal con gran estabilidad de la plaqueta en el asiento.

### -PR

Operaciones: cilindrado longitudinal, refrentado y perfilado

Componentes: husillos, ejes, cubos, engranajes, etc.

Ventajas: geometría de desbaste positiva que genera fuerzas de corte bajas, amplia gama de aplicaciones, gran estabilidad de las plaquetas de una cara

#### CONDICIONES BUENAS



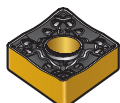
- Cortes continuos
- Premecanizado o costra ligera de forjado.

#### AVANCE ELEVADO



-WR / GC4205

#### AVANCE NORMAL



-PR / GC4215

#### CONDICIONES NORMALES



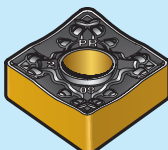
Operaciones de uso general.

#### AVANCE ELEVADO



-WR / GC4215

#### AVANCE NORMAL



-PR / GC4225

#### CONDICIONES DIFÍCILES



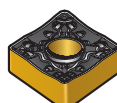
- Cortes intermitentes
- Escama gruesa de forjado.

#### AVANCE ELEVADO



-WR / GC4225

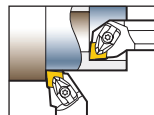
#### AVANCE NORMAL



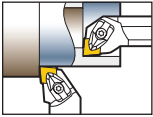
-PR / GC4235

ISO/  
ANSI**P R****DESBASTE DE ACERO**

Plaquitas con forma básica negativa



| CÓDIGO DE PEDIDO                                                                                      |                         |   |                                                                                   |                                                                                   |                                                                                   |                                  | DATOS DE CORTE, CMC 02.1 / HB 180 |                   |              |                 |     |     |     |
|-------------------------------------------------------------------------------------------------------|-------------------------|---|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------|-----------------------------------|-------------------|--------------|-----------------|-----|-----|-----|
|                                                                                                       |                         |   |  |  |  | Velocidad de corte $v_c$ (m/min) |                                   |                   |              |                 |     |     |     |
|                                                                                                       |                         |   | GC4205                                                                            | GC4215                                                                            | GC4215                                                                            | GC4225                           | GC4225                            | GC4235            |              |                 |     |     |     |
| Una sola cara  $r_e$ |                         |   |                                                                                   |                                                                                   |                                                                                   | Profundidad de corte $a_p$ mm    |                                   | Avance $f_r$ mm/r |              |                 |     |     |     |
| <br><b>Wiper</b>     | <b>CNMM 12 04 08-WR</b> | ☆ |                                                                                   | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 2.5 (0.8-5)  | 0.6 (0.3-0.8)   | 335 | 305 | 250 |
|                                                                                                       | 12 04 12-WR             | ☆ |                                                                                   | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 2.5 (1-5)    | 0.8 (0.4-1.1)   | 285 | 260 | 215 |
|                                                                                                       | 12 04 16-WR             | ☆ |                                                                                   | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 2.5 (1.2-5)  | 0.8 (0.44-1.2)  | 285 | 260 | 215 |
|                                                                                                       | 16 06 12-WR             | ☆ |                                                                                   | ★                                                                                 |                                                                                   |                                  |                                   |                   | 3 (1.2-6)    | 0.8 (0.42-1.2)  | 285 | 260 |     |
|                                                                                                       | 16 06 16-WR             | ☆ |                                                                                   |                                                                                   |                                                                                   | ☆                                |                                   |                   | 3 (1.4-6)    | 0.9 (0.46-1.2)  | 265 |     | 200 |
|                                                                                                       | 19 06 16-WR             | ☆ |                                                                                   | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 3.3(1.6-6.7) | 1.0 (0.48-1.2)  | 245 | 225 | 185 |
|                      | <b>TNMX 22 04 12-WR</b> |   |                                                                                   | ★                                                                                 |                                                                                   |                                  |                                   |                   | 2.5 (1-5)    | 0.8 (0.4-1.1)   | 260 |     |     |
|                      | <b>CNMM 12 04 08-PR</b> |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 5 (0.7-7.5)  | 0.4 (0.2-0.55)  | 370 | 305 | 185 |
|                                                                                                       | 12 04 12-PR             |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 5 (1-7.5)    | 0.5 (0.25-0.7)  | 335 | 275 | 170 |
|                                                                                                       | 12 04 16-PR             |   | ☆                                                                                 | ★                                                                                 |                                                                                   |                                  |                                   |                   | 5 (1.5-7.5)  | 0.55 (0.32-0.9) | 320 | 265 |     |
|                                                                                                       | 16 06 08-PR             |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 6 (0.7-9.5)  | 0.4 (0.2-0.55)  | 370 | 305 | 185 |
|                                                                                                       | 16 06 12-PR             |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 6 (1-9.5)    | 0.5 (0.25-0.7)  | 335 | 275 | 170 |
|                                                                                                       | 16 06 16-PR             |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 6 (1.5-9.5)  | 0.55 (0.32-0.9) | 320 | 265 | 160 |
|                                                                                                       | 19 06 12-PR             |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 6 (1-12)     | 0.5 (0.25-0.7)  | 335 | 275 | 170 |
|                                                                                                       | 19 06 16-PR             |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 6 (1.5-12)   | 0.55 (0.32-0.9) | 320 | 265 | 160 |
|                                                                                                       | 19 06 24-PR             |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 6 (2-12)     | 0.55 (0.35-1.2) | 320 | 265 | 160 |
|                      | <b>DNMM 15 06 08-PR</b> |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 5 (0.7-6)    | 0.4 (0.2-0.55)  | 370 | 305 | 185 |
|                                                                                                       | 15 06 12-PR             |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 5 (1-6)      | 0.5 (0.25-0.7)  | 335 | 275 | 170 |
|                                                                                                       | 15 06 16-PR             |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 5 (1.5-6)    | 0.55 (0.32-0.9) | 320 | 265 | 160 |
|                     | <b>SNMM 12 04 08-PR</b> |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 5 (0.7-7.5)  | 0.4 (0.2-0.55)  | 370 | 305 | 185 |
|                                                                                                       | 12 04 12-PR             |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 5 (1-7.5)    | 0.5 (0.25-0.7)  | 335 | 275 | 170 |
|                                                                                                       | 15 06 12-PR             |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 6 (1-9)      | 0.5 (0.25-0.7)  | 335 | 275 | 170 |
|                                                                                                       | 15 06 16-PR             |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 6 (1.5-9)    | 0.55 (0.32-0.9) | 320 | 265 | 160 |
|                                                                                                       | 19 06 12-PR             |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 6 (1-12)     | 0.5 (0.25-0.7)  | 335 | 275 | 170 |
|                                                                                                       | 19 06 16-PR             |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 6 (1.5-12)   | 0.55 (0.32-0.9) | 320 | 265 | 160 |
|                                                                                                       | 19 06 24-PR             |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 6 (2-12)     | 0.55 (0.35-1.2) | 320 | 265 | 160 |
|                    | <b>TNMM 16 04 08-PR</b> |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 4 (0.7-6)    | 0.4 (0.2-0.55)  | 370 | 305 | 185 |
|                                                                                                       | 16 04 12-PR             |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 4 (1-6)      | 0.5 (0.25-0.7)  | 335 | 275 | 170 |
|                                                                                                       | 22 04 08-PR             |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 5 (0.7-8)    | 0.4 (0.2-0.55)  | 370 | 305 | 185 |
|                                                                                                       | 22 04 12-PR             |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 5 (1-8)      | 0.5 (0.25-0.7)  | 335 | 275 | 170 |
|                                                                                                       | 22 04 16-PR             |   | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆                                |                                   |                   | 5 (1.5-8)    | 0.55 (0.32-0.9) | 320 | 265 | 160 |



ACABADO DE ACERO INOXIDABLE

Acero inoxidable, austenítico, HB 180

ISO/  
ANSI

M

F

T-MAX P

Doble  
cara

CNMG 12 04 08-WF

$a_p = 0,3 - 4,0$  mm

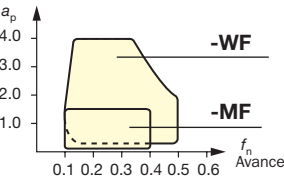
$f_n = 0,1 - 0,5$  mm/r

CNMG 12 04 08-MF

$a_p = 0,1 - 1,5$  mm

$f_n = 0,1 - 0,4$  mm/r

Profundidad de corte



WF – para un cilindrado en acabado productivo

Operaciones: cilindrado longitudinal y refrentado

Componentes: husillos rígidos, ejes, cubos, engranajes, etc.

Ventajas: Avances convencionales dobles con el mismo acabado superficial o la mitad de los valores de acabado superficial para el mismo avance.

-MF

Operaciones: operaciones de acabado en general

Componentes: piezas de acero inoxidable en general

Ventajas: geometría de corte ligero con bajas fuerzas de corte, buena alternativa para ejes esbeltos, componentes de paredes finas y piezas de sujeción inestable.

CONDICIONES BUENAS



- Cortes continuos
- Premecanizado o costra ligera de fundición/forjado.

AVANCE ELEVADO



-WF / GC2015

AVANCE NORMAL



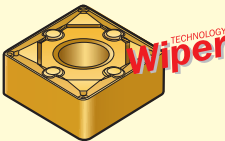
-MF / GC2015

CONDICIONES NORMALES



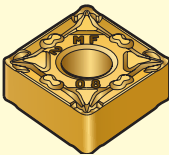
Operaciones de uso  
general.

AVANCE ELEVADO



-WF / GC2015

AVANCE NORMAL



-MF / GC2015

CONDICIONES DIFÍCILES



- Cortes intermitentes
- Costra de fundición o escamas gruesas de forjado.

AVANCE ELEVADO



-WF / GC2015

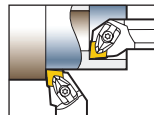
AVANCE NORMAL



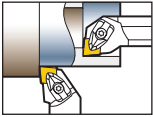
-MF / GC2025

ISO/  
ANSI**M F****ACABADO DE ACERO INOXIDABLE**

Plaquetas con forma básica negativa



| CÓDIGO DE PEDIDO                                                                                  |                                                               |                                                                                   |                  |                                                                                   | DATOS DE CORTE, CMC 05.21 / HB 180                                                |                                                                                   |                                                                        |                          |                                  |        |
|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------|--------------------------|----------------------------------|--------|
| Doble cara                                                                                        |                                                               |  | $r_c$            |  |  |  | Profundidad de corte<br>$a_p$ mm                                       | Avance<br>$f_n$ mm/r     | Velocidad de corte $v_c$ (m/min) |        |
|                                                                                                   |                                                               |                                                                                   |                  |                                                                                   |                                                                                   |                                                                                   |                                                                        |                          | GC2015                           | GC2025 |
|                  | CNMG 12 04 04-WF<br>12 04 08-WF                               | ☆<br>☆                                                                            | ★<br>★           | ☆<br>☆                                                                            |                                                                                   | 0.4 (0.25-3)<br>1 (0.25-4)                                                        | 0.15 (0.05-0.25)<br>0.3 (0.1-0.5)                                      | 290<br>220               |                                  |        |
|                                                                                                   |                                                               |                                                                                   |                  |                                                                                   |                                                                                   |                                                                                   |                                                                        |                          |                                  |        |
|                                                                                                   |                                                               |                                                                                   |                  |                                                                                   |                                                                                   |                                                                                   |                                                                        |                          |                                  |        |
| <br><b>Wiper</b> | DNMX 11 04 04-WF<br>11 04 08-WF<br>15 06 08-WF                | ☆<br>☆<br>☆                                                                       | ★<br>★<br>★      | ☆<br>☆<br>☆                                                                       |                                                                                   | 1 (0.2-1.5)<br>1 (0.2-3)<br>1.5 (0.2-3)                                           | 0.2 (0.08-0.3)<br>0.3 (0.1-0.4)<br>0.3 (0.1-0.4)                       | 290<br>270<br>270        |                                  |        |
|                                                                                                   |                                                               |                                                                                   |                  |                                                                                   |                                                                                   |                                                                                   |                                                                        |                          |                                  |        |
|                                                                                                   |                                                               |                                                                                   |                  |                                                                                   |                                                                                   |                                                                                   |                                                                        |                          |                                  |        |
|                  | TNMX 16 04 04-WF<br>16 04 08-WF                               | ☆<br>☆                                                                            | ★<br>★           | ☆<br>☆                                                                            |                                                                                   | 1 (0.2-3)<br>1.5 (0.2-3)                                                          | 0.2 (0.08-0.3)<br>0.3 (0.1-0.4)                                        | 290<br>270               |                                  |        |
|                                                                                                   |                                                               |                                                                                   |                  |                                                                                   |                                                                                   |                                                                                   |                                                                        |                          |                                  |        |
|                                                                                                   |                                                               |                                                                                   |                  |                                                                                   |                                                                                   |                                                                                   |                                                                        |                          |                                  |        |
|                  | WNMG 06 04 04-WF<br>06 04 08-WF<br>08 04 04-WF<br>08 04 08-WF | ☆<br>☆<br>☆<br>☆                                                                  | ★<br>★<br>★<br>★ | ☆<br>☆<br>☆<br>☆                                                                  |                                                                                   | 0.4 (0.25-2)<br>1 (0.25-3)<br>0.4 (0.25-3)<br>1 (0.25-4)                          | 0.15 (0.05-0.25)<br>0.3 (0.1-0.5)<br>0.15 (0.05-0.25)<br>0.3 (0.1-0.5) | 290<br>270<br>290<br>270 |                                  |        |
|                                                                                                   |                                                               |                                                                                   |                  |                                                                                   |                                                                                   |                                                                                   |                                                                        |                          |                                  |        |
|                                                                                                   |                                                               |                                                                                   |                  |                                                                                   |                                                                                   |                                                                                   |                                                                        |                          |                                  |        |
|                  | CNMG 12 04 04-MF<br>12 04 08-MF                               | ☆<br>☆                                                                            | ★<br>★           |                                                                                   | ☆<br>☆                                                                            | 0.4 (0.1-1.5)<br>0.4 (0.1-1.5)                                                    | 0.1 (0.05-0.2)<br>0.2 (0.1-0.4)                                        | 290<br>290               | 265<br>240                       |        |
|                                                                                                   |                                                               |                                                                                   |                  |                                                                                   |                                                                                   |                                                                                   |                                                                        |                          |                                  |        |
|                  | DNMG 11 04 04-MF<br>11 04 08-MF<br>15 06 04-MF<br>15 06 08-MF | ☆<br>☆<br>☆<br>☆                                                                  | ★<br>★<br>★<br>★ |                                                                                   | ☆<br>☆<br>☆<br>☆                                                                  | 0.4 (0.1-1.5)<br>0.4 (0.1-1.5)<br>0.4 (0.1-1.5)<br>0.4 (0.1-1.5)                  | 0.1 (0.05-0.2)<br>0.2 (0.1-0.4)<br>0.1 (0.05-0.2)<br>0.2 (0.1-0.4)     | 290<br>290<br>290<br>290 | 265<br>240<br>265<br>240         |        |
|                                                                                                   |                                                               |                                                                                   |                  |                                                                                   |                                                                                   |                                                                                   |                                                                        |                          |                                  |        |
|                                                                                                   |                                                               |                                                                                   |                  |                                                                                   |                                                                                   |                                                                                   |                                                                        |                          |                                  |        |
|                                                                                                   |                                                               |                                                                                   |                  |                                                                                   |                                                                                   |                                                                                   |                                                                        |                          |                                  |        |
|                 | SNMG 12 04 04-MF<br>12 04 08-MF                               | ☆<br>☆                                                                            | ★<br>★           |                                                                                   | ☆<br>☆                                                                            | 0.4 (0.1-1.5)<br>0.4 (0.1-1.5)                                                    | 0.1 (0.05-0.2)<br>0.2 (0.1-0.4)                                        | 290<br>290               | 265<br>240                       |        |
|                                                                                                   |                                                               |                                                                                   |                  |                                                                                   |                                                                                   |                                                                                   |                                                                        |                          |                                  |        |
|                | TNMG 16 04 04-MF<br>16 04 08-MF                               | ☆<br>☆                                                                            | ★<br>★           |                                                                                   | ☆<br>☆                                                                            | 0.4 (0.1-1.5)<br>0.4 (0.1-1.5)                                                    | 0.1 (0.05-0.2)<br>0.2 (0.1-0.4)                                        | 290<br>290               | 265<br>240                       |        |
|                                                                                                   |                                                               |                                                                                   |                  |                                                                                   |                                                                                   |                                                                                   |                                                                        |                          |                                  |        |
|                | VNMG 16 04 04-MF<br>16 04 08-MF                               | ☆<br>☆                                                                            | ★<br>★           |                                                                                   | ☆<br>☆                                                                            | 0.4 (0.1-1.5)<br>0.8 (0.2-2.5)                                                    | 0.1 (0.05-0.2)<br>0.15 (0.08-0.3)                                      | 290<br>290               | 265<br>260                       |        |
|                                                                                                   |                                                               |                                                                                   |                  |                                                                                   |                                                                                   |                                                                                   |                                                                        |                          |                                  |        |
|                | WNMG 06 04 04-MF<br>06 04 08-MF<br>08 04 04-MF<br>08 04 08-MF | ☆<br>☆<br>☆<br>☆                                                                  | ★<br>★<br>★<br>★ |                                                                                   | ☆<br>☆<br>☆<br>☆                                                                  | 0.4 (0.1-1.5)<br>0.4 (0.1-1.5)<br>0.4 (0.1-1.5)<br>0.4 (0.1-1.5)                  | 0.1 (0.05-0.2)<br>0.2 (0.1-0.4)<br>0.1 (0.05-0.2)<br>0.2 (0.1-0.4)     | 290<br>290<br>290<br>290 | 265<br>240<br>265<br>240         |        |
|                                                                                                   |                                                               |                                                                                   |                  |                                                                                   |                                                                                   |                                                                                   |                                                                        |                          |                                  |        |
|                                                                                                   |                                                               |                                                                                   |                  |                                                                                   |                                                                                   |                                                                                   |                                                                        |                          |                                  |        |
|                                                                                                   |                                                               |                                                                                   |                  |                                                                                   |                                                                                   |                                                                                   |                                                                        |                          |                                  |        |



MECANIZADO MEDIO DE ACERO INOXIDABLE

Acero inoxidable, austenítico, HB 180

ISO/  
ANSI

M

M

T-MAX P

Doble  
cara

CNMG 12 04 08-WMX

$a_p = 0,5 - 5,0 \text{ mm}$

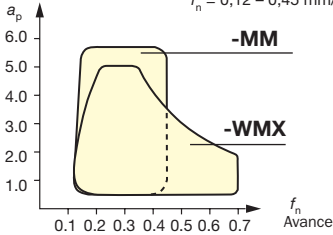
$f_n = 0,15 - 0,6 \text{ mm/r}$

CNMG 12 04 08-MM

$a_p = 0,5 - 5,7 \text{ mm}$

$f_n = 0,12 - 0,45 \text{ mm/r}$

Profundidad de corte



-WMX – para un cilindrado medio productivo

Operaciones: cilindrado longitudinal y refrentado

Componentes: husillos rígidos, ejes, cubos, engranajes, etc.

Ventajas: Triplica la velocidad de avance convencional obteniéndose un mejor acabado superficial. Ideal si es prioritario un buen acabado superficial. Puede sustituir a la operación de rectificado. Rotura de viruta mejorada por la mayor velocidad de avance. Mayor duración de la herramienta (piezas/filo) gracias a la reducción del tiempo de empañe del filo.

-MM

Operaciones: cilindrado longitudinal, refrentado y perfilado

Componentes: piezas de acero inoxidable en general

Ventajas: mecanizado seguro debido a la ausencia de problemas

CONDICIONES BUENAS



- Cortes continuos
- Premecanizado o costra ligera de fundición/forjado.

AVANCE ELEVADO



-WMX / GC2015

AVANCE NORMAL



-MM / GC2015

CONDICIONES NORMALES



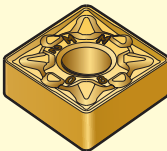
Operaciones de uso general.

AVANCE ELEVADO



-WMX / GC2015

AVANCE NORMAL



-MM / GC2025

CONDICIONES DIFÍCILES



- Cortes intermitentes
- Costra de fundición o escamas gruesas de forjado.

AVANCE ELEVADO



-WMX / GC2015

AVANCE NORMAL

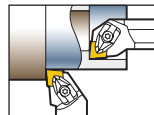


-MM / GC2035

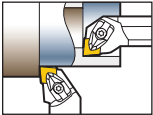


ISO/  
ANSI**M M****MECANIZADO MEDIO DE ACERO INOXIDABLE**

Plaquitas con forma básica negativa



| CÓDIGO DE PEDIDO                                                                                                                                                       |                                                                                                                                       |                                                                                   | DATOS DE CORTE, CMC 05.21 / HB 180                                                |                                                                                   |                                                                                                                                  |                                                                                                                                                            |                                                                                  |                                                                                  |                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Doble cara                                                                                                                                                             |  $r_\epsilon$                                        |  |  |  | Profundidad de corte $a_p$ mm                                                                                                    | Avance $f_n$ mm/r                                                                                                                                          | Velocidad de corte $v_c$ (m/min)                                                 |                                                                                  |                                                                                  |
|                                                                                                                                                                        |                                                                                                                                       | GC2015                                                                            | GC2015                                                                            | GC2025                                                                            |                                                                                                                                  |                                                                                                                                                            | GC2015                                                                           | GC2025                                                                           | GC2035                                                                           |
|                                                                                       | <b>CNMG 12 04 08-WMX</b><br><b>12 04 12-WMX</b>                                                                                       | ☆<br>☆                                                                            | ★<br>★                                                                            | ☆<br>☆                                                                            | <b>3 (0.5-5)</b><br><b>3.5 (0.8-6)</b>                                                                                           | <b>0.45 (0.15-0.7)</b><br><b>0.5 (0.2-0.75)</b>                                                                                                            | <b>225</b><br><b>215</b>                                                         |                                                                                  |                                                                                  |
| <br> | <b>DNMX 15 06 08-WMX</b><br><b>15 06 12-WMX</b>                                                                                       | ☆<br>☆                                                                            | ★<br>★                                                                            | ☆<br>☆                                                                            | <b>3 (0.5-5)</b><br><b>3.5 (0.8-6)</b>                                                                                           | <b>0.45 (0.15-0.7)</b><br><b>0.5 (0.2-0.75)</b>                                                                                                            | <b>225</b><br><b>215</b>                                                         |                                                                                  |                                                                                  |
|                                                                                       | <b>TNMX 16 04 08-WMX</b><br><b>16 04 12-WMX</b>                                                                                       | ☆<br>☆                                                                            | ★<br>★                                                                            | ☆<br>☆                                                                            | <b>3 (0.5-5)</b><br><b>3.5 (0.8-6)</b>                                                                                           | <b>0.45 (0.15-0.7)</b><br><b>0.5 (0.2-0.75)</b>                                                                                                            | <b>225</b><br><b>215</b>                                                         |                                                                                  |                                                                                  |
|                                                                                       | <b>WNMG 06 04 08-WMX</b><br><b>06 04 12-WMX</b><br><b>08 04 08-WMX</b><br><b>08 04 12-WMX</b>                                         | ☆<br>☆<br>☆<br>☆                                                                  | ★<br>★<br>★<br>★                                                                  | ☆<br>☆<br>☆<br>☆                                                                  | <b>3 (0.5-5)</b><br><b>3.5 (0.8-6)</b><br><b>3 (0.5-5)</b><br><b>3.5 (0.8-6)</b>                                                 | <b>0.45 (0.15-0.7)</b><br><b>0.5 (0.2-0.75)</b><br><b>0.45 (0.15-0.7)</b><br><b>0.5 (0.2-0.75)</b>                                                         | <b>225</b><br><b>215</b><br><b>225</b><br><b>215</b>                             |                                                                                  |                                                                                  |
|                                                                                       | <b>CNMG 12 04 08-MM</b><br><b>12 04 12-MM</b><br><b>12 04 16-MM</b><br><b>16 06 08-MM</b><br><b>16 06 12-MM</b><br><b>16 06 16-MM</b> | ☆<br>☆<br>☆<br>☆<br>☆<br>☆                                                        | ★<br>★<br>★<br>★<br>★<br>★                                                        | ☆<br>☆<br>☆<br>☆<br>☆<br>☆                                                        | <b>3 (0.5-5.7)</b><br><b>3 (0.5-5.7)</b><br><b>3 (0.5-5.7)</b><br><b>4 (0.5-7.2)</b><br><b>4 (0.5-7.2)</b><br><b>4 (0.5-7.2)</b> | <b>0.25 (0.12-0.45)</b><br><b>0.3 (0.15-0.6)</b><br><b>0.37 (0.18-0.65)</b><br><b>0.25 (0.12-0.45)</b><br><b>0.3 (0.15-0.6)</b><br><b>0.37 (0.18-0.65)</b> | <b>280</b><br><b>270</b><br><b>250</b><br><b>280</b><br><b>270</b><br><b>280</b> | <b>225</b><br><b>205</b><br><b>185</b><br><b>225</b><br><b>205</b><br><b>185</b> | <b>165</b><br><b>160</b><br><b>150</b><br><b>165</b><br><b>160</b><br><b>150</b> |
|                                                                                       | <b>DNMG 11 04 08-MM</b><br><b>11 04 12-MM</b><br><b>15 06 08-MM</b><br><b>15 06 12-MM</b>                                             | ☆<br>☆<br>☆<br>☆                                                                  | ★<br>★<br>★<br>★                                                                  | ☆<br>☆<br>☆<br>☆                                                                  | <b>2 (0.5-4.4)</b><br><b>2 (0.5-4.4)</b><br><b>3 (0.5-6.4)</b><br><b>3 (0.5-6.4)</b>                                             | <b>0.25 (0.12-0.45)</b><br><b>0.3 (0.15-0.6)</b><br><b>0.25 (0.12-0.45)</b><br><b>0.3 (0.15-0.6)</b>                                                       | <b>280</b><br><b>270</b><br><b>280</b><br><b>270</b>                             | <b>225</b><br><b>205</b><br><b>225</b><br><b>205</b>                             | <b>165</b><br><br><b>165</b><br><b>160</b>                                       |
|                                                                                      | <b>SNMG 12 04 08-MM</b><br><b>12 04 12-MM</b><br><b>12 04 16-MM</b><br><b>15 06 12-MM</b><br><b>15 06 16-MM</b>                       | ☆<br>☆<br>☆<br>☆<br>☆                                                             | ★<br>★<br>★<br>★<br>★                                                             | ☆<br>☆<br>☆<br>☆<br>☆                                                             | <b>3 (0.5-6.4)</b><br><b>3 (0.5-6.4)</b><br><b>3 (0.5-6.4)</b><br><b>4 (0.5-8)</b><br><b>4 (0.5-8)</b>                           | <b>0.25 (0.12-0.45)</b><br><b>0.3 (0.15-0.6)</b><br><b>0.37 (0.18-0.65)</b><br><b>0.3 (0.15-0.6)</b><br><b>0.37 (0.18-0.65)</b>                            | <b>280</b><br><b>270</b><br><b>250</b><br><br><b>205</b>                         | <b>225</b><br><b>205</b><br><b>185</b><br><br><b>160</b>                         | <b>165</b><br><b>160</b><br><b>150</b><br><br><b>160</b>                         |
|                                                                                     | <b>TNMG 16 04 08-MM</b><br><b>16 04 12-MM</b><br><b>22 04 08-MM</b><br><b>22 04 12-MM</b><br><b>22 04 16-MM</b>                       | ☆<br>☆<br>☆<br>☆<br>☆                                                             | ★<br>★<br>★<br>★<br>★                                                             | ☆<br>☆<br>☆<br>☆<br>☆                                                             | <b>3 (0.5-4.8)</b><br><b>3 (0.5-4.8)</b><br><b>4 (0.5-6.6)</b><br><b>4 (0.5-6.6)</b><br><b>4 (0.5-6.6)</b>                       | <b>0.25 (0.12-0.45)</b><br><b>0.3 (0.15-0.6)</b><br><b>0.25 (0.12-0.45)</b><br><b>0.3 (0.15-0.6)</b><br><b>0.37 (0.18-0.65)</b>                            | <b>280</b><br><b>270</b><br><b>280</b><br><b>270</b><br><b>250</b>               | <b>225</b><br><b>205</b><br><b>225</b><br><b>205</b><br><b>185</b>               | <b>165</b><br><b>160</b><br><b>165</b><br><b>160</b><br><b>160</b>               |
|                                                                                     | <b>VNMG 16 04 08-MM</b>                                                                                                               | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>2 (0.5-4)</b>                                                                                                                 | <b>0.25 (0.12-0.45)</b>                                                                                                                                    | <b>280</b>                                                                       | <b>225</b>                                                                       | <b>165</b>                                                                       |
|                                                                                     | <b>WNMG 06 04 08-MM</b><br><b>06 04 12-MM</b><br><b>08 04 08-MM</b><br><b>08 04 12-MM</b>                                             | ☆<br>☆<br>☆<br>☆                                                                  | ★<br>★<br>★<br>★                                                                  | ☆<br>☆<br>☆<br>☆                                                                  | <b>2 (0.5-3)</b><br><b>2 (0.5-3)</b><br><b>2.5 (0.5-4)</b><br><b>2.5 (0.5-4)</b>                                                 | <b>0.25 (0.12-0.45)</b><br><b>0.3 (0.15-0.6)</b><br><b>0.25 (0.12-0.45)</b><br><b>0.3 (0.15-0.6)</b>                                                       | <b>280</b><br><b>270</b><br><b>280</b><br><b>270</b>                             | <b>225</b><br><b>205</b><br><b>225</b><br><b>205</b>                             | <b>165</b><br><br><b>165</b><br><b>160</b>                                       |



DESBASTE DE ACERO INOXIDABLE

Acero inoxidable, austenítico, HB 180

ISO/  
ANSI

M

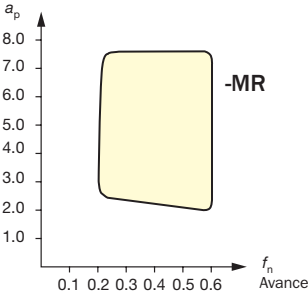
R

T-MAX P

Doble  
cara

CNMG 12 04 12-MR  
 $a_p = 2,0 - 7,6 \text{ mm}$   
 $f_n = 0,2 - 0,6 \text{ mm/r}$

Profundidad de corte



-MR

**Operaciones:** cilindrado longitudinal, refrentado y perfilado

**Componentes:** componentes de acero inoxidable en general

**Ventajas:** gran capacidad de desbaste, la alternativa de doble cara para un desbaste de gran capacidad que genera una buena economía en el mecanizado

CONDICIONES BUENAS



- Cortes continuos
- Premecanizado o costra ligera de fundición/forjado.

AVANCE NORMAL



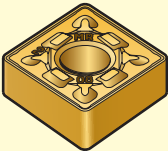
-MR / GC2025

CONDICIONES NORMALES



Operaciones de  
uso general.

AVANCE NORMAL



-MR / GC2025

CONDICIONES DIFÍCILES



- Cortes intermitentes
- Costra de fundición o escamas gruesas de forjado.

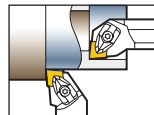
AVANCE NORMAL



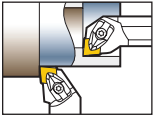
-MR / GC2025

ISO/  
ANSI**M R****DESBASTE DE ACERO INOXIDABLE**

Plaquetas con forma básica negativa



| CÓDIGO DE PEDIDO |                         |        |        |        | DATOS DE CORTE, CMC 05.21 / HB 180 |                        |                                  |
|------------------|-------------------------|--------|--------|--------|------------------------------------|------------------------|----------------------------------|
| Doble cara       | $r_c$                   | GC2025 | GC2025 | GC2025 | Profundidad de corte $a_p$ mm      | Avance $f_n$ mm/r      | Velocidad de corte $v_c$ (m/min) |
|                  |                         |        |        |        |                                    |                        | GC2025                           |
|                  | <b>CNMG 12 04 08-MR</b> | ☆      | ★      | ☆      | <b>3</b> (2-7.6)                   | <b>0.3</b> (0.15-0.55) | <b>205</b>                       |
|                  | <b>12 04 12-MR</b>      | ☆      | ★      | ☆      | <b>3</b> (2-7.6)                   | <b>0.35</b> (0.2-0.6)  | <b>190</b>                       |
|                  | <b>12 04 16-MR</b>      | ☆      | ★      | ☆      | <b>3</b> (2-7.6)                   | <b>0.4</b> (0.25-0.7)  | <b>175</b>                       |
|                  | <b>16 06 12-MR</b>      | ☆      | ★      | ☆      | <b>4</b> (2-10)                    | <b>0.35</b> (0.2-0.6)  | <b>190</b>                       |
|                  | <b>16 06 16-MR</b>      | ☆      | ★      | ☆      | <b>4</b> (2-10)                    | <b>0.4</b> (0.25-0.7)  | <b>175</b>                       |
|                  | <b>DNMG 15 06 08-MR</b> | ☆      | ★      | ☆      | <b>3</b> (2-6)                     | <b>0.3</b> (0.15-0.55) | <b>205</b>                       |
|                  | <b>15 06 12-MR</b>      | ☆      | ★      | ☆      | <b>3</b> (2-6)                     | <b>0.35</b> (0.2-0.6)  | <b>190</b>                       |
|                  | <b>SNMG 12 04 08-MR</b> | ☆      | ★      | ☆      | <b>3</b> (2-7.6)                   | <b>0.3</b> (0.15-0.55) | <b>205</b>                       |
|                  | <b>12 04 12-MR</b>      | ☆      | ★      | ☆      | <b>3</b> (2-7.6)                   | <b>0.35</b> (0.2-0.6)  | <b>190</b>                       |
|                  | <b>15 06 12-MR</b>      | ☆      | ★      | ☆      | <b>4</b> (2-9.6)                   | <b>0.35</b> (0.2-0.6)  | <b>190</b>                       |
|                  | <b>15 06 16-MR</b>      | ☆      | ★      | ☆      | <b>4</b> (2-9.6)                   | <b>0.4</b> (0.25-0.7)  | <b>175</b>                       |
|                  | <b>TNMG 16 04 08-MR</b> | ☆      | ★      | ☆      | <b>3</b> (2-5.6)                   | <b>0.3</b> (0.15-0.55) | <b>205</b>                       |
|                  | <b>16 04 12-MR</b>      | ☆      | ★      | ☆      | <b>3</b> (2-5.6)                   | <b>0.35</b> (0.2-0.6)  | <b>190</b>                       |
|                  | <b>22 04 08-MR</b>      | ☆      | ★      | ☆      | <b>4</b> (2-7.7)                   | <b>0.3</b> (0.15-0.55) | <b>205</b>                       |
|                  | <b>22 04 12-MR</b>      | ☆      | ★      | ☆      | <b>4</b> (2-7.7)                   | <b>0.35</b> (0.2-0.6)  | <b>190</b>                       |
|                  | <b>WNMG06 04 08-MR</b>  | ☆      | ★      | ☆      | <b>2</b> (1.5-3)                   | <b>0.3</b> (0.15-0.55) | <b>205</b>                       |
|                  | <b>06 04 12-MR</b>      | ☆      | ★      | ☆      | <b>2</b> (1.5-3)                   | <b>0.35</b> (0.2-0.6)  | <b>190</b>                       |
|                  | <b>08 04 08-MR</b>      | ☆      | ★      | ☆      | <b>2.5</b> (2-4)                   | <b>0.3</b> (0.15-0.55) | <b>205</b>                       |
|                  | <b>08 04 12-MR</b>      | ☆      | ★      | ☆      | <b>2.5</b> (2-4)                   | <b>0.35</b> (0.2-0.6)  | <b>190</b>                       |



DESABASTE DE ACERO INOXIDABLE

Acero inoxidable, austenítico, HB 180

ISO/  
ANSI

M

R

T-MAX P

Una sola cara

CNMM 16 06 08-MR

$a_p = 1,0 - 9,5 \text{ mm}$

$f_n = 0,3 - 0,55 \text{ mm/r}$

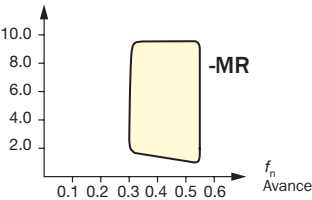
-MR

Operaciones: cilindrado longitudinal, refrentado y perfilado

Componentes: rodillos, husillos, ejes, etc.

Ventajas: arista de corte robusta para desbaste, amplia área de aplicación, gran estabilidad de las plaquitas de una cara.

Profundidad de corte  
 $a_p$

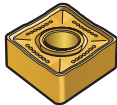


CONDICIONES BUENAS



- Cortes continuos
- Premecanizado o costra ligera de fundición/forjado

AVANCE NORMAL



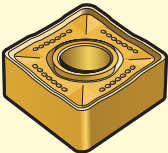
-MR / GC2025

CONDICIONES NORMALES



Operaciones de uso general.

AVANCE NORMAL



-MR / GC2025

CONDICIONES DIFÍCILES



- Cortes intermitentes
- Costra de fundición o escamas gruesas de forjado.

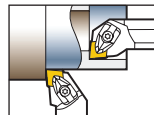
AVANCE NORMAL



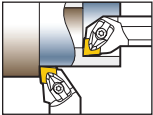
-MR / GC2035

ISO/  
ANSI**M R****DESBASTE DE ACERO INOXIDABLE**

Plaquetas con forma básica negativa



| CÓDIGO DE PEDIDO                                                                  |      |                                                                                         |                                                                                          | DATOS DE CORTE, CMC 05.21 / HB 180                                                       |                                                                                          |                               |                   |                                  |        |
|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------|-------------------|----------------------------------|--------|
| Una sola cara                                                                     |      |  $r_c$ |  GC2025 |  GC2025 |  GC2035 | Profundidad de corte $a_p$ mm | Avance $f_n$ mm/r | Velocidad de corte $v_c$ (m/min) |        |
|                                                                                   |      |                                                                                         | GC2025                                                                                   | GC2025                                                                                   | GC2035                                                                                   |                               |                   | GC2025                           | GC2035 |
|  | CNMM | 12 04 08-MR                                                                             | ☆                                                                                        | ★                                                                                        | ☆                                                                                        | 3 (0.7-7.5)                   | 0.35 (0.2-0.55)   | 190                              | 155    |
|                                                                                   |      | 12 04 12-MR                                                                             | ☆                                                                                        | ★                                                                                        |                                                                                          | 3 (1-7.5)                     | 0.4 (0.25-0.7)    | 175                              |        |
|                                                                                   |      | 12 04 16-MR                                                                             | ☆                                                                                        | ★                                                                                        |                                                                                          | 3 (1.5-7.5)                   | 0.5 (0.32-0.9)    | 150                              |        |
|                                                                                   |      | 16 06 08-MR                                                                             | ☆                                                                                        | ★                                                                                        |                                                                                          | 6 (1-9.5)                     | 0.4 (0.3-0.55)    | 175                              |        |
|                                                                                   |      | 16 06 12-MR                                                                             | ☆                                                                                        | ★                                                                                        |                                                                                          | 6 (1.2-9.5)                   | 0.45 (0.32-0.65)  | 165                              |        |
|                                                                                   |      | 16 06 16-MR                                                                             | ☆                                                                                        | ★                                                                                        |                                                                                          | 6 (1.5-9.5)                   | 0.5 (0.35-0.8)    | 150                              |        |
|  | DNMM | 15 06 08-MR                                                                             | ☆                                                                                        | ★                                                                                        |                                                                                          | 3 (0.7-6)                     | 0.35 (0.2-0.55)   | 190                              |        |
|                                                                                   |      | 15 06 12-MR                                                                             | ☆                                                                                        | ★                                                                                        |                                                                                          | 3 (1-6)                       | 0.4 (0.25-0.7)    | 175                              |        |
|                                                                                   |      | 15 06 16-MR                                                                             | ☆                                                                                        | ★                                                                                        |                                                                                          | 3 (1.5-6)                     | 0.5 (0.32-0.9)    | 150                              |        |
|  | SNMM | 12 04 08-MR                                                                             | ☆                                                                                        | ★                                                                                        | ☆                                                                                        | 3 (0.7-7.5)                   | 0.35 (0.2-0.55)   | 190                              | 155    |
|                                                                                   |      | 12 04 12-MR                                                                             | ☆                                                                                        | ★                                                                                        | ☆                                                                                        | 3 (1-7.5)                     | 0.4 (0.25-0.7)    | 175                              | 145    |
|                                                                                   |      | 12 04 16-MR                                                                             | ☆                                                                                        | ★                                                                                        | ☆                                                                                        | 3 (1.5-7.5)                   | 0.5 (0.32-0.9)    | 150                              | 130    |
|                                                                                   |      | 15 06 12-MR                                                                             | ☆                                                                                        | ★                                                                                        |                                                                                          | 4 (1-9)                       | 0.4 (0.25-0.7)    | 175                              |        |
|                                                                                   |      | 15 06 16-MR                                                                             | ☆                                                                                        | ★                                                                                        |                                                                                          | 4 (1.5-9)                     | 0.5 (0.32-0.9)    | 150                              |        |
|  | TNMM | 16 04 08-MR                                                                             | ☆                                                                                        | ★                                                                                        | ☆                                                                                        | 3 (0.7-7.5)                   | 0.35 (0.2-0.55)   | 190                              | 155    |
|                                                                                   |      | 16 04 12-MR                                                                             |                                                                                          |                                                                                          | ★                                                                                        | 5 (1-7.5)                     | 0.4 (0.25-0.7)    |                                  | 145    |
|                                                                                   |      | 22 04 08-MR                                                                             | ☆                                                                                        | ★                                                                                        |                                                                                          | 3 (0.7-8)                     | 0.35 (0.2-0.55)   | 190                              |        |
|                                                                                   |      | 22 04 12-MR                                                                             | ☆                                                                                        | ★                                                                                        |                                                                                          | 3 (1-8)                       | 0.4 (0.25-0.7)    | 175                              |        |
|                                                                                   |      | 22 04 16-MR                                                                             | ☆                                                                                        | ★                                                                                        |                                                                                          | 3 (1.5-8)                     | 0.5 (0.32-0.9)    | 150                              |        |
|  | WNMM | 08 04 08-MR                                                                             | ☆                                                                                        | ★                                                                                        | ☆                                                                                        | 3 (0.7-6)                     | 0.35 (0.2-0.55)   | 190                              | 155    |
|                                                                                   |      | 08 04 12-MR                                                                             | ☆                                                                                        | ★                                                                                        | ☆                                                                                        | 3 (1-6)                       | 0.4 (0.25-0.7)    | 175                              | 145    |
|                                                                                   |      | 08 04 16-MR                                                                             | ☆                                                                                        | ★                                                                                        |                                                                                          | 3 (1.5-6)                     | 0.5 (0.32-0.9)    | 150                              |        |



ACABADO DE FUNDICIÓN GRIS  
Y FUNDICIÓN NODULAR

Alta resistencia a la tracción, HB 220 / HB 250

ISO/  
ANSI

K

F

T-MAX P

Doble  
cara

CNMG 12 04 08-WF

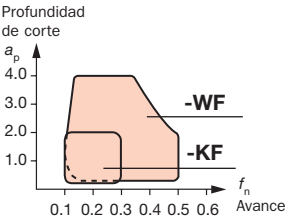
$a_p = 0,3 - 4,0 \text{ mm}$

$f_n = 0,1 - 0,5 \text{ mm/r}$

CNMG 12 04 08-KF

$a_p = 0,2 - 2,0 \text{ mm}$

$f_n = 0,1 - 0,3 \text{ mm/r}$



WF – para un cilindrado en acabado productivo

Operaciones: cilindrado longitudinal y refrentado

Componentes: husillos rígidos, ejes, cubos, engranajes, etc.

Ventajas: avances convencionales dobles con el mismo acabado superficial o la mitad de los valores de acabado superficial para el mismo avance. Ideal cuando resulta prioritario un buen acabado superficial.

-KF

Operaciones: cilindrado longitudinal, refrentado y perfilado

Componentes: piezas de fundición en general

Ventajas: geometría de corte ligero con bajas fuerzas de corte, adecuada para componentes sensibles a las vibraciones y piezas con sujeción inestable.

CONDICIONES BUENAS



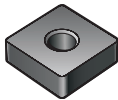
Cortes continuos.  
Premecanizado o costra ligera de fundición.

AVANCE ELEVADO



-WF / GC3215

AVANCE NORMAL



Cerámicas

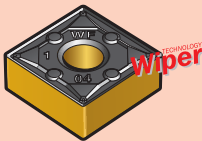
.NGA / CC650

Primera elección  
CONDICIONES NORMALES



Operaciones de uso  
general.

AVANCE ELEVADO



-WF / GC3215

AVANCE NORMAL



-KF / GC3215

CONDICIONES DIFÍCILES



Cortes intermitentes.  
Costra gruesa de fundición.

AVANCE ELEVADO



-WF / GC3215

AVANCE NORMAL

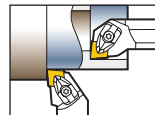


-KF / GC3215

Para un mejor rendimiento con cerámicas, utilice los portaplaquitas especiales. Consulte el catálogo principal.

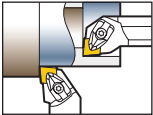
ISO/  
ANSI**K F****ACABADO DE FUNDICIÓN GRIS  
Y FUNDICIÓN NODULAR**

Plaquitas con forma básica negativa



| CÓDIGO DE PEDIDO |                      |       |        |        |        | DATOS DE CORTE, CMC 08.2 <sup>1)</sup> / HB 220 |                      |                 |
|------------------|----------------------|-------|--------|--------|--------|-------------------------------------------------|----------------------|-----------------|
|                  |                      |       |        |        |        | Velocidad de corte $v_c$ (m/min)                |                      |                 |
| Doble cara       | $r_c$                | CC650 | GC3215 | GC3215 | GC3215 | Profundidad de corte<br>$a_p$ mm                | Avance<br>$f_n$ mm/r | CC650<br>GC3215 |
|                  | CNMG09 03 08-WF      |       | ☆      | ★      | ☆      | 1 (0.3-2)                                       | 0.3 (0.1-0.5)        | 190             |
|                  | 12 04 04-WF          |       | ☆      | ★      | ☆      | 0.4 (0.25-3)                                    | 0.15 (0.05-0.25)     | 225             |
|                  | 12 04 08-WF          |       | ☆      | ★      | ☆      | 1 (0.25-4)                                      | 0.3 (0.1-0.5)        | 190             |
|                  | 12 04 12-WF          |       | ☆      | ★      | ☆      | 1.5 (0.4-4)                                     | 0.5 (0.2-0.6)        | 160             |
|                  | DNMX 11 04 04-WF     |       | ☆      | ★      | ☆      | 1 (0.2-1.5)                                     | 0.2 (0.08-0.3)       | 215             |
|                  | 11 04 08-WF          |       | ☆      | ★      | ☆      | 1 (0.2-3)                                       | 0.3 (0.1-0.4)        | 190             |
|                  | 15 06 08-WF          |       | ☆      | ★      | ☆      | 1.5 (0.2-3)                                     | 0.3 (0.1-0.4)        | 190             |
|                  | 15 06 12-WF          |       | ☆      | ★      | ☆      | 1.5 (0.4-3.5)                                   | 0.4 (0.15-0.55)      | 175             |
|                  | TNMX 16 04 04-WF     |       | ☆      | ★      | ☆      | 1 (0.2-3)                                       | 0.2 (0.08-0.3)       | 215             |
|                  | 16 04 08-WF          |       | ☆      | ★      | ☆      | 1.5 (0.2-3)                                     | 0.3 (0.1-0.4)        | 190             |
|                  | WNMG06 04 04-WF      |       | ☆      | ★      | ☆      | 0.4 (0.25-2)                                    | 0.15 (0.05-0.25)     | 225             |
|                  | 06 04 08-WF          |       | ☆      | ★      | ☆      | 1 (0.25-3)                                      | 0.3 (0.1-0.5)        | 190             |
|                  | 08 04 04-WF          |       | ☆      | ★      | ☆      | 0.4 (0.25-3)                                    | 0.15 (0.05-0.25)     | 225             |
|                  | 08 04 08-WF          |       | ☆      | ★      | ☆      | 1 (0.25-4)                                      | 0.3 (0.1-0.5)        | 190             |
|                  | 08 04 12-WF          |       | ☆      | ★      | ☆      | 1.5 (0.4-4)                                     | 0.5 (0.2-0.6)        | 160             |
|                  | CNMG 12 04 04-KF     |       |        | ★      | ☆      | 0.5 (0.15-2)                                    | 0.15 (0.08-0.25)     | 225             |
|                  | 12 04 08-KF          |       |        | ★      | ☆      | 0.5 (0.15-2)                                    | 0.2 (0.1-0.3)        | 215             |
|                  | 12 04 12-KF          |       |        | ★      | ☆      | 1 (0.2-2.5)                                     | 0.25 (0.1-0.35)      | 200             |
|                  | CNGA 12 04 08 T01020 | ★     |        |        |        | 3.6 (0.1-6)                                     | 0.2 (0.05-0.36)      | 610             |
|                  | 12 04 12 T01020      | ★     |        |        |        | 3.6 (0.1-6)                                     | 0.3 (0.05-0.54)      | 540             |
|                  | 16 06 08 T01020      | ★     |        |        |        | 4.8 (0.1-8)                                     | 0.2 (0.05-0.36)      | 610             |
|                  | 16 06 12 T01020      | ★     |        |        |        | 4.8 (0.1-8)                                     | 0.3 (0.05-0.54)      | 540             |
|                  | DNMG 11 04 04-KF     |       |        | ★      | ☆      | 0.5 (0.15-2)                                    | 0.15 (0.08-0.25)     | 225             |
|                  | 11 04 08-KF          |       |        | ★      | ☆      | 0.5 (0.15-2)                                    | 0.2 (0.1-0.3)        | 215             |
|                  | 15 06 04-KF          |       |        | ★      | ☆      | 0.5 (0.15-2)                                    | 0.15 (0.08-0.25)     | 225             |
|                  | 15 06 08-KF          |       |        | ★      | ☆      | 0.5 (0.15-2)                                    | 0.2 (0.1-0.3)        | 215             |
|                  | SNGA 12 04 08 T01020 | ★     |        |        |        | 3.6 (0.1-6)                                     | 0.2 (0.05-0.36)      | 610             |
|                  | 12 04 12 T01020      | ★     |        |        |        | 3.6 (0.1-6)                                     | 0.3 (0.05-0.54)      | 540             |
|                  | TNMG 16 04 04-KF     |       |        | ★      | ☆      | 0.5 (0.15-2)                                    | 0.15 (0.08-0.25)     | 225             |
|                  | 16 04 08-KF          |       |        | ★      | ☆      | 0.5 (0.15-2)                                    | 0.2 (0.1-0.3)        | 215             |
|                  | TNGA 16 04 08 T01020 | ★     |        |        |        | 4.8 (0.1-8)                                     | 0.2 (0.05-0.36)      | 610             |
|                  | 16 04 12 T01020      | ★     |        |        |        | 4.8 (0.1-8)                                     | 0.3 (0.05-0.54)      | 540             |
|                  | WNMG 06 04 04-KF     |       |        | ★      | ☆      | 0.5 (0.15-2)                                    | 0.15 (0.08-0.25)     | 225             |
|                  | 08 04 04-KF          |       |        | ★      | ☆      | 0.5 (0.15-2)                                    | 0.15 (0.08-0.25)     | 225             |
|                  | 08 04 08-KF          |       |        | ★      | ☆      | 0.5 (0.15-2)                                    | 0.2 (0.1-0.3)        | 215             |
|                  | 08 04 12-KF          |       |        | ★      | ☆      | 1 (0.2-2.5)                                     | 0.25 (0.1-0.35)      | 200             |

<sup>1)</sup> Para CMC 09.2 reducir la velocidad de corte ( $v_c$ ) un 10%.



MECANIZADO MEDIO DE FUNDICIÓN GRIS

Alta resistencia a la tracción, HB 220

ISO/  
ANSI

K

M

T-Max P

Doble  
cara

CNMG 12 04 08-WMX

$a_p = 0,5 - 5,0 \text{ mm}$

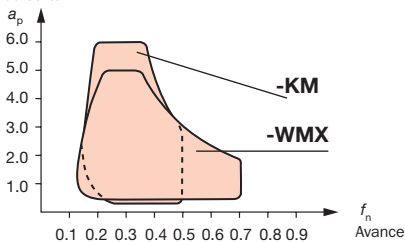
$f_n = 0,15 - 0,6 \text{ mm/r}$

CNMG 12 04 08-KM

$a_p = 0,3 - 6,0 \text{ mm}$

$f_n = 0,15 - 0,6 \text{ mm/r}$

Profundidad  
de corte



WMX – para un cilindrado medio productivo

Operaciones: cilindrado longitudinal y refrentado

Componentes: husillos rígidos, ejes, cubos, engranajes, etc.

**Ventajas:** Triplica la velocidad de avance convencional obteniéndose un mejor acabado superficial. Ideal si es prioritario un buen acabado superficial. Puede sustituir a la operación de rectificado. Rotura de viruta mejorada por la mayor velocidad de avance. Mayor duración de la herramienta (piezas/filo) gracias a la reducción del tiempo de empañe del filo.

-KM

Operaciones: cilindrado longitudinal, refrentado y perfilado

Componentes: piezas de fundición en general

**Ventajas:** mecanizado seguro por la ausencia de problemas, acabado a desbaste ligero

Plaquetas para fundición nodular, consulte la página 44.

CONDICIONES BUENAS



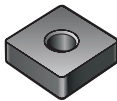
Cortes continuos.  
Premecanizado o costra ligera de fundición.

AVANCE ELEVADO



-WMX / GC3215

AVANCE NORMAL



Cerámicas

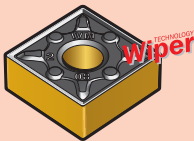
.NGA / CC6190

CONDICIONES NORMALES



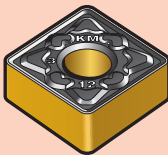
Operaciones de uso  
general.

AVANCE ELEVADO



-WMX / GC3215

AVANCE NORMAL



-KM / GC3205

CONDICIONES DIFÍCILES



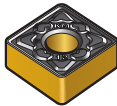
Cortes intermitentes.  
Costra gruesa de fundición.

AVANCE ELEVADO



-WMX / GC3215

AVANCE NORMAL



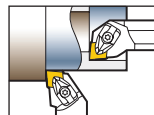
-KM / GC3215

Para obtener el mejor rendimiento con cerámicas, utilice los portaplaquetas especiales. Consulte el catálogo principal.

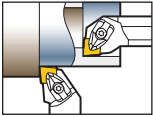


ISO/  
ANSI**K M****MECANIZADO MEDIO DE FUNDICIÓN GRIS**

Plaquitas con forma básica negativa



| CÓDIGO DE PEDIDO                                                                    |                      |                                                                                         | DATOS DE CORTE, CMC 08.2 / HB 220                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                  |                   |     |  |
|-------------------------------------------------------------------------------------|----------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------|-------------------|-----|--|
| Doble cara                                                                          |                      |  $r_c$ |  |  |  |  |  | Velocidad de corte $v_c$ (m/min) |                   |     |  |
|                                                                                     |                      |                                                                                         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Profundidad de corte $a_p$ mm    | Avance $f_n$ mm/r |     |  |
|    | CNMG 12 04 08-WMX    |                                                                                         | ☆                                                                                 |                                                                                   | ★                                                                                 | ☆                                                                                 | 3 (0.5-5)                                                                         | 0.45 (0.15-0.7)                  |                   | 170 |  |
|                                                                                     | 12 04 12-WMX         |                                                                                         | ☆                                                                                 |                                                                                   | ★                                                                                 | ☆                                                                                 | 3.5 (0.8-6)                                                                       | 0.5 (0.2-0.75)                   |                   | 160 |  |
|                                                                                     | 16 06 08-WMX         |                                                                                         | ☆                                                                                 |                                                                                   | ★                                                                                 | ☆                                                                                 | 3 (0.5-5)                                                                         | 0.45 (0.15-0.7)                  |                   | 170 |  |
|                                                                                     | 16 06 12-WMX         |                                                                                         | ☆                                                                                 |                                                                                   | ★                                                                                 | ☆                                                                                 | 3.5 (0.8-6)                                                                       | 0.5 (0.2-0.75)                   |                   | 160 |  |
|    | DNMX 15 06 08-WMX    |                                                                                         | ☆                                                                                 |                                                                                   | ★                                                                                 | ☆                                                                                 | 3 (0.5-5)                                                                         | 0.45 (0.15-0.7)                  |                   | 170 |  |
|                                                                                     | 15 06 12-WMX         |                                                                                         | ☆                                                                                 |                                                                                   | ★                                                                                 | ☆                                                                                 | 3.5 (0.8-6)                                                                       | 0.5 (0.2-0.75)                   |                   | 160 |  |
|                                                                                     | 15 06 16-WMX         |                                                                                         | ☆                                                                                 |                                                                                   | ★                                                                                 | ☆                                                                                 | 3.5 (0.5-6)                                                                       | 0.5 (0.2-0.8)                    |                   | 160 |  |
|    | TNMX 16 04 08-WMX    |                                                                                         | ☆                                                                                 |                                                                                   | ★                                                                                 | ☆                                                                                 | 3 (0.5-5)                                                                         | 0.45 (0.15-0.7)                  |                   | 170 |  |
|                                                                                     | 16 04 12-WMX         |                                                                                         | ☆                                                                                 |                                                                                   | ★                                                                                 | ☆                                                                                 | 3.5 (0.8-6)                                                                       | 0.5 (0.2-0.75)                   |                   | 160 |  |
|    | WNMG06 04 08-WMX     |                                                                                         | ☆                                                                                 |                                                                                   | ★                                                                                 | ☆                                                                                 | 3 (0.5-5)                                                                         | 0.45 (0.15-0.7)                  |                   | 170 |  |
|                                                                                     | 06 04 12-WMX         |                                                                                         | ☆                                                                                 |                                                                                   | ★                                                                                 | ☆                                                                                 | 3.5 (0.8-6)                                                                       | 0.5 (0.2-0.75)                   |                   | 160 |  |
|                                                                                     | 08 04 08-WMX         |                                                                                         | ☆                                                                                 |                                                                                   | ★                                                                                 | ☆                                                                                 | 3 (0.5-5)                                                                         | 0.45 (0.15-0.7)                  |                   | 170 |  |
|                                                                                     | 08 04 12-WMX         |                                                                                         | ☆                                                                                 |                                                                                   | ★                                                                                 | ☆                                                                                 | 3.5 (0.8-6)                                                                       | 0.5 (0.2-0.75)                   |                   | 160 |  |
|    | CNMG 12 04 08-KM     |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 3 (0.2-6)                                                                         | 0.35 (0.15-0.5)                  |                   | 325 |  |
|                                                                                     | 12 04 12-KM          |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 3 (0.3-6)                                                                         | 0.4 (0.15-0.6)                   |                   | 310 |  |
|                                                                                     | 12 04 16-KM          |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 3 (0.3-6)                                                                         | 0.45 (0.2-0.7)                   |                   | 295 |  |
|                                                                                     | 16 06 08-KM          |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 4 (0.2-8)                                                                         | 0.35 (0.15-0.5)                  |                   | 325 |  |
|                                                                                     | 16 06 12-KM          |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 4 (0.3-8)                                                                         | 0.4 (0.15-0.6)                   |                   | 310 |  |
|                                                                                     | 16 06 16-KM          |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 4 (0.3-8)                                                                         | 0.45 (0.2-0.7)                   |                   | 295 |  |
|    | CNGA 12 04 08T02520  | ★                                                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 3 (2-4)                                                                           | 0.5 (0.3-0.56)                   | 490               |     |  |
|                                                                                     | 12 04 12T02520       | ★                                                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 3 (2-4)                                                                           | 0.5 (0.3-0.6)                    | 490               |     |  |
|                                                                                     | 12 04 16T02520       | ★                                                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 3 (2-4)                                                                           | 0.5 (0.3-0.6)                    | 490               |     |  |
|                                                                                     | 16 06 12T02520       | ★                                                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 4.8 (0.1-8)                                                                       | 0.3 (0.15-0.54)                  | 620               |     |  |
|                                                                                     | 16 06 16T02520       | ★                                                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 4.8 (0.1-8)                                                                       | 0.4 (0.15-0.6)                   | 550               |     |  |
|    | DNMG 11 04 08-KM     |                                                                                         |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 2 (0.2-3.5)                                                                       | 0.35 (0.15-0.5)                  |                   | 185 |  |
|                                                                                     | 11 04 12-KM          |                                                                                         |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 2 (0.3-3.5)                                                                       | 0.4 (0.15-0.6)                   |                   | 175 |  |
|                                                                                     | 15 06 08-KM          |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 2.5 (0.2-5)                                                                       | 0.35 (0.15-0.5)                  | 325               | 185 |  |
|                                                                                     | 15 06 12-KM          |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 2.5 (0.3-5)                                                                       | 0.4 (0.15-0.6)                   | 310               | 175 |  |
|   | SNMG 09 03 08-KM     |                                                                                         |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 2.5 (0.2-4.5)                                                                     | 0.35 (0.15-0.5)                  |                   | 185 |  |
|                                                                                     | 12 04 08-KM          |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 3 (0.2-6)                                                                         | 0.35 (0.15-0.5)                  | 325               | 185 |  |
|                                                                                     | 12 04 12-KM          |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 3 (0.3-6)                                                                         | 0.4 (0.15-0.6)                   | 310               | 175 |  |
|                                                                                     | 12 04 16-KM          |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 3 (0.3-6)                                                                         | 0.45 (0.2-0.7)                   | 295               | 170 |  |
|                                                                                     | 15 06 12-KM          |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 4 (0.3-8)                                                                         | 0.4 (0.15-0.6)                   | 310               | 175 |  |
|                                                                                     | 15 06 16-KM          |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 4 (0.3-8)                                                                         | 0.45 (0.2-0.7)                   | 295               | 170 |  |
|  | SNGA 12 04 08 T02520 | ★                                                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 3 (2-4)                                                                           | 0.5 (0.3-0.56)                   | 490               |     |  |
|                                                                                     | 12 04 12 T02520      | ★                                                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 3 (2-4)                                                                           | 0.5 (0.3-0.6)                    | 490               |     |  |
|                                                                                     | 12 04 16 T02520      | ★                                                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 3 (2-4)                                                                           | 0.5 (0.3-0.6)                    | 490               |     |  |
|  | TNMG 16 04 08-KM     |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 3 (0.2-5.5)                                                                       | 0.35 (0.15-0.5)                  | 325               | 185 |  |
|                                                                                     | 16 04 12-KM          |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 3 (0.3-5.5)                                                                       | 0.4 (0.15-0.6)                   | 310               | 175 |  |
|                                                                                     | 22 04 08-KM          |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 4 (0.2-8)                                                                         | 0.35 (0.15-0.5)                  | 325               | 185 |  |
|                                                                                     | 22 04 12-KM          |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 4 (0.3-8)                                                                         | 0.4 (0.15-0.6)                   | 310               | 175 |  |
|                                                                                     | 22 04 16-KM          |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 4 (0.3-8)                                                                         | 0.45 (0.2-0.7)                   | 295               | 170 |  |
|  | TNGA 16 04 08 T02520 | ★                                                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 3 (2-4)                                                                           | 0.5 (0.3-0.56)                   | 490               |     |  |
|                                                                                     | 16 04 12 T02520      | ★                                                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 3 (2-4)                                                                           | 0.5 (0.3-0.6)                    | 490               |     |  |
|                                                                                     | 16 04 16 T02520      | ★                                                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 4.8 (0.1-8)                                                                       | 0.4 (0.15-0.6)                   | 550               |     |  |
|  | VNMG 16 04 08-KM     |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 2 (0.2-3.5)                                                                       | 0.3 (0.15-0.4)                   | 340               | 190 |  |
|                                                                                     | 16 04 12-KM          |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 2 (0.3-3.5)                                                                       | 0.35 (0.15-0.5)                  | 325               | 185 |  |
|  | WNMG 06 04 08-KM     |                                                                                         |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 2 (0.2-4)                                                                         | 0.35 (0.15-0.5)                  |                   | 185 |  |
|                                                                                     | 06 04 12-KM          |                                                                                         |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 2 (0.3-4)                                                                         | 0.4 (0.15-0.6)                   |                   | 175 |  |
|                                                                                     | 08 04 08-KM          |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 2.5 (0.2-5)                                                                       | 0.35 (0.15-0.5)                  | 325               | 185 |  |
|                                                                                     | 08 04 12-KM          |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 2.5 (0.3-5)                                                                       | 0.4 (0.15-0.6)                   | 310               | 175 |  |
|                                                                                     | 08 04 16-KM          |                                                                                         |                                                                                   |                                                                                   | ★                                                                                 | ☆                                                                                 | 2.5 (0.3-5)                                                                       | 0.45 (0.2-0.7)                   | 295               | 170 |  |
|  | WNGA 08 04 08T02520  | ★                                                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 3 (0.1-5)                                                                         | 0.2 (0.15-0.36)                  | 700               |     |  |
|                                                                                     | 08 04 12T02520       | ★                                                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 3 (0.1-5)                                                                         | 0.3 (0.15-0.54)                  | 620               |     |  |
|                                                                                     | 08 04 16T02520       | ★                                                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 3 (0.1-5)                                                                         | 0.4 (0.15-0.6)                   | 550               |     |  |



MECANIZADO MEDIO DE FUNDICIÓN NODULAR

Alta resistencia a la tracción, HB 250

ISO/  
ANSI

K

M

T-Max P

Doble  
cara

CNMG 12 04 08-WMX

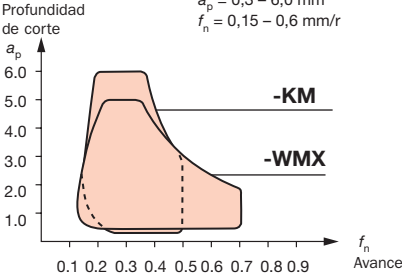
$a_p = 0,5 - 5,0 \text{ mm}$

$f_n = 0,15 - 0,6 \text{ mm/r}$

CNMG 12 04 08-KM

$a_p = 0,3 - 6,0 \text{ mm}$

$f_n = 0,15 - 0,6 \text{ mm/r}$



WMX – para un cilindrado medio productivo

Operaciones: cilindrado longitudinal y refrentado

Componentes: husillos rígidos, ejes, cubos, engranajes, etc.

**Ventajas:** Triplica la velocidad de avance convencional obteniéndose un mejor acabado superficial. Ideal si es prioritario un buen acabado superficial. Puede sustituir a la operación de rectificado. Rotura de viruta mejorada por la mayor velocidad de avance. Mayor duración de la herramienta (piezas/filo) gracias a la reducción del tiempo de empañe del filo.

-KM

Operaciones: cilindrado longitudinal, refrentado y perfilado

Componentes: piezas de fundición en general

**Ventajas:** mecanizado seguro por la ausencia de problemas, acabado a desbaste ligero

Plaquetas para fundición gris, ver página 42

CONDICIONES BUENAS



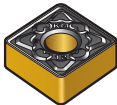
Cortes continuos.  
Premecanizado o costra ligera de fundición.

AVANCE ELEVADO



-WMX / GC3210

AVANCE NORMAL



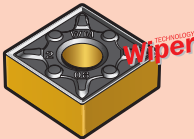
-KM / GC3210

Primera elección  
CONDICIONES NORMALES



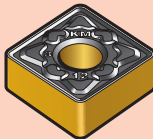
Operaciones de uso  
general.

AVANCE ELEVADO



-WMX / GC3210

AVANCE NORMAL



-KM / GC3210

CONDICIONES DIFÍCILES



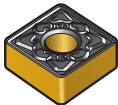
Cortes intermitentes.  
Costra gruesa de fundición.

AVANCE ELEVADO



-WMX / GC3215

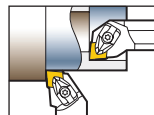
AVANCE NORMAL



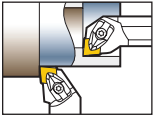
-KM / GC3215

ISO/  
ANSI**K M****MECANIZADO MEDIO DE FUNDICIÓN NODULAR**

Plaquitas con forma básica negativa



| CÓDIGO DE PEDIDO                                                                    |                                                                                         |    |        |        | DATOS DE CORTE, CMC 09.2 / HB 250 |                      |                                  |        |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|-----------------------------------|----------------------|----------------------------------|--------|
| Doble cara                                                                          |  $r_c$ | GC3210                                                                                                                                                                                                                                                | GC3210 | GC3215 | Profundidad de corte<br>$a_p$ mm  | Avance<br>$f_n$ mm/r | Velocidad de corte $v_c$ (m/min) |        |
|                                                                                     |                                                                                         |                                                                                                                                                                                                                                                       |        |        |                                   |                      | GC3210                           | GC3215 |
|    | CNMG12 04 08-WMX                                                                        | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 3 (0.5-5)                         | 0.45 (0.15-0.7)      | 245                              | 170    |
|                                                                                     | 12 04 12-WMX                                                                            | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 3.5 (0.8-6)                       | 0.5 (0.2-0.75)       | 235                              | 160    |
|                                                                                     | 16 06 08-WMX                                                                            | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 3 (0.5-5)                         | 0.45 (0.15-0.7)      | 245                              | 170    |
|                                                                                     | 16 06 12-WMX                                                                            | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 3.5 (0.8-6)                       | 0.5 (0.2-0.75)       | 235                              | 160    |
|    | DNMG15 06 08-WMX                                                                        | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 3 (0.5-5)                         | 0.45 (0.15-0.7)      | 245                              | 170    |
|                                                                                     | 15 06 12-WMX                                                                            | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 3.5 (0.8-6)                       | 0.5 (0.2-0.75)       | 235                              | 160    |
|                                                                                     | 15 06 16-WMX                                                                            | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 3.5 (0.5-6)                       | 0.5 (0.2-0.8)        | 235                              | 160    |
|    | TNMG16 04 08-WMX                                                                        | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 3 (0.5-5)                         | 0.45 (0.15-0.7)      | 245                              | 170    |
|                                                                                     | 16 04 12-WMX                                                                            | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 3.5 (0.8-6)                       | 0.5 (0.2-0.75)       | 235                              | 160    |
|    | WNMG06 04 08-WM                                                                         | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 3 (0.5-5)                         | 0.45 (0.15-0.7)      | 245                              | 170    |
|                                                                                     | 06 04 12-WM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 3.5 (0.8-6)                       | 0.5 (0.2-0.75)       | 235                              | 160    |
|                                                                                     | 08 04 08-WM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 3 (0.5-5)                         | 0.45 (0.15-0.7)      | 245                              | 170    |
|                                                                                     | 08 04 12-WM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 3.5 (0.8-6)                       | 0.5 (0.2-0.75)       | 235                              | 160    |
|    | CNMG12 04 08-KM                                                                         | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 3 (0.2-6)                         | 0.35 (0.15-0.5)      | 270                              | 185    |
|                                                                                     | 12 04 12-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 3 (0.3-6)                         | 0.4 (0.15-0.6)       | 255                              | 175    |
|                                                                                     | 12 04 16-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 3 (0.3-6)                         | 0.45 (0.2-0.7)       | 245                              | 170    |
|                                                                                     | 16 06 08-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 4 (0.2-8)                         | 0.35 (0.15-0.5)      | 270                              | 185    |
|                                                                                     | 16 06 12-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 4 (0.3-8)                         | 0.4 (0.15-0.6)       | 255                              | 175    |
|                                                                                     | 16 06 16-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 4 (0.3-8)                         | 0.45 (0.2-0.7)       | 245                              | 170    |
|    | DNMG11 04 08-KM                                                                         | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 2 (0.2-3.5)                       | 0.35 (0.15-0.5)      | 270                              | 185    |
|                                                                                     | 11 04 12-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 2 (0.3-3.5)                       | 0.4 (0.15-0.6)       | 255                              | 175    |
|                                                                                     | 15 06 08-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 2.5 (0.2-5)                       | 0.35 (0.15-0.5)      | 270                              | 185    |
|                                                                                     | 15 06 12-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 2.5 (0.3-5)                       | 0.4 (0.15-0.6)       | 255                              | 175    |
|    | SNMG09 03 08-KM                                                                         | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 2.5 (0.2-4.5)                     | 0.35 (0.15-0.5)      | 270                              | 185    |
|                                                                                     | 12 04 08-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 3 (0.2-6)                         | 0.35 (0.15-0.5)      | 270                              | 185    |
|                                                                                     | 12 04 12-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 3 (0.3-6)                         | 0.4 (0.15-0.6)       | 255                              | 175    |
|                                                                                     | 12 04 16-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 3 (0.3-6)                         | 0.45 (0.2-0.7)       | 245                              | 170    |
|                                                                                     | 15 06 12-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 4 (0.3-8)                         | 0.4 (0.15-0.6)       | 255                              | 175    |
|                                                                                     | 15 06 16-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 4 (0.3-8)                         | 0.45 (0.2-0.7)       | 245                              | 170    |
|  | TNMG16 04 08-KM                                                                         | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 3 (0.2-5.5)                       | 0.35 (0.15-0.5)      | 270                              | 185    |
|                                                                                     | 16 04 12-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 3 (0.3-5.5)                       | 0.4 (0.15-0.6)       | 255                              | 175    |
|                                                                                     | 22 04 08-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 4 (0.2-8)                         | 0.35 (0.15-0.5)      | 270                              | 185    |
|                                                                                     | 22 04 12-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 4 (0.3-8)                         | 0.4 (0.15-0.6)       | 255                              | 175    |
|                                                                                     | 22 04 16-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 4 (0.3-8)                         | 0.45 (0.2-0.7)       | 245                              | 170    |
|  | VNMG16 04 08-KM                                                                         | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 2 (0.2-3.5)                       | 0.3 (0.15-0.4)       | 285                              | 190    |
|                                                                                     | 16 04 12-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 2 (0.3-3.5)                       | 0.35 (0.15-0.5)      | 270                              | 185    |
|  | WNMG06 04 08-KM                                                                         | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 2 (0.2-4)                         | 0.35 (0.15-0.5)      | 270                              | 185    |
|                                                                                     | 06 04 12-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 2 (0.3-4)                         | 0.4 (0.15-0.6)       | 255                              | 175    |
|                                                                                     | 08 04 08-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 2.5 (0.2-5)                       | 0.35 (0.15-0.5)      | 270                              | 185    |
|                                                                                     | 08 04 12-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 2.5 (0.3-5)                       | 0.4 (0.15-0.6)       | 255                              | 175    |
|                                                                                     | 08 04 16-KM                                                                             | ☆                                                                                                                                                                                                                                                     | ★      | ☆      | 2.5 (0.3-5)                       | 0.45 (0.2-0.7)       | 245                              | 170    |



DESABASTE DE FUNDICIÓN GRIS

Alta resistencia a la tracción, HB 220

ISO/  
ANSI

K

R

T-Max P

Doble  
cara

CNMA 12 04 12-KR

$a_p = 0,3 - 8,0 \text{ mm}$

$f_n = 0,2 - 0,8 \text{ mm/r}$

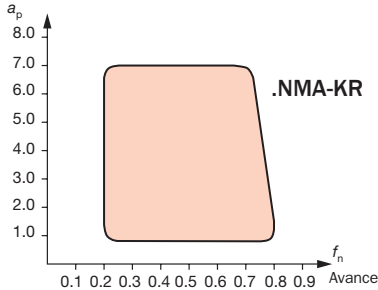
.NMA-KR

Operaciones: cilindrado longitudinal, refrentado y en algunos casos perfilado

Componentes: piezas de fundición en general

Ventajas: amplia gama de aplicaciones para desbaste

Profundidad de corte



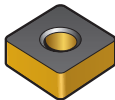
Plaquetas para fundición nodular, ver página 48

CONDICIONES BUENAS



Cortes continuos.  
Premecanizado o costra ligera de fundición.

AVANCE NORMAL



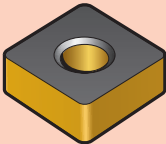
-KR / GC3205

CONDICIONES NORMALES



Operaciones de uso general.

AVANCE NORMAL



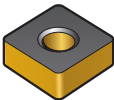
-KR / GC3205

CONDICIONES DIFÍCILES



Cortes intermitentes.  
Costra gruesa de fundición.

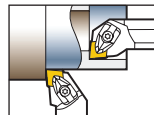
AVANCE NORMAL



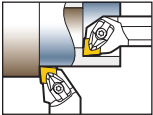
-KR / GC3215

ISO/  
ANSI**K R****DESBASTE DE FUNDICIÓN GRIS**

Plaquetas con forma básica negativa



| CÓDIGO DE PEDIDO                                                                    |                                                                                   |             |                                                                                   |                                                                                   | DATOS DE CORTE, CMC 08.2 / HB 220                                                 |                                  |                   |         |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------|-------------------|---------|
| Doble cara                                                                          |  | $r_e$       |  |  |  | Velocidad de corte $v_c$ (m/min) |                   |         |
|                                                                                     |                                                                                   |             | GC3205                                                                            | GC3205                                                                            | GC3215                                                                            | Profundidad de corte $a_p$ mm    | Avance $f_n$ mm/r |         |
|    | <b>CNMA</b>                                                                       | 12 04 04-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 2.5 (0.2-5)                      | 0.2 (0.1-0.3)     | 375 215 |
|                                                                                     |                                                                                   | 12 04 08-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 4 (0.2-8)                        | 0.35 (0.15-0.6)   | 325 185 |
|                                                                                     |                                                                                   | 12 04 12-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 4 (0.3-8)                        | 0.45 (0.2-0.8)    | 295 170 |
|                                                                                     |                                                                                   | 12 04 16-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 4 (0.3-8)                        | 0.55 (0.2-1)      | 275 155 |
|                                                                                     |                                                                                   | 16 06 12-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 5 (0.3-10)                       | 0.45 (0.2-0.8)    | 295 170 |
|                                                                                     |                                                                                   | 16 06 16-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 5 (0.3-10)                       | 0.55 (0.2-1)      | 275 155 |
|                                                                                     |                                                                                   | 19 06 08-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 6 (0.2-12)                       | 0.35 (0.15-0.6)   | 325 185 |
|                                                                                     |                                                                                   | 19 06 12-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 6 (0.3-12)                       | 0.45 (0.2-0.8)    | 295 170 |
|                                                                                     |                                                                                   | 19 06 16-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 6 (0.3-12)                       | 0.55 (0.2-1)      | 275 155 |
|                                                                                     |                                                                                   | 19 06 24-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 6 (0.4-12)                       | 0.6 (0.2-1.19)    | 265 150 |
|    | <b>DNMA</b>                                                                       | 15 06 08-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 3 (0.2-6)                        | 0.35 (0.15-0.6)   | 325 185 |
|                                                                                     |                                                                                   | 15 06 12-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 3 (0.3-6)                        | 0.45 (0.2-0.8)    | 295 170 |
|                                                                                     |                                                                                   | 15 06 16-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 3 (0.3-6)                        | 0.55 (0.2-1)      | 275 155 |
|    | <b>SNMA</b>                                                                       | 09 03 08-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 2.5 (0.38-4.5)                   | 0.38 (0.19-0.53)  | 315 180 |
|                                                                                     |                                                                                   | 12 04 08-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 4 (0.2-8)                        | 0.35 (0.15-0.6)   | 325 185 |
|                                                                                     |                                                                                   | 12 04 12-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 4 (0.3-8)                        | 0.45 (0.2-0.8)    | 295 170 |
|                                                                                     |                                                                                   | 12 04 16-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 4 (0.3-8)                        | 0.55 (0.2-1)      | 275 155 |
|                                                                                     |                                                                                   | 15 06 12-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 5 (0.3-10)                       | 0.45 (0.2-0.8)    | 295 170 |
|                                                                                     |                                                                                   | 15 06 16-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 5 (0.3-10)                       | 0.55 (0.2-1)      | 275 155 |
|                                                                                     |                                                                                   | 19 06 08-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 6 (0.2-12)                       | 0.35 (0.15-0.6)   | 325 185 |
|                                                                                     |                                                                                   | 19 06 12-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 6 (0.3-12)                       | 0.45 (0.2-0.8)    | 295 170 |
|                                                                                     |                                                                                   | 19 06 16-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 6 (0.3-12)                       | 0.55 (0.2-1)      | 275 155 |
|   | <b>TNMA</b>                                                                       | 16 04 04-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 2.5 (0.2-5)                      | 0.2 (0.1-0.3)     | 375 215 |
|                                                                                     |                                                                                   | 16 04 08-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 3.5 (0.2-7)                      | 0.35 (0.15-0.6)   | 325 185 |
|                                                                                     |                                                                                   | 16 04 12-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 3.5 (0.3-7)                      | 0.45 (0.2-0.8)    | 295 170 |
|                                                                                     |                                                                                   | 16 04 16-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 3.5 (0.3-7)                      | 0.55 (0.2-1)      | 275 155 |
|                                                                                     |                                                                                   | 22 04 04-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 2.5 (0.2-10)                     | 0.2 (0.1-0.3)     | 375 215 |
|                                                                                     |                                                                                   | 22 04 08-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 5 (0.2-10)                       | 0.35 (0.15-0.6)   | 325 185 |
|                                                                                     |                                                                                   | 22 04 12-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 5 (0.3-10)                       | 0.45 (0.2-0.8)    | 295 170 |
|                                                                                     |                                                                                   | 22 04 16-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 5 (0.3-10)                       | 0.55 (0.2-1)      | 275 155 |
|  | <b>WNMA</b>                                                                       | 06 04 08-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 2.5 (0.2-4)                      | 0.35 (0.15-0.6)   | 325 185 |
|                                                                                     |                                                                                   | 06 04 12-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 2.5 (0.3-4)                      | 0.45 (0.2-0.8)    | 295 170 |
|                                                                                     |                                                                                   | 08 04 08-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 3 (0.2-5)                        | 0.35 (0.15-0.6)   | 325 185 |
|                                                                                     |                                                                                   | 08 04 12-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 3 (0.3-5)                        | 0.45 (0.2-0.8)    | 295 170 |
|                                                                                     |                                                                                   | 08 04 16-KR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 3 (0.3-5)                        | 0.55 (0.2-1)      | 275 155 |



DESABASTE PARA FUNDICIÓN NODULAR

Alta resistencia a la tracción, HB 250

ISO/  
ANSI

K

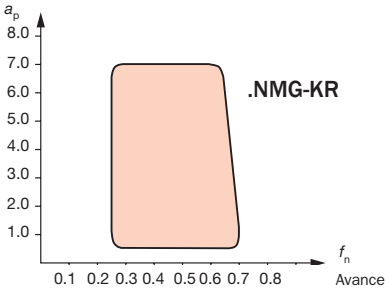
R

T-Max P

Doble  
cara

CNMG 12 04 12-KR  
 $a_p = 0,5 - 7,0 \text{ mm}$   
 $f_n = 0,25 - 0,7 \text{ mm/r}$

Profundidad de corte



.NMG-KR

**Operaciones:** cilindrado longitudinal, refrentado y en algunos casos perfilado

**Componentes:** piezas de fundición en general

**Ventajas:** amplia gama de aplicaciones para desbaste, la alternativa de doble cara para un desbaste de alta capacidad que genera una buena economía de mecanizado

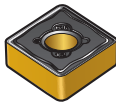
Plaquetas para fundición gris, ver página 46

CONDICIONES BUENAS



Cortes continuos.  
Premecanizado o costra ligera de fundición.

AVANCE NORMAL



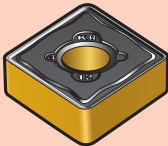
-KR / GC3210

CONDICIONES NORMALES



Operaciones de uso general.

AVANCE NORMAL



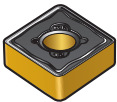
-KR / GC3210

CONDICIONES DIFÍCILES



Cortes intermitentes.  
Costra gruesa de fundición.

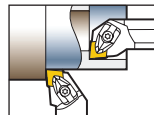
AVANCE NORMAL



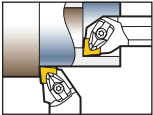
-KR / GC3215

ISO/  
ANSI**K R****DESBASTE PARA FUNDICIÓN NODULAR**

Plaquitas con forma básica negativa



| CÓDIGO DE PEDIDO |                         |            |            |            | DATOS DE CORTE, CMC 09.2/HB 250     |                      |        |        |
|------------------|-------------------------|------------|------------|------------|-------------------------------------|----------------------|--------|--------|
| Doble cara       | $r_e$                   | <br>GC3210 | <br>GC3210 | <br>GC3215 | Velocidad de corte $v_c$ (m/min)    |                      |        |        |
|                  |                         |            |            |            | Profundidad<br>de corte<br>$a_p$ mm | Avance<br>$f_n$ mm/r | GC3210 | GC3215 |
|                  | <b>CNMG 12 04 08-KR</b> | ☆          | ★          | ☆          | 3.5 (0.38-7)                        | 0.38 (0.19-0.53)     | 260    | 180    |
|                  | 12 04 12-KR             | ☆          | ★          | ☆          | 3.5 (0.5-7)                         | 0.5 (0.25-0.7)       | 235    | 160    |
|                  | 12 04 16-KR             | ☆          | ★          | ☆          | 3.5 (0.75-7)                        | 0.61 (0.28-0.85)     | 215    | 150    |
|                  | 16 06 12-KR             | ☆          | ★          | ☆          | 4.7 (0.8-9.3)                       | 0.55 (0.28-0.77)     | 225    | 155    |
|                  | 16 06 16-KR             | ☆          | ★          | ☆          | 4.7 (1-9.3)                         | 0.61 (0.3-0.85)      | 215    | 150    |
|                  | 19 06 12-KR             | ☆          | ★          | ☆          | 7 (1-14)                            | 0.55 (0.28-0.77)     | 225    | 155    |
|                  | 19 06 16-KR             | ☆          | ★          | ☆          | 7 (1.5-14)                          | 0.61 (0.3-0.85)      | 215    | 150    |
|                  | <b>DNMG 15 06 08-KR</b> | ☆          | ★          | ☆          | 3.5 (0.38-7)                        | 0.34 (0.17-0.47)     | 270    | 185    |
|                  | 15 06 12-KR             | ☆          | ★          | ☆          | 3.5 (0.5-7)                         | 0.45 (0.23-0.63)     | 245    | 170    |
|                  | 15 06 16-KR             | ☆          | ★          | ☆          | 3.5 (0.75-7)                        | 0.5 (0.25-0.69)      | 235    | 160    |
|                  | <b>SNMG 12 04 08-KR</b> | ☆          | ★          | ☆          | 3.5 (0.38-7)                        | 0.38 (0.19-0.53)     | 260    | 180    |
|                  | 12 04 12-KR             | ☆          | ★          | ☆          | 3.5 (0.5-7)                         | 0.5 (0.28-0.7)       | 235    | 160    |
|                  | 12 04 16-KR             | ☆          | ★          | ☆          | 3.5 (0.75-7)                        | 0.55 (0.28-0.77)     | 225    | 155    |
|                  | 15 06 12-KR             | ☆          | ★          | ☆          | 4.4 (0.63-8.8)                      | 0.55 (0.28-0.77)     | 225    | 155    |
|                  | 15 06 16-KR             | ☆          | ★          | ☆          | 4.4 (0.94-8.8)                      | 0.61 (0.3-0.85)      | 215    | 150    |
|                  | 19 06 16-KR             | ☆          | ★          | ☆          | 6.1 (1.3-12.3)                      | 0.61 (0.3-0.85)      | 215    | 150    |
|                  | <b>TNMG 16 04 08-KR</b> | ☆          | ★          | ☆          | 3.2 (0.34-6.2)                      | 0.3 (0.17-0.42)      | 285    | 190    |
|                  | 16 04 12-KR             | ☆          | ★          | ☆          | 3.2 (0.45-6.3)                      | 0.4 (0.2-0.56)       | 255    | 175    |
|                  | 16 04 16-KR             | ☆          | ★          | ☆          | 3.2 (0.68-6.2)                      | 0.44 (0.22-0.62)     | 245    | 170    |
|                  | 22 04 08-KR             | ☆          | ★          | ☆          | 3.5 (0.38-7)                        | 0.38 (0.19-0.53)     | 260    | 180    |
|                  | 22 04 12-KR             | ☆          | ★          | ☆          | 3.5 (0.5-7)                         | 0.5 (0.25-0.7)       | 235    | 160    |
|                  | 22 04 16-KR             | ☆          | ★          | ★          | 3.5 (0.75-7)                        | 0.55 (0.28-0.77)     |        | 155    |
|                  |                         |            |            |            |                                     |                      |        |        |
|                  | <b>WNMG06 04 08-KR</b>  | ☆          | ★          | ☆          | 2.2 (0.24-4.5)                      | 0.3 (0.17-0.42)      | 285    | 190    |
|                  | 06 04 12-KR             | ☆          | ★          | ☆          | 2.2 (0.32-4.5)                      | 0.4 (0.2-0.56)       | 255    | 175    |
|                  | 08 04 08-KR             | ☆          | ★          | ☆          | 2.7 (0.29-5.5)                      | 0.34 (0.17-0.47)     | 270    | 185    |
|                  | 08 04 12-KR             | ☆          | ★          | ☆          | 2.7 (0.39-5.5)                      | 0.45 (0.23-0.63)     | 245    | 170    |



ACABADO DE SUPER ALEACIONES

Superalaciones termorresistentes, HB 350

ISO/  
ANSI

S

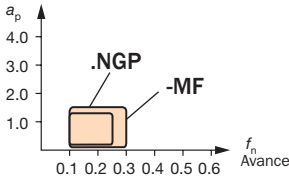
F

T-MAX P

Doble cara  
CNGP 12 04 08  
 $a_p = 0,2 - 1,3 \text{ mm}$   
 $f_n = 0,1 - 0,25 \text{ mm/r}$

CNMG 12 04 08-MF  
 $a_p = 0,1 - 1,5 \text{ mm}$   
 $f_n = 0,1 - 0,3 \text{ mm/r}$

Profundidad de corte



.NGP

Operaciones: operaciones de acabado en general

Componentes: piezas termorresistentes en general

Ventajas: geometría de corte ligero con fuerzas de corte bajas, buena alternativa para ejes esbeltos, componentes de paredes finas y piezas con sujeción inestable. La geometría positiva reduce la tendencia a la creación de filo de aportación, produciendo un buen acabado superficial y alargando la vida de la herramienta.

-MF

Operaciones: Operaciones de acabado.

Componentes: de superaleaciones termoresistentes en general.

Ventajas: Geometría de corte ligero con fuerzas de corte reducidas, excelente alternativas para el mecanizado de ejes delgados, piezas de paredes delgadas o sujeción inestable. La geometría positiva minimiza la tendencia a crearse aportaciones en el filo, favorece el acabado superficial y prolonga la vida útil de la herramienta.

CONDICIONES BUENAS



- Cortes continuos
- Superficie pre-mecanizada

AVANCE NORMAL



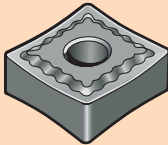
.NGP / S05F

CONDICIONES NORMALES



Operaciones de uso general.

AVANCE NORMAL



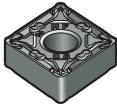
.NGP / GC1105

CONDICIONES DIFÍCILES



- Cortes intermitentes
- Condiciones tenaces/envejecidas, cascarrilla de forjado

AVANCE NORMAL

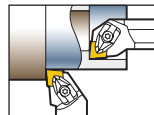


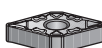
MF / GC1115

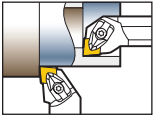


ISO/  
ANSI**S F****ACABADO DE SUPER ALEACIONES**

Plaquetas con forma básica negativa



| CÓDIGO DE PEDIDO                                                                   |                                                                                   |                                    |                                                                                   | DATOS DE CORTE, CMC 20.22/HB 350                                                  |                                                                                   |                                              |                                                   |                                  |                        |           |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------|---------------------------------------------------|----------------------------------|------------------------|-----------|
| Doble cara                                                                         |  | $r_c$                              |  |  |  | Profundidad de corte<br>$a_p$ mm             | Avance<br>$f_n$ mm/r                              | Velocidad de corte $v_c$ (m/min) |                        |           |
|                                                                                    |                                                                                   |                                    | S05F                                                                              | GC1105                                                                            | GC1115                                                                            |                                              |                                                   | S05F                             | GC1105                 | GC1115    |
|   | <b>CNMG</b>                                                                       | <b>12 04 04-MF</b>                 | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>0.4</b> (0.1-1.5)                         | <b>0.1</b> (0.05-0.2)                             | <b>90</b>                        | <b>80</b>              | <b>65</b> |
|                                                                                    |                                                                                   | <b>12 04 08-MF</b>                 | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>0.4</b> (0.1-1.5)                         | <b>0.15</b> (0.1-0.3)                             | <b>85</b>                        | <b>80</b>              | <b>65</b> |
|   | <b>CNGP</b>                                                                       | <b>12 04 02</b>                    |                                                                                   | ★                                                                                 | ☆                                                                                 | <b>0.3</b> (0.05-1)                          | <b>0.1</b> (0.05-0.15)                            |                                  | <b>80</b>              | <b>65</b> |
|                                                                                    |                                                                                   | <b>12 04 04</b>                    | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>0.6</b> (0.1-1.3)                         | <b>0.11</b> (0.06-0.15)                           | <b>90</b>                        | <b>80</b>              | <b>65</b> |
|                                                                                    |                                                                                   | <b>12 04 08</b>                    | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>0.6</b> (0.2-1.3)                         | <b>0.17</b> (0.1-0.25)                            | <b>80</b>                        | <b>75</b>              | <b>60</b> |
|   | <b>DNMG</b>                                                                       | <b>15 06 04-MF</b>                 | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>0.4</b> (0.1-1.5)                         | <b>0.1</b> (0.05-0.2)                             | <b>90</b>                        | <b>80</b>              | <b>65</b> |
|                                                                                    |                                                                                   | <b>15 06 08-MF</b>                 | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>0.4</b> (0.1-1.5)                         | <b>0.15</b> (0.1-0.3)                             | <b>85</b>                        | <b>80</b>              | <b>65</b> |
|   | <b>DNGP</b>                                                                       | <b>15 04 04</b>                    |                                                                                   | ★                                                                                 | ☆                                                                                 | <b>0.17</b> (0.1-0.25)                       | <b>0.1</b> (0.05-0.15)                            |                                  | <b>80</b>              | <b>65</b> |
|                                                                                    |                                                                                   | <b>15 04 08</b>                    |                                                                                   | ★                                                                                 | ☆                                                                                 | <b>0.17</b> (0.1-0.25)                       | <b>0.3</b> (0.15-0.5)                             |                                  | <b>75</b>              | <b>60</b> |
|                                                                                    |                                                                                   | <b>15 06 04</b>                    | ☆                                                                                 | ★                                                                                 |                                                                                   | <b>0.17</b> (0.1-0.25)                       | <b>0.1</b> (0.05-0.15)                            | <b>90</b>                        | <b>80</b>              |           |
|                                                                                    |                                                                                   | <b>15 06 08</b>                    | ☆                                                                                 | ★                                                                                 |                                                                                   | <b>0.3</b> (0.15-0.5)                        | <b>0.17</b> (0.1-0.25)                            | <b>80</b>                        | <b>75</b>              |           |
|   | <b>VNMG</b>                                                                       | <b>16 04 04-MF</b>                 | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>0.4</b> (0.1-1.5)                         | <b>0.1</b> (0.05-0.2)                             | <b>90</b>                        | <b>80</b>              | <b>65</b> |
|                                                                                    |                                                                                   | <b>16 04 08-MF</b>                 | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>0.4</b> (0.2-1.5)                         | <b>0.1</b> (0.05-0.25)                            | <b>90</b>                        | <b>80</b>              | <b>65</b> |
|   | <b>VNGP</b>                                                                       | <b>16 04 04</b>                    | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>0.17</b> (0.1-0.25)                       | <b>0.1</b> (0.05-0.15)                            | <b>90</b>                        | <b>80</b>              | <b>65</b> |
|                                                                                    |                                                                                   | <b>16 04 08</b>                    | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>0.3</b> (0.15-0.5)                        | <b>0.17</b> (0.1-0.25)                            | <b>80</b>                        | <b>75</b>              | <b>60</b> |
|   | <b>WNMG</b>                                                                       | <b>08 04 08-MF</b>                 | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>0.4</b> (0.1-1.5)                         | <b>0.15</b> (0.1-0.3)                             | <b>85</b>                        | <b>80</b>              | <b>65</b> |
|  | <b>WNGP</b>                                                                       | <b>08 04 04</b><br><b>08 04 08</b> |                                                                                   | ★<br>★                                                                            |                                                                                   | <b>0.6</b> (0.1-1.3)<br><b>0.6</b> (0.2-1.3) | <b>0.11</b> (0.06-0.15)<br><b>0.17</b> (0.1-0.25) |                                  | <b>80</b><br><b>75</b> |           |



MECANIZADO MEDIO DE SUPER ALEACIONES

Superalaciones termorresistentes, HB 350

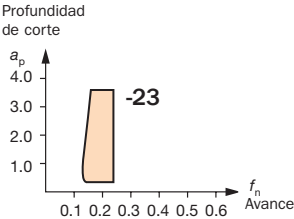
ISO/  
ANSI

S

M

T-MAX P

Doble cara  
CNMG 12 04 08-23  
 $a_p = 0,4 - 3,6 \text{ mm}$   
 $f_n = 0,13 - 0,24 \text{ mm/r}$



-23 – para cilindrado de ligero a medio

Operaciones: cilindrado longitudinal, refrentado y perfilado

Componentes: semi-acabado y acabado de piezas en general en acero inoxidable y HRSA

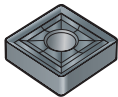
Ventajas: geometría de corte ligero agudizada que genera fuerzas de corte bajas con posibilidad de mecanizar ejes esbeltos y componentes de paredes finas, así como piezas de sujeción inestable. Geometría positiva que reduce la tendencia a la formación de filos de aportación, para un buen acabado superficial y gran duración de la herramienta.

CONDICIONES BUENAS



- Cortes continuos
- Superficie pre-mecanizada

AVANCE NORMAL



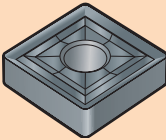
-23 / GC1105

CONDICIONES NORMALES



Operaciones de uso general.

AVANCE NORMAL



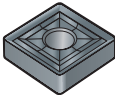
-23 / GC1105

CONDICIONES DIFÍCILES



- Cortes intermitentes
- Condiciones tenaces/envejecidas, cascarilla de forjado

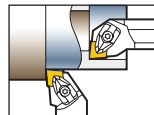
AVANCE NORMAL

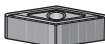


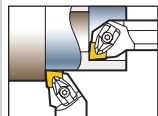
-23 / H13A

ISO/  
ANSI**S M****MECANIZADO MEDIO DE SUPER ALEACIONES**

Plaquetas con forma básica negativa



| CÓDIGO DE PEDIDO                                                                    |                                                                                   |                    |                                                                                   | DATOS DE CORTE, CMC 20.22/HB 350                                                  |                                                                                   |                                  |                         |                                  |           |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------|-------------------------|----------------------------------|-----------|
| Doble cara                                                                          |  | $r_c$              |  |  |  | Profundidad de corte<br>$a_p$ mm | Avance<br>$f_n$ mm/r    | Velocidad de corte $v_c$ (m/min) |           |
|                                                                                     |                                                                                   |                    | GC1105                                                                            | GC1105                                                                            | H13A                                                                              |                                  |                         | GC1105                           | H13A      |
|    | <b>CNMG</b>                                                                       | <b>12 04 04-23</b> | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>1.5</b> (0.18-3.6)            | <b>0.14</b> (0.1-0.18)  | <b>80</b>                        | <b>40</b> |
|                                                                                     |                                                                                   | <b>12 04 08-23</b> | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>2.4</b> (0.36-3.6)            | <b>0.18</b> (0.13-0.24) | <b>75</b>                        | <b>40</b> |
|                                                                                     |                                                                                   | <b>12 04 12-23</b> | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>2.4</b> (0.43-3.6)            | <b>0.22</b> (0.16-0.29) | <b>65</b>                        | <b>35</b> |
|    | <b>DNMG</b>                                                                       | <b>15 06 04-23</b> | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>1.5</b> (0.18-3.6)            | <b>0.14</b> (0.1-0.18)  | <b>80</b>                        | <b>40</b> |
|                                                                                     |                                                                                   | <b>15 06 08-23</b> | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>2.4</b> (0.36-3.6)            | <b>0.18</b> (0.13-0.5)  | <b>75</b>                        | <b>40</b> |
|                                                                                     |                                                                                   | <b>15 06 12-23</b> | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>2.4</b> (0.43-3.6)            | <b>0.22</b> (0.16-0.29) | <b>65</b>                        | <b>35</b> |
|    | <b>SNMG</b>                                                                       | <b>12 04 04-23</b> |                                                                                   |                                                                                   | ★                                                                                 | <b>1.5</b> (0.2-3.6)             | <b>0.14</b> (0.1-0.18)  |                                  | <b>40</b> |
|                                                                                     |                                                                                   | <b>12 04 08-23</b> | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>2.4</b> (0.36-3.6)            | <b>0.18</b> (0.13-0.24) | <b>75</b>                        | <b>40</b> |
|                                                                                     |                                                                                   | <b>12 04 12-23</b> | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>2.4</b> (0.43-3.6)            | <b>0.22</b> (0.16-0.29) | <b>65</b>                        | <b>35</b> |
|    | <b>TNMG</b>                                                                       | <b>16 04 04-23</b> | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>2</b> (0.15-3)                | <b>0.11</b> (0.08-0.15) | <b>80</b>                        | <b>40</b> |
|                                                                                     |                                                                                   | <b>16 04 08-23</b> | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>2</b> (0.3-3)                 | <b>0.15</b> (0.11-0.2)  | <b>80</b>                        | <b>40</b> |
|                                                                                     |                                                                                   | <b>16 04 12-23</b> | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>2</b> (0.36-3)                | <b>0.18</b> (0.13-0.24) | <b>75</b>                        | <b>40</b> |
|                                                                                     |                                                                                   | <b>22 04 08-23</b> | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>2.4</b> (0.36-3.6)            | <b>0.18</b> (0.13-0.24) | <b>75</b>                        | <b>40</b> |
|                                                                                     |                                                                                   | <b>22 04 12-23</b> | ☆                                                                                 | ★                                                                                 |                                                                                   | <b>2.4</b> (0.43-3.6)            | <b>0.22</b> (0.16-0.29) | <b>65</b>                        |           |
|    | <b>VNMG</b>                                                                       | <b>16 04 04-23</b> | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>2</b> (0.4-4)                 | <b>0.15</b> (0.1-0.2)   | <b>80</b>                        | <b>40</b> |
|                                                                                     |                                                                                   | <b>16 04 08-23</b> | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>2.5</b> (0.5-4)               | <b>0.2</b> (0.15-0.25)  | <b>70</b>                        | <b>35</b> |
|  | <b>WNMG06</b>                                                                     | <b>04 04-23</b>    | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>2</b> (0.5-3)                 | <b>0.15</b> (0.1-0.3)   | <b>80</b>                        | <b>40</b> |
|                                                                                     |                                                                                   | <b>06 04-23</b>    | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>2.5</b> (0.7-4)               | <b>0.25</b> (0.2-0.35)  | <b>60</b>                        | <b>35</b> |
|                                                                                     |                                                                                   | <b>08 04 04-23</b> | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>2.5</b> (0.5-4)               | <b>0.15</b> (0.1-0.3)   | <b>80</b>                        | <b>40</b> |
|                                                                                     |                                                                                   | <b>08 04 08-23</b> | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | <b>2.5</b> (0.7-4)               | <b>0.25</b> (0.2-0.35)  | <b>60</b>                        | <b>35</b> |



# DESBASTE DE SUPER ALEACIONES

Superalaciones termorresistentes, HB 350

ISO/  
ANSI

**S**

**R**

## T-MAX P

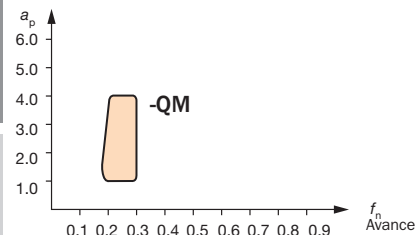
Doble  
cara

CNMG 12 04 08-QM

$a_p = 1,0 - 4,0$  mm

$f_n = 0,18 - 0,3$  mm/r

Profundidad  
de corte



## -QM

**Operaciones:** cilindrado longitudinal, refrentado y perfilado

**Componentes:** en general en el mecanizado mixto en acero inoxidable y HRSA

**Ventajas:** amplia área de aplicación para semi-acabado a desbaste ligero en diferentes materiales, disponible en numerosas calidades

### CONDICIONES BUENAS



- Cortes continuos
- Superficie pre-mecanizada

### AVANCE NORMAL



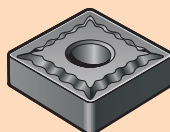
-QM / 1105

### CONDICIONES NORMALES



Operaciones de uso  
general.

### AVANCE NORMAL



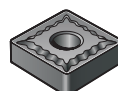
-QM / GC1115

### CONDICIONES DIFÍCILES



- Cortes intermitentes
- Condiciones tenaces/  
envejecidas, cascarilla de  
forjado

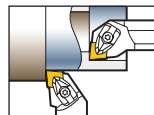
### AVANCE NORMAL



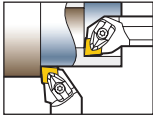
-QM / H13A

ISO/  
ANSI**S R****DESBASTE DE SUPER ALEACIONES**

Plaquitas con forma básica negativa



| CÓDIGO DE PEDIDO |                         |        |        |      | DATOS DE CORTE, CMC 20.22/HB 350 |                   |        |        |      |
|------------------|-------------------------|--------|--------|------|----------------------------------|-------------------|--------|--------|------|
|                  |                         | GC1105 | GC1115 | H13A | Velocidad de corte $v_c$ (m/min) |                   |        |        |      |
| Doble cara       | $r_c$                   |        |        |      | Profundidad de corte $a_p$ mm    | Avance $f_n$ mm/r | GC1105 | GC1115 | H13A |
|                  | <b>CNMG</b> 12 04 04-QM | ★      | ☆      | ☆    | 1.5 (0.48-4)                     | 0.18 (0.14-0.23)  | 75     | 60     | 40   |
|                  | 12 04 08-QM             | ★      | ☆      | ☆    | 2.4 (0.96-4)                     | 0.22 (0.18-0.3)   | 65     | 55     | 35   |
|                  | 12 04 12-QM             | ★      | ☆      | ☆    | 2.4 (1.2-4)                      | 0.25 (0.2-0.34)   | 60     | 50     | 35   |
|                  | 12 04 16-QM             | ★      | ☆      | ☆    | 2.4 (1.3-4)                      | 0.28 (0.23-0.38)  | 55     | 45     | 30   |
|                  | 16 06 08-QM             | ★      | ☆      | ☆    | 3 (1-6)                          | 0.25 (0.2-0.35)   |        |        | 35   |
|                  | 16 06 12-QM             | ★      | ☆      | ☆    | 3 (1-6)                          | 0.3 (0.25-0.4)    | 50     | 40     | 30   |
|                  | <b>DNMG</b> 15 06 04-QM | ★      | ☆      | ☆    | 2.4 (1-4)                        | 0.2 (0.18-0.3)    |        | 55     | 35   |
|                  | 15 06 08-QM             | ★      | ☆      | ☆    | 2.4 (0.96-4)                     | 0.22 (0.18-0.3)   | 65     | 55     | 35   |
|                  | 15 06 12-QM             | ★      | ☆      | ☆    | 2.4 (1.2-4)                      | 0.25 (0.2-0.34)   | 60     | 50     | 35   |
|                  | <b>SNMG</b> 09 03 08-QM |        |        | ★    | 2.5 (1-3)                        | 0.25 (0.2-0.3)    |        |        | 35   |
|                  | 12 04 08-QM             | ★      | ☆      | ☆    | 2.4 (0.96-4)                     | 0.22 (0.18-0.3)   | 65     | 55     | 35   |
|                  | 12 04 12-QM             | ★      | ☆      | ☆    | 2.4 (1-4)                        | 0.24 (0.19-0.32)  | 65     | 50     | 35   |
|                  | 12 04 16-QM             | ★      | ☆      | ☆    | 2.4 (1.2-4)                      | 0.35 (0.3-0.4)    | 45     | 35     | 25   |
|                  | <b>TNMG</b> 16 04 04-QM |        |        | ★    | 2 (1-3.5)                        | 0.2 (0.18-0.23)   |        |        | 35   |
|                  | 16 04 08-QM             | ★      | ☆      | ☆    | 2 (1-3.5)                        | 0.18 (0.15-0.25)  | 75     | 60     | 40   |
|                  | 16 04 12-QM             | ★      | ☆      | ☆    | 2 (1-3.5)                        | 0.21 (0.17-0.28)  | 70     | 55     |      |
|                  | 22 04 04-QM             |        |        | ★    | 3 (1-5)                          | 0.2 (0.18-0.25)   |        |        | 35   |
|                  | 22 04 08-QM             |        |        | ★    | 3 (1-5)                          | 0.25 (0.2-0.3)    |        |        | 35   |
|                  | 22 04 12-QM             |        |        | ★    | 3 (1-5)                          | 0.3 (0.25-0.35)   |        |        | 30   |
|                  | 22 04 16-QM             | ★      | ☆      | ☆    | 3 (1.3-5)                        | 0.28 (0.23-0.38)  | 55     | 45     | 30   |
|                  | <b>VNMG</b> 16 04 04-QM | ★      | ☆      | ☆    | 0.9 (0.4-2)                      | 0.13 (0.1-0.17)   |        | 65     | 40   |
|                  | 16 04 08-QM             | ★      | ☆      | ☆    | 1.1 (0.8-2)                      | 0.18 (0.15-0.22)  | 75     | 60     | 40   |
|                  | <b>WNMG</b> 08 04 04-QM | ★      | ☆      | ☆    | 2.1 (0.8-3.5)                    | 0.18 (0.15-0.23)  | 75     | 60     | 40   |
|                  | 08 04 08-QM             | ★      | ☆      | ☆    | 2.1 (0.8-3.5)                    | 0.2 (0.16-0.3)    | 70     | 55     | 35   |
|                  | 08 04 12-QM             | ★      | ☆      | ☆    | 2.1 (1-3.5)                      | 0.25 (0.18-0.34)  | 60     | 50     | 35   |



ACABADO DE PIEZAS TEMPLADAS

Endurecido y templado, HRC 60

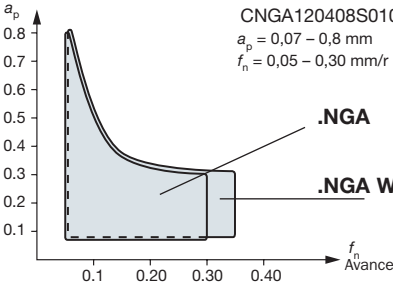
ISO/  
ANSI

H

F

T-MAX P

Profundidad  
de corte



CNGA120408T01030AWH

$a_p = 0,07 - 0,8 \text{ mm}$

$f_n = 0,05 - 0,35 \text{ mm/r}$

CNGA120408S01030A

$a_p = 0,07 - 0,8 \text{ mm}$

$f_n = 0,05 - 0,30 \text{ mm/r}$

.NGA

.NGA WH

.NGA

**Operaciones:** cilindrado longitudinal, refrentado y perfilado.

**Componentes:** cajas de cambios templadas y otros componentes de trenes de engranajes.

**Ventajas:** excelente acabado en materiales templados. Grandes ahorros comparado con el rectificado.

Tipos de chafilán

Tipo S



Chafilán con  
lapeado ligero

Tipo T



Chafilán sin  
lapeado

CONDICIONES BUENAS



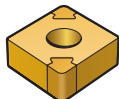
- Cortes continuos
- Superficie pre-mecanizada.

AVANCE ELEVADO



.NGA WH / CB7015

AVANCE NORMAL



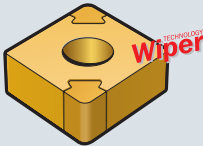
.NGA / CB7015

CONDICIONES NORMALES



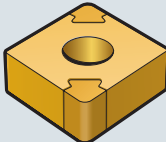
- Cortes continuos a discontinuos ligeros.
- Superficies de alta calidad.

AVANCE ELEVADO



.NGA WH / CB7015

AVANCE NORMAL



.NGA / CB7015

CONDICIONES DIFÍCILES



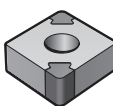
- Cortes intermitentes

AVANCE ELEVADO

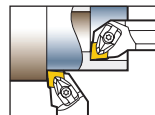


.NGA WH / CB7025

AVANCE NORMAL

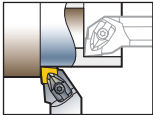


.NGA / CB7025

ISO/  
ANSI**H F****ACABADO DE PIEZAS TEMPLADAS**

Plaquetas con forma básica negativa

| CÓDIGO DE PEDIDO                                                                    |                                                                                   |                    | DATOS DE CORTE, CMC 04.1 / HRC 60                                                 |                                                                                   |                                                                                   |                                  |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------|
| Doble cara                                                                          |  | $r_e$              |  |  |  | Velocidad de corte $v_c$ (m/min) |
|                                                                                     |                                                                                   |                    | CB7015                                                                            | CB7015                                                                            | CB7025                                                                            |                                  |
|    | <b>CNGA</b>                                                                       | 12 04 04 T01030AWH | ☆                                                                                 | ★                                                                                 | 0.1 (0.07-0.4)                                                                    | <b>180</b>                       |
|                                                                                     |                                                                                   | 12 04 08 T01030AWH | ☆                                                                                 | ★                                                                                 | 0.1 (0.07-0.8)                                                                    | <b>155</b>                       |
|                                                                                     |                                                                                   | 12 04 12 T01030AWH | ☆                                                                                 | ★                                                                                 | 0.2 (0.07-1.2)                                                                    | <b>145</b>                       |
|    | <b>CNGA</b>                                                                       | 12 04 04 S01030AWH |                                                                                   | ★                                                                                 | 0.1 (0.07-0.4)                                                                    | <b>145</b>                       |
|                                                                                     |                                                                                   | 12 04 08 S01030AWH |                                                                                   | ★                                                                                 | 0.1 (0.05-0.35)                                                                   | <b>130</b>                       |
|                                                                                     |                                                                                   | 12 04 12 S01030AWH |                                                                                   | ★                                                                                 | 0.2 (0.05-0.4)                                                                    | <b>125</b>                       |
|    | <b>WNGA</b>                                                                       | 08 04 04 T01030AWH | ☆                                                                                 | ★                                                                                 | 0.1 (0.07-0.4)                                                                    | <b>180</b>                       |
|                                                                                     |                                                                                   | 08 04 08 T01030AWH | ☆                                                                                 | ★                                                                                 | 0.1 (0.07-0.8)                                                                    | <b>155</b>                       |
|                                                                                     |                                                                                   | 08 04 12 T01030AWH | ☆                                                                                 | ★                                                                                 | 0.2 (0.05-0.4)                                                                    | <b>145</b>                       |
|    | <b>WNGA</b>                                                                       | 08 04 04 S01030AWH |                                                                                   | ★                                                                                 | 0.1 (0.05-0.25)                                                                   | <b>145</b>                       |
|                                                                                     |                                                                                   | 08 04 08 S01030AWH |                                                                                   | ★                                                                                 | 0.1 (0.05-0.35)                                                                   | <b>130</b>                       |
|                                                                                     |                                                                                   | 08 04 12 S01030AWH |                                                                                   | ★                                                                                 | 0.2 (0.05-0.4)                                                                    | <b>125</b>                       |
|    | <b>CNGA</b>                                                                       | 12 04 04 S01030A   | ☆                                                                                 | ★                                                                                 | 0.1 (0.07-0.4)                                                                    | <b>215</b>                       |
|                                                                                     |                                                                                   | 12 04 08 S01030A   | ☆                                                                                 | ★                                                                                 | 0.2 (0.07-0.8)                                                                    | <b>190</b>                       |
|                                                                                     |                                                                                   | 12 04 12 S01030A   | ☆                                                                                 | ★                                                                                 | 0.2 (0.05-0.3)                                                                    | <b>175</b>                       |
|    | <b>CNGA</b>                                                                       | 12 04 04 S01030A   |                                                                                   | ★                                                                                 | 0.1 (0.05-0.2)                                                                    | <b>165</b>                       |
|                                                                                     |                                                                                   | 12 04 08 S01030A   |                                                                                   | ★                                                                                 | 0.15 (0.05-0.3)                                                                   | <b>150</b>                       |
|                                                                                     |                                                                                   | 12 04 12 S01030A   |                                                                                   | ★                                                                                 | 0.2 (0.05-0.3)                                                                    | <b>140</b>                       |
|    | <b>DNGA</b>                                                                       | 15 04 04 S01030A   | ☆                                                                                 | ★                                                                                 | 0.1 (0.07-0.4)                                                                    | <b>215</b>                       |
|                                                                                     |                                                                                   | 15 04 08 S01030A   | ☆                                                                                 | ★                                                                                 | 0.2 (0.07-0.8)                                                                    | <b>190</b>                       |
|                                                                                     |                                                                                   | 15 04 12 S01030A   | ☆                                                                                 | ★                                                                                 | 0.2 (0.05-0.3)                                                                    | <b>175</b>                       |
|   | <b>DNGA</b>                                                                       | 15 04 04 S01030A   |                                                                                   | ★                                                                                 | 0.1 (0.05-0.2)                                                                    | <b>165</b>                       |
|                                                                                     |                                                                                   | 15 04 08 S01030A   |                                                                                   | ★                                                                                 | 0.15 (0.05-0.3)                                                                   | <b>150</b>                       |
|                                                                                     |                                                                                   | 15 04 12 S01030A   |                                                                                   | ★                                                                                 | 0.2 (0.05-0.3)                                                                    | <b>140</b>                       |
|  | <b>SNGA</b>                                                                       | 12 04 08 S01030A   | ☆                                                                                 | ★                                                                                 | 0.2 (0.07-0.8)                                                                    | <b>190</b>                       |
|                                                                                     |                                                                                   | 12 04 12 S01030A   | ☆                                                                                 | ★                                                                                 | 0.2 (0.05-0.3)                                                                    | <b>175</b>                       |
|  | <b>SNGA</b>                                                                       | 12 04 08 S01030A   |                                                                                   | ★                                                                                 | 0.2 (0.05-0.3)                                                                    | <b>150</b>                       |
|                                                                                     |                                                                                   | 12 04 12 S01030A   |                                                                                   | ★                                                                                 | 0.2 (0.05-0.3)                                                                    | <b>140</b>                       |
|  | <b>TNGA</b>                                                                       | 16 04 04 S01030A   | ☆                                                                                 | ★                                                                                 | 0.1 (0.07-0.4)                                                                    | <b>215</b>                       |
|                                                                                     |                                                                                   | 16 04 08 S01030A   | ☆                                                                                 | ★                                                                                 | 0.2 (0.07-0.8)                                                                    | <b>190</b>                       |
|                                                                                     |                                                                                   | 16 04 12 S01030A   | ☆                                                                                 | ★                                                                                 | 0.2 (0.05-0.3)                                                                    | <b>175</b>                       |
|  | <b>TNGA</b>                                                                       | 16 04 04 S01030A   |                                                                                   | ★                                                                                 | 0.1 (0.05-0.2)                                                                    | <b>165</b>                       |
|                                                                                     |                                                                                   | 16 04 08 S01030A   |                                                                                   | ★                                                                                 | 0.15 (0.05-0.3)                                                                   | <b>150</b>                       |
|                                                                                     |                                                                                   | 16 04 12 S01030A   |                                                                                   | ★                                                                                 | 0.2 (0.05-0.3)                                                                    | <b>140</b>                       |
|  | <b>WNGA</b>                                                                       | 08 04 04 S01030A   | ☆                                                                                 | ★                                                                                 | 0.1 (0.07-0.4)                                                                    | <b>215</b>                       |
|                                                                                     |                                                                                   | 08 04 08 S01030A   | ☆                                                                                 | ★                                                                                 | 0.2 (0.07-0.8)                                                                    | <b>190</b>                       |
|                                                                                     |                                                                                   | 08 04 12 S01030A   | ☆                                                                                 | ★                                                                                 | 0.2 (0.05-0.3)                                                                    | <b>175</b>                       |
|  | <b>WNGA</b>                                                                       | 08 04 04 S01030A   |                                                                                   | ★                                                                                 | 0.1 (0.05-0.2)                                                                    | <b>165</b>                       |
|                                                                                     |                                                                                   | 08 04 08 S01030A   |                                                                                   | ★                                                                                 | 0.15 (0.05-0.3)                                                                   | <b>150</b>                       |
|                                                                                     |                                                                                   | 08 04 12 S01030A   |                                                                                   | ★                                                                                 | 0.2 (0.05-0.3)                                                                    | <b>140</b>                       |



Mecanizado exterior con T-Max P,  
plaquitas negativas  
Tamaños de mango 1616 – 3232

CoroTurn® RC sujeción rígida

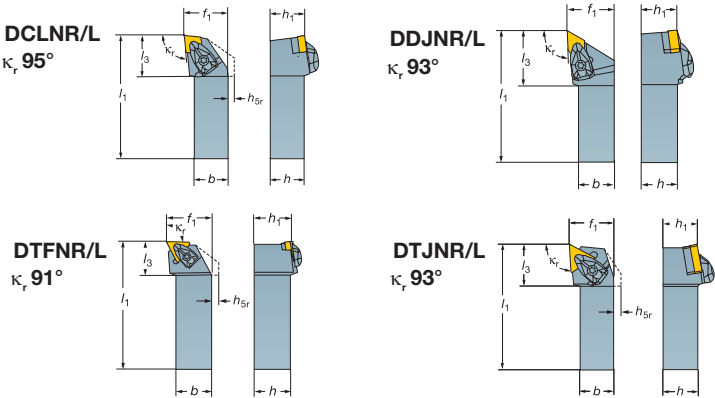
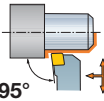
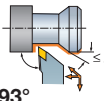
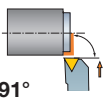
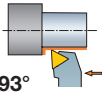


Ilustración a derecha

|                                                                                           | Plaquita | Código de pedido | Dimensiones, mm |       |     |       |       | $h_{5r}$ | $r_e^{1)}$ |  | Nm       |
|-------------------------------------------------------------------------------------------|----------|------------------|-----------------|-------|-----|-------|-------|----------|------------|-----------------------------------------------------------------------------------|----------|
|                                                                                           |          |                  | $h$             | $h_1$ | $b$ | $l_1$ | $l_3$ |          |            |                                                                                   |          |
| <br>95°   | C        | DCLNR/L 1616H09  | 16              | 16    | 16  | 100   | 24.8  | 20       | –          | 0.8                                                                               | 9IP 1.7  |
|                                                                                           |          | 2020K09          | 20              | 20    | 20  | 125   | 24.8  | 25       | –          | 0.8                                                                               |          |
|                                                                                           |          | 2525M09          | 25              | 25    | 25  | 150   | 24.8  | 32       | –          | 0.8                                                                               |          |
|                                                                                           |          |                  |                 |       |     |       |       |          |            |                                                                                   |          |
|                                                                                           | 12       | DCLNR/L 1616H12  | 16              | 16    | 16  | 100   | 32.2  | 20       | 4.5        | 0.8                                                                               | 15IP 3.9 |
|                                                                                           |          | 2020K12          | 20              | 20    | 20  | 125   | 32.0  | 25       | –          | 0.8                                                                               |          |
|                                                                                           |          | 2525M12          | 25              | 25    | 25  | 150   | 32.0  | 32       | –          | 0.8                                                                               |          |
|                                                                                           |          | 3225P12          | 32              | 32    | 25  | 170   | 32.0  | 32       | –          | 0.8                                                                               |          |
|                                                                                           | 16       | DCLNR/L 2525M16  | 25              | 25    | 25  | 150   | 39.0  | 32       | –          | 1.2                                                                               | 20IP 6.4 |
|                                                                                           |          | 3225P16          | 32              | 32    | 25  | 170   | 39.0  | 32       | –          | 1.2                                                                               |          |
|                                                                                           | 19       | DCLNR/L 2525M19  | 25              | 25    | 25  | 150   | 43.7  | 32       | 1.0        | 1.2                                                                               | 20IP 6.4 |
|                                                                                           |          | 3225P19          | 25              | 32    | 25  | 170   | 43.2  | 32       | –          | 1.2                                                                               |          |
|                                                                                           |          | 3232P19          | 32              | 32    | 32  | 170   | 43.4  | 40       | –          |                                                                                   |          |
|                                                                                           |          |                  |                 |       |     |       |       |          |            |                                                                                   |          |
| <br>93° | D        | DDJNR/L 1616H11  | 16              | 16    | 16  | 100   | 30.1  | 20       | –          | 0.8                                                                               | 9IP 1.7  |
|                                                                                           |          | 2020K11          | 20              | 20    | 20  | 125   | 30.1  | 25       | –          | 0.8                                                                               |          |
|                                                                                           |          | 2525M11          | 25              | 25    | 25  | 150   | 30.2  | 32       | –          | 0.8                                                                               |          |
|                                                                                           |          | 3225P11          | 32              | 32    | 25  | 170   | 30.2  | 32       | –          | 0.8                                                                               |          |
|                                                                                           | 15       | DDJNR/L 2020K15  | 20              | 20    | 20  | 125   | 39.4  | 25       | –          | 0.8                                                                               | 15IP 3.9 |
|                                                                                           |          | 2525M15          | 25              | 25    | 25  | 150   | 39.4  | 32       | –          | 0.8                                                                               |          |
|                                                                                           |          | 3225P15          | 32              | 32    | 25  | 170   | 39.4  | 32       | –          | 0.8                                                                               |          |
|                                                                                           |          |                  |                 |       |     |       |       |          |            |                                                                                   |          |
|                                                                                           |          |                  |                 |       |     |       |       |          |            |                                                                                   |          |
| <br>91° | T        | DTFNR/L 1616H16  | 16              | 16    | 16  | 100   | 24.0  | 20       | 2.0        | 0.8                                                                               | 9IP 1.7  |
|                                                                                           |          | 2020K16          | 20              | 20    | 20  | 125   | 23.6  | 25       | –          | 0.8                                                                               |          |
|                                                                                           |          | 2525M16          | 25              | 25    | 25  | 150   | 23.6  | 32       | –          | 0.8                                                                               |          |
|                                                                                           |          | 3225P16          | 32              | 32    | 25  | 170   | 24.1  | 32       | –          | 0.8                                                                               |          |
|                                                                                           | 22       | DTFNR/L 2525M22  | 25              | 25    | 25  | 150   | 31.1  | 32       | –          | 0.8                                                                               | 15IP 3.9 |
|                                                                                           |          | 3225P22          | 32              | 32    | 25  | 170   | 31.1  | 32       | –          | 0.8                                                                               |          |
|                                                                                           |          | 3232P22          | 32              | 32    | 32  | 170   | 31.1  | 40       | –          | 0.8                                                                               |          |
|                                                                                           |          |                  |                 |       |     |       |       |          |            |                                                                                   |          |
|                                                                                           |          |                  |                 |       |     |       |       |          |            |                                                                                   |          |
|                                                                                           |          |                  |                 |       |     |       |       |          |            |                                                                                   |          |
| <br>93° | T        | DTJNR/L 1616H16  | 16              | 16    | 16  | 100   | 24.9  | 20       | 1.0        | 0.8                                                                               | 9IP 1.7  |
|                                                                                           |          | 2020K16          | 20              | 20    | 20  | 125   | 24.9  | 25       | –          | 0.8                                                                               |          |
|                                                                                           |          | 2525M16          | 25              | 25    | 25  | 150   | 24.9  | 32       | –          | 0.8                                                                               |          |
|                                                                                           |          | 3225P16          | 32              | 32    | 25  | 170   | 25.3  | 32       | –          | 0.8                                                                               |          |
|                                                                                           | 22       | DTJNR/L 2525M22  | 25              | 25    | 25  | 150   | 32.6  | 32       | –          | 0.8                                                                               | 15IP 3.9 |
|                                                                                           |          | 3225P22          | 32              | 32    | 25  | 170   | 32.6  | 32       | –          | 0.8                                                                               |          |
|                                                                                           |          | 3232P22          | 32              | 32    | 32  | 170   | 32.6  | 40       | –          | 0.8                                                                               |          |
|                                                                                           |          |                  |                 |       |     |       |       |          |            |                                                                                   |          |

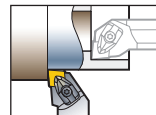
<sup>1)</sup>  $r_e$  = radio de punta en plaquita patrón

Ejemplo de pedido: 2 piezas DCLNR 1616H09  
(R=A derecha, L=A izquierda)



# Mecanizado exterior con T-Max P, plaquitas negativas

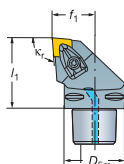
Tamaños Coromant Capto C4 – C6



CoroTurn® RC sujeción rígida

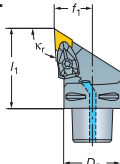
**DCLNR/L**

$\kappa_r 95^\circ$



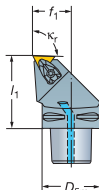
**DDJNR/L**

$\kappa_r 93^\circ$



**DTFNR/L**

$\kappa_r 91^\circ$



**DTJNR/L**

$\kappa_r 93^\circ$

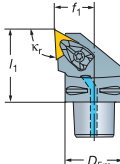
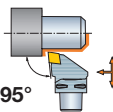
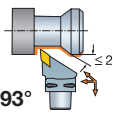
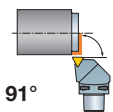
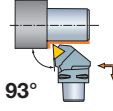


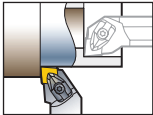
Ilustración a derecha

|                                                                                            | Plaquita                                                                                 | Tamaño                                                                                     | Código de pedido                                                                         | Dimensiones, mm      |                      |                      |                   |  Nm |          |          |         |
|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------|----------------------|----------------------|-------------------|---------------------------------------------------------------------------------------|----------|----------|---------|
|                                                                                            |                                                                                          |                                                                                            |                                                                                          | $D_{5m}$             | $l_1$                | $f_1$                | $r_\epsilon^{1)}$ |                                                                                       |          |          |         |
| <br>95°   | <br>C   | 09                                                                                         | C4                                                                                       | C4-DCLNR/L -27050-09 | 40                   | 50                   | 27                | 0.8                                                                                   | 9IP 1.7  |          |         |
|                                                                                            |                                                                                          | 12                                                                                         | C4                                                                                       | C4-DCLNR/L -27050-12 | 40                   | 50                   | 27                | 0.8                                                                                   |          | 15IP 3.9 |         |
|                                                                                            |                                                                                          | C5                                                                                         | C5                                                                                       | C5-DCLNR/L -35060-12 | 50                   | 60                   | 35                | 0.8                                                                                   |          |          |         |
|                                                                                            |                                                                                          | C6                                                                                         | C6                                                                                       | C6-DCLNR/L -45065-12 | 63                   | 65                   | 45                | 0.8                                                                                   |          |          |         |
|                                                                                            |                                                                                          | 16                                                                                         | C4                                                                                       | C4-DCLNR/L -27055-16 | 40                   | 55                   | 27                | 1.2                                                                                   | 20IP 6.4 |          |         |
|                                                                                            |                                                                                          | C5                                                                                         | C5                                                                                       | C5-DCLNR/L -35060-16 | 50                   | 60                   | 35                | 1.2                                                                                   |          |          |         |
|                                                                                            |                                                                                          | C6                                                                                         | C6                                                                                       | C6-DCLNR/L -45065-16 | 63                   | 65                   | 45                | 1.2                                                                                   |          |          |         |
|                                                                                            |                                                                                          | 19                                                                                         | C5                                                                                       | C5-DCLNR/L -35060-19 | 50                   | 60                   | 35                | 1.2                                                                                   |          |          |         |
| C6                                                                                         | C6                                                                                       | C6-DCLNR/L -45065-19                                                                       | 63                                                                                       | 65                   | 45                   | 1.2                  |                   |                                                                                       |          |          |         |
| <br>93° | <br>D  | 11                                                                                         | C4                                                                                       | C4-DDJNR/L -27050-11 | 40                   | 50                   | 27                | 0.8                                                                                   | 9IP 1.7  |          |         |
|                                                                                            |                                                                                          | C5                                                                                         | C5-DDJNR/L -35060-11                                                                     | 50                   | 60                   | 35                   | 0.8               | 15IP 3.9                                                                              |          |          |         |
|                                                                                            |                                                                                          | C6                                                                                         | C6-DDJNR/L -45065-11                                                                     | 63                   | 65                   | 45                   | 0.8               |                                                                                       |          |          |         |
|                                                                                            |                                                                                          | 15                                                                                         | C4                                                                                       | C4-DDJNR/L -27055-15 | 40                   | 55                   | 27                | 0.8                                                                                   |          |          |         |
|                                                                                            |                                                                                          | C5                                                                                         | C5-DDJNR/L -35060-15                                                                     | 50                   | 60                   | 35                   | 0.8               |                                                                                       |          |          |         |
|                                                                                            |                                                                                          | C6                                                                                         | C6-DDJNR/L -45065-15                                                                     | 63                   | 65                   | 45                   | 0.8               |                                                                                       |          |          |         |
|                                                                                            |                                                                                          | <br>91° | <br>T | 16                   | C4                   | C4-DTFNR/L -27050-16 | 40                | 50                                                                                    | 27       | 0.8      | 9IP 1.7 |
|                                                                                            |                                                                                          |                                                                                            |                                                                                          | C5                   | C5-DTFNR/L -35060-16 | 50                   | 60                | 35                                                                                    | 0.8      | 15IP 3.9 |         |
| C6                                                                                         | C6-DTFNR/L -45065-16                                                                     |                                                                                            |                                                                                          | 63                   | 65                   | 45                   | 0.8               |                                                                                       |          |          |         |
| 22                                                                                         | C4                                                                                       |                                                                                            |                                                                                          | C4-DTFNR/L -27050-22 | 40                   | 50                   | 27                | 0.8                                                                                   |          |          |         |
| C5                                                                                         | C5-DTFNR/L -35060-22                                                                     |                                                                                            |                                                                                          | 50                   | 60                   | 35                   | 0.8               |                                                                                       |          |          |         |
| C6                                                                                         | C6-DTFNR/L -45065-22                                                                     |                                                                                            |                                                                                          | 63                   | 65                   | 45                   | 0.8               |                                                                                       |          |          |         |
| <br>93° | <br>T |                                                                                            |                                                                                          | 16                   | C4                   | C4-DTJNR/L -27050-16 | 40                | 50                                                                                    | 27       | 0.8      | 9IP 1.7 |
|                                                                                            |                                                                                          |                                                                                            |                                                                                          | C5                   | C5-DTJNR/L -35060-16 | 50                   | 60                | 35                                                                                    | 0.8      | 15IP 3.9 |         |
|                                                                                            |                                                                                          | C6                                                                                         | C6-DTJNR/L -45065-16                                                                     | 63                   | 65                   | 45                   | 0.8               |                                                                                       |          |          |         |
|                                                                                            |                                                                                          | 22                                                                                         | C4                                                                                       | C4-DTJNR/L -27050-22 | 40                   | 50                   | 27                | 0.8                                                                                   |          |          |         |
|                                                                                            |                                                                                          | C5                                                                                         | C5-DTJNR/L -35060-22                                                                     | 50                   | 60                   | 35                   | 0.8               |                                                                                       |          |          |         |
|                                                                                            |                                                                                          | C6                                                                                         | C6-DTJNR/L -45065-22                                                                     | 63                   | 65                   | 45                   | 0.8               |                                                                                       |          |          |         |

<sup>1)</sup>  $r_\epsilon$  = radio de punta en plaquita patrón

**Ejemplo de pedido: 2 piezas C4-DCLNR-27050-09**

(R=A derecha, L=A izquierda)



Mecanizado exterior con T-Max P,  
plaquitas negativas  
Tamaños de mango 1616 – 3232

CoroTurn® RC sujeción rígida

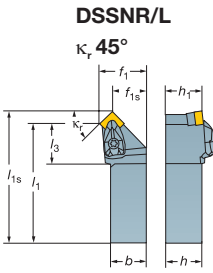
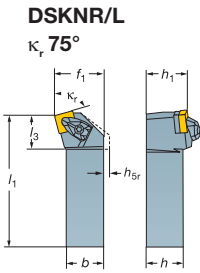
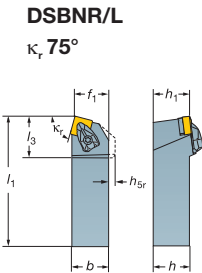
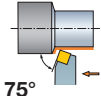
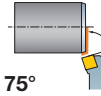
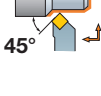


Ilustración a derecha

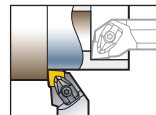
| <br>75°   | <br>09<br><br>S<br><br>12<br><br>15<br><br>S<br><br>19   | Plaquita | Código de pedido | Dimensiones, mm                                                                           |                                                                                                                                           |          |                       |                        |                       |                       |                        |                        |                                     |      |      |  | Nm  |      |     |
|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------------|------------------------|-----------------------|-----------------------|------------------------|------------------------|-------------------------------------|------|------|-----------------------------------------------------------------------------------|-----|------|-----|
|                                                                                           |                                                                                                                                           |          |                  | <i>h</i>                                                                                  | <i>h</i> <sub>1</sub>                                                                                                                     | <i>b</i> | <i>l</i> <sub>1</sub> | <i>l</i> <sub>1s</sub> | <i>l</i> <sub>3</sub> | <i>f</i> <sub>1</sub> | <i>f</i> <sub>1s</sub> | <i>h</i> <sub>5r</sub> | <i>r</i> <sub>e</sub> <sup>1)</sup> |      |      |                                                                                   |     |      |     |
| <br>75°  | <br>09<br><br>S<br><br>12<br><br>15<br><br>S<br><br>19   | DSBNR/L  | 1616H09          | 16                                                                                        | 16                                                                                                                                        | 16       | 100                   | –                      | 26.7                  | 13                    | –                      | 1.0                    | 0.8                                 | 9IP  | 1.7  |                                                                                   |     |      |     |
|                                                                                           |                                                                                                                                           |          | 2020K09          | 20                                                                                        | 20                                                                                                                                        | 20       | 125                   | –                      | 26.7                  | 17.4                  | –                      | –                      | 0.8                                 | 15IP | 3.9  |                                                                                   |     |      |     |
|                                                                                           |                                                                                                                                           |          | 2525M09          | 25                                                                                        | 25                                                                                                                                        | 25       | 150                   | –                      | 26.7                  | 22                    | –                      | –                      | 0.8                                 |      |      |                                                                                   |     |      |     |
|                                                                                           |                                                                                                                                           |          | 3225P12          | 32                                                                                        | 32                                                                                                                                        | 25       | 170                   | –                      | 34.3                  | 22                    | –                      | –                      | 0.8                                 |      |      |                                                                                   |     |      |     |
|                                                                                           |                                                                                                                                           |          | DSBNR/L          | 2525M15                                                                                   | 25                                                                                                                                        | 25       | 25                    | 150                    | –                     | 41.6                  | 22                     | –                      | –                                   | 1.2  | 20IP | 6.4                                                                               |     |      |     |
|                                                                                           |                                                                                                                                           |          |                  | 3225P15                                                                                   | 32                                                                                                                                        | 32       | 25                    | 170                    | –                     | 41.7                  | 22                     | –                      | –                                   | 1.2  | 20IP | 6.4                                                                               |     |      |     |
|                                                                                           |                                                                                                                                           |          |                  | 3232P15                                                                                   | 32                                                                                                                                        | 32       | 32                    | 170                    | –                     | 41.5                  | 27                     | –                      | –                                   | 1.2  |      |                                                                                   |     |      |     |
|                                                                                           |                                                                                                                                           |          |                  | 3232P19                                                                                   | 32                                                                                                                                        | 32       | 32                    | 170                    | –                     | 46.4                  | 27                     | –                      | –                                   | 1.2  |      |                                                                                   |     |      |     |
| <br>75° | <br>09<br><br>S<br><br>12<br><br>15<br><br>S<br><br>19 | DSKNR/L  | 2020K09          | 20                                                                                        | 20                                                                                                                                        | 20       | 125                   | –                      | 18.2                  | 25                    | –                      | –                      | 0.8                                 | 9IP  | 1.7  |                                                                                   |     |      |     |
|                                                                                           |                                                                                                                                           |          | 2020K12          | 20                                                                                        | 20                                                                                                                                        | 20       | 125                   | –                      | 23.6                  | 25                    | –                      | 4.5                    | 0.8                                 | 15IP | 3.9  |                                                                                   |     |      |     |
|                                                                                           |                                                                                                                                           |          | 2525M12          | 25                                                                                        | 25                                                                                                                                        | 25       | 150                   | –                      | 23.6                  | 32                    | –                      | –                      | 0.8                                 |      |      |                                                                                   |     |      |     |
|                                                                                           |                                                                                                                                           |          | 3225P12          | 32                                                                                        | 32                                                                                                                                        | 25       | 170                   | –                      | 23.5                  | 32                    | –                      | –                      | 0.8                                 |      |      |                                                                                   |     |      |     |
|                                                                                           |                                                                                                                                           |          | DSKNR/L          | 3232P15                                                                                   | 32                                                                                                                                        | 32       | 32                    | 170                    | –                     | 28.9                  | 40                     | –                      | –                                   | 1.2  | 20IP | 6.4                                                                               |     |      |     |
|                                                                                           |                                                                                                                                           |          |                  | 3232P19                                                                                   | 32                                                                                                                                        | 32       | 32                    | 170                    | –                     | 32.1                  | 40                     | –                      | –                                   | 1.2  | 20IP | 6.4                                                                               |     |      |     |
|                                                                                           |                                                                                                                                           |          |                  | <br>45° | <br>09<br><br>S<br><br>12<br><br>15<br><br>S<br><br>19 | DSSNR/L  | 1616H09               | 16                     | 16                    | 16                    | 100                    | 106.1                  | 21.3                                | 20   | 13.9 | –                                                                                 | 0.8 | 9IP  | 1.7 |
|                                                                                           |                                                                                                                                           |          |                  |                                                                                           |                                                                                                                                           |          | 2020K09               | 20                     | 20                    | 20                    | 125                    | 131.1                  | 21.3                                | 25   | 18.9 | –                                                                                 | 0.8 | 15IP | 3.9 |
| 2525M09                                                                                   | 25                                                                                                                                        | 25       | 25               |                                                                                           |                                                                                                                                           |          | 150                   | 156.1                  | 21.3                  | 32                    | 25.9                   | –                      | 0.8                                 |      |      |                                                                                   |     |      |     |
| 2020K12                                                                                   | 20                                                                                                                                        | 20       | 20               |                                                                                           |                                                                                                                                           |          | 125                   | 133.3                  | 28.8                  | 25                    | 16.7                   | –                      | 0.8                                 | 20IP | 6.4  |                                                                                   |     |      |     |
| 2525M12                                                                                   | 25                                                                                                                                        | 25       | 25               |                                                                                           |                                                                                                                                           |          | 150                   | 158.3                  | 28.8                  | 32                    | 23.7                   | –                      | 0.8                                 |      |      |                                                                                   |     |      |     |
| 3225P12                                                                                   | 32                                                                                                                                        | 32       | 25               |                                                                                           |                                                                                                                                           |          | 170                   | 178.3                  | 28.8                  | 32                    | 23.7                   | –                      | 0.8                                 |      |      |                                                                                   |     |      |     |
| 3232P12                                                                                   | 32                                                                                                                                        | 32       | 32               |                                                                                           |                                                                                                                                           |          | 170                   | 178.3                  | 27.4                  | 40                    | 31.7                   | –                      | 0.8                                 | 20IP | 6.4  |                                                                                   |     |      |     |
| DSBNR/L                                                                                   | 2525M15                                                                                                                                   | 25       | 25               |                                                                                           |                                                                                                                                           |          | 25                    | 150                    | 160.2                 | 34.9                  | 32                     | 21.8                   | –                                   |      |      | 1.2                                                                               |     |      |     |
|                                                                                           | 3225P15                                                                                                                                   | 25       | 32               | 25                                                                                        | 170                                                                                                                                       | 180.2    | 34.9                  | 32                     | 21.8                  | –                     | 1.2                    | 20IP                   | 6.4                                 |      |      |                                                                                   |     |      |     |
|                                                                                           | 3232P15                                                                                                                                   | 32       | 32               | 32                                                                                        | 170                                                                                                                                       | 180.2    | 34.9                  | 40                     | 29.8                  | –                     | 1.2                    |                        |                                     |      |      |                                                                                   |     |      |     |
|                                                                                           | 3232P19                                                                                                                                   | 32       | 32               | 32                                                                                        | 170                                                                                                                                       | 182.5    | 35.9                  | 40                     | 27.5                  | –                     | 1.2                    |                        |                                     |      |      |                                                                                   |     |      |     |

<sup>1)</sup> *r*<sub>e</sub> = radio de punta en plaquita patrón

Ejemplo de pedido: 2 piezas DSBNR 1616H09  
(R=A derecha, L=A izquierda)

# Mecanizado exterior con T-Max P, plaquitas negativas

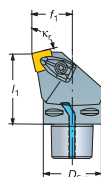
Tamaños Coromant Capto C4 – C6



CoroTurn® RC sujeción rígida

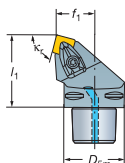
**DSKNR/L**

$\kappa_r 75^\circ$



**DSRNR/L**

$\kappa_r 75^\circ$



**DSSNR/L**

$\kappa_r 45^\circ$

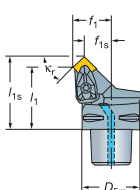
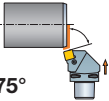
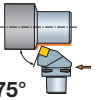
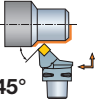
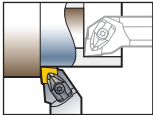


Ilustración a derecha

|                                                                                            | Plaquita                                                                                                   | Tamaño Código de pedido |                      | Dimensiones, mm |       |          |       |          |                     |          |  Nm |
|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------|----------------------|-----------------|-------|----------|-------|----------|---------------------|----------|---------------------------------------------------------------------------------------|
|                                                                                            |                                                                                                            |                         |                      | $D_{5m}$        | $l_1$ | $l_{1s}$ | $f_1$ | $f_{1s}$ | $r_{\epsilon}^{1)}$ |          |                                                                                       |
| <br>75°   | <br>S<br>12<br>15<br>19   | C4                      | C4-DSKNR/L -27050-12 | 40              | 50    | –        | 27    | –        | 0.8                 | 15IP 3.9 |                                                                                       |
|                                                                                            |                                                                                                            | C5                      | C5-DSKNR/L -35060-12 | 50              | 60    | –        | 35    | –        | 0.8                 |          |                                                                                       |
|                                                                                            |                                                                                                            | C6                      | C6-DSKNR/L -45065-12 | 63              | 65    | –        | 45    | –        | 0.8                 |          |                                                                                       |
|                                                                                            |                                                                                                            | C5                      | C5-DSKNR/L -35060-15 | 50              | 60    | –        | 35    | –        | 1.2                 | 20IP 6.4 |                                                                                       |
|                                                                                            |                                                                                                            | C6                      | C6-DSKNR/L -45065-15 | 63              | 65    | –        | 45    | –        | 1.2                 |          |                                                                                       |
|                                                                                            |                                                                                                            | C5                      | C5-DSKNR/L -35060-19 | 50              | 60    | –        | 35    | –        | 1.2                 | 20IP 6.4 |                                                                                       |
| C6                                                                                         | C6-DSKNR/L -45065-19                                                                                       | 63                      | 65                   | –               | 45    | –        | 1.2   |          |                     |          |                                                                                       |
| <br>75°  | <br>S<br>12<br>15<br>19   | C4                      | C4-DSRNR/L -22050-12 | 40              | 50    | –        | 22    | –        | 0.8                 | 15IP 3.9 |                                                                                       |
|                                                                                            |                                                                                                            | C5                      | C5-DSRNR/L -27060-12 | 50              | 60    | –        | 27    | –        | 0.8                 |          |                                                                                       |
|                                                                                            |                                                                                                            | C6                      | C6-DSRNR/L -35065-12 | 63              | 65    | –        | 35    | –        | 0.8                 |          |                                                                                       |
|                                                                                            |                                                                                                            | C5                      | C5-DSRNR/L -27060-15 | 50              | 60    | –        | 27    | –        | 1.2                 | 20IP 6.4 |                                                                                       |
|                                                                                            |                                                                                                            | C6                      | C6-DSRNR/L -35065-15 | 63              | 65    | –        | 35    | –        | 1.2                 |          |                                                                                       |
|                                                                                            |                                                                                                            | C5                      | C5-DSRNR/L -27060-19 | 50              | 60    | –        | 27    | –        | 1.2                 | 20IP 6.4 |                                                                                       |
| C6                                                                                         | C6-DSRNR/L -35065-19                                                                                       | 63                      | 65                   | –               | 35    | –        | 1.2   |          |                     |          |                                                                                       |
| <br>45° | <br>S<br>12<br>15<br>19 | C4                      | C4-DSSNR/L -27042-12 | 40              | 42    | 50.3     | 27    | 18.7     | 0.8                 | 15IP 3.9 |                                                                                       |
|                                                                                            |                                                                                                            | C5                      | C5-DSSNR/L -35052-12 | 50              | 52    | 60.3     | 35    | 26.7     | 0.8                 |          |                                                                                       |
|                                                                                            |                                                                                                            | C6                      | C6-DSSNR/L -45056-12 | 63              | 56    | 64.3     | 45    | 36.7     | 0.8                 |          |                                                                                       |
|                                                                                            |                                                                                                            | C4                      | C4-DSSNR/L -27045-15 | 40              | 45    | 55.2     | 27    | 16.8     | 1.2                 | 20IP 6.4 |                                                                                       |
|                                                                                            |                                                                                                            | C5                      | C5-DSSNR/L -35050-15 | 50              | 50    | 60.2     | 35    | 24.8     | 1.2                 |          |                                                                                       |
|                                                                                            |                                                                                                            | C6                      | C6-DSSNR/L -45054-15 | 63              | 54    | 64.2     | 45    | 34.8     | 1.2                 |          |                                                                                       |
|                                                                                            |                                                                                                            | C5                      | C5-DSSNR/L -35048-19 | 50              | 48    | 60.5     | 35    | 24.8     | 1.2                 |          |                                                                                       |
|                                                                                            |                                                                                                            | C6                      | C6-DSSNR/L -45052-19 | 63              | 52    | 64.5     | 45    | 34.8     | 1.2                 |          |                                                                                       |
|                                                                                            |                                                                                                            |                         |                      |                 |       |          |       |          |                     |          |                                                                                       |

<sup>1)</sup>  $r_e$  = radio de punta en plaquita patrón

**Ejemplo de pedido: 2 piezas C4-DSKNR-27050-12**  
(R=A derecha, L=A izquierda)



Mecanizado exterior con T-Max P,  
plaquitas negativas  
Tamaños de mango 1616 – 3225

CoroTurn® RC sujeción rígida

T-Max P diseño de brida-cuña

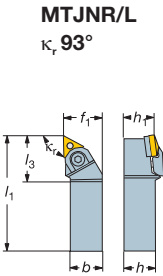
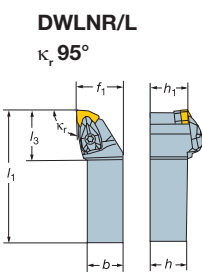
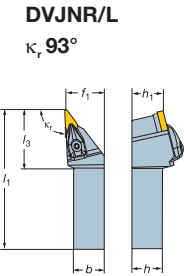
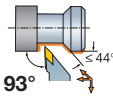
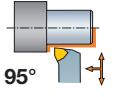
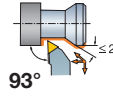


Ilustración a derecha

|                                                                                           | Plaquita                                                                                       | Código de pedido  | Dimensiones, mm |                       |          |                       |                       |                       |                                     |  Nm |
|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------|-----------------|-----------------------|----------|-----------------------|-----------------------|-----------------------|-------------------------------------|--------------------------------------------------------------------------------------|
|                                                                                           |                                                                                                |                   | <i>h</i>        | <i>h</i> <sub>1</sub> | <i>b</i> | <i>l</i> <sub>1</sub> | <i>l</i> <sub>3</sub> | <i>f</i> <sub>1</sub> | <i>r</i> <sub>e</sub> <sup>1)</sup> |                                                                                      |
| <br>93°   | <br>16<br>V   | DVJNR/L 2020K16   | 20              | 20                    | 20       | 125                   | 46.6                  | 25                    | 0.8                                 | 15IP 3.0                                                                             |
|                                                                                           |                                                                                                | 2525M16           | 25              | 25                    | 25       | 150                   | 46.6                  | 32                    | 0.8                                 |                                                                                      |
|                                                                                           |                                                                                                | 3225P16           | 32              | 32                    | 25       | 170                   | 46.6                  | 32                    | 0.8                                 |                                                                                      |
|                                                                                           |                                                                                                | 3232P16           | 32              | 32                    | 32       | 170                   | 46.6                  | 40                    | 0.8                                 |                                                                                      |
| <br>95°   | <br>06<br>W   | DWLNR/L 1616H06   | 16              | 16                    | 16       | 100                   | 26.4                  | 20                    | 0.8                                 | 9IP 1.7                                                                              |
|                                                                                           |                                                                                                | 2020K06           | 20              | 20                    | 20       | 125                   | 27.1                  | 25                    | 0.8                                 |                                                                                      |
|                                                                                           |                                                                                                | 2525M06           | 25              | 25                    | 25       | 150                   | 27.1                  | 32                    | 0.8                                 |                                                                                      |
|                                                                                           |                                                                                                | 3225M06           | 32              | 32                    | 25       | 150                   | 27.1                  | 32                    | 0.8                                 |                                                                                      |
|                                                                                           | 08                                                                                             | DWLNR/L 2020K08   | 20              | 20                    | 20       | 125                   | 34.3                  | 25                    | 0.8                                 | 15IP 3.9                                                                             |
|                                                                                           |                                                                                                | 2525M08           | 25              | 25                    | 25       | 150                   | 35.0                  | 32                    | 0.8                                 |                                                                                      |
|                                                                                           |                                                                                                | 3225P08           | 32              | 32                    | 32       | 170                   | 35.0                  | 32                    | 0.8                                 |                                                                                      |
| <br>93° | <br>16<br>T | MTJNR/L 2020K16M1 | 20              | 20                    | 20       | 125                   | 30.8                  | 25                    | 0.8                                 | – –<br>2.5 mm                                                                        |
|                                                                                           |                                                                                                | 2525M16M1         | 25              | 25                    | 25       | 150                   | 30.8                  | 32                    | 0.8                                 |                                                                                      |
|                                                                                           |                                                                                                | 3225P16M1         | 32              | 32                    | 25       | 170                   | 30.8                  | 32                    | 0.8                                 |                                                                                      |
|                                                                                           |                                                                                                | 3225P16M1         | 32              | 32                    | 25       | 170                   | 30.8                  | 32                    | 0.8                                 |                                                                                      |
|                                                                                           | 22                                                                                             | MTJNR/L 2525M22M1 | 25              | 25                    | 25       | 150                   | 34.8                  | 32                    | 0.8                                 | – –<br>3.0 mm                                                                        |
|                                                                                           |                                                                                                | 3225P22M1         | 32              | 32                    | 25       | 170                   | 34.8                  | 32                    | 0.8                                 |                                                                                      |

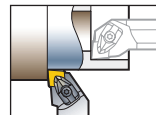
<sup>1)</sup> *r*<sub>e</sub> = radio de punta en plaquita patrón

**Ejemplo de pedido: 2 piezas DVJNR 2020K16**  
(R=A derecha, L=A izquierda)



# Mecanizado exterior con T-Max P, plaquitas negativas

Tamaños Coromant Capto C4 – C6

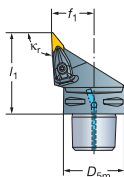


CoroTurn® RC sujeción rígida

T-Max P diseño de brida-cuña

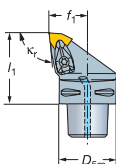
**DVJNR/L**

$\kappa_r 93^\circ$



**DWLNR/L**

$\kappa_r 95^\circ$



**MTJNR/L**

$\kappa_r 93^\circ$

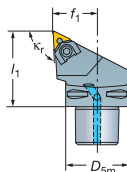
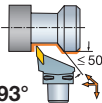
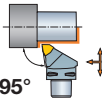
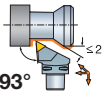


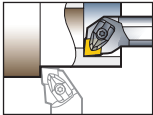
Ilustración a derecha

|                                                                                                   | Plaquita                                                                                                                | Tamaño    | Código de pedido            | Dimensiones, mm |       |       |            |  |
|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------|-----------------------------|-----------------|-------|-------|------------|------------------------------------------------------------------------------------|
|                                                                                                   |                                                                                                                         |           |                             | $D_{5m}$        | $l_1$ | $f_1$ | $r_e^{1)}$ |                                                                                    |
| <br><b>93°</b>   | <br><b>16</b><br><b>V</b>              | <b>C4</b> | <b>C4-DVJNR/L -27062-16</b> | 40              | 62    | 27    | 0.8        | 15IP 3.0                                                                           |
|                                                                                                   |                                                                                                                         | <b>C5</b> | <b>C5-DVJNR/L -35065-16</b> | 50              | 65    | 35    | 0.8        |                                                                                    |
|                                                                                                   |                                                                                                                         | <b>C6</b> | <b>C6-DVJNR/L -45065-16</b> | 63              | 65    | 45    | 0.8        |                                                                                    |
| <br><b>95°</b>   | <br><b>06</b><br><b>W</b><br><b>08</b> | <b>C4</b> | <b>C4-DWLNR/L-27050-06</b>  | 40              | 50    | 27    | 0.8        | 9IP 1.7                                                                            |
|                                                                                                   |                                                                                                                         | <b>C5</b> | <b>C5-DWLNR/L-35060-06</b>  | 50              | 60    | 35    | 0.8        |                                                                                    |
|                                                                                                   |                                                                                                                         | <b>C6</b> | <b>C6-DWLNR/L-45065-06</b>  | 63              | 65    | 45    | 0.8        |                                                                                    |
|                                                                                                   |                                                                                                                         | <b>C4</b> | <b>C4-DWLNR/L-27050-08</b>  | 40              | 50    | 27    | 0.8        | 15IP 3.9                                                                           |
|                                                                                                   |                                                                                                                         | <b>C5</b> | <b>C5-DWLNR/L-35060-08</b>  | 50              | 60    | 35    | 0.8        |                                                                                    |
|                                                                                                   |                                                                                                                         | <b>C6</b> | <b>C6-DWLNR/L-45065-08</b>  | 63              | 65    | 45    | 0.8        |                                                                                    |
| <br><b>93°</b> | <br><b>16</b><br><b>T</b>            | <b>C4</b> | <b>C4-MTJNR/L -27050-16</b> | 40              | 50    | 27    | 0.8        | 2.5 mm                                                                             |
|                                                                                                   |                                                                                                                         | <b>C5</b> | <b>C5-MTJNR/L -35060-16</b> | 50              | 60    | 35    | 0.8        |                                                                                    |

<sup>1)</sup>  $r_e$  = radio de punta en plaquita patrón

**Ejemplo de pedido: 2 piezas C4-DVJNR-27062-16**

(R=A derecha, L=A izquierda)



Mecanizado interior con T-Max P,  
plaquitas negativas

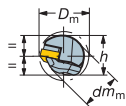
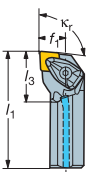
Diámetro de barra 25 – 40 mm

CoroTurn® RC sujeción rígida

Cilíndrico con planos

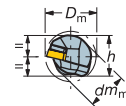
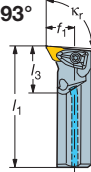
DCLNR/L

K<sub>r</sub> 95°



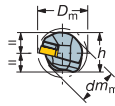
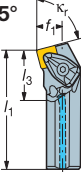
DDUNR/L

K<sub>r</sub> 93°



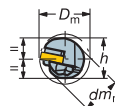
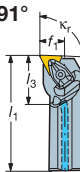
DSKNR/L

K<sub>r</sub> 75°



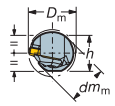
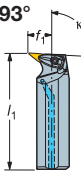
DTFNR/L

K<sub>r</sub> 91°



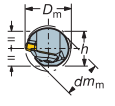
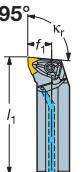
DVUNR/L

K<sub>r</sub> 93°



DWLNRL/L

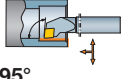
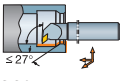
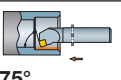
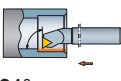
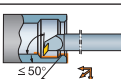
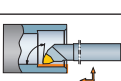
K<sub>r</sub> 95°



Con suministro de refrigerante interno

Voladizo máx. 4 x dm

Ilustración a derecha

|                                                                                           | Plaquita                                                                                 | Código de pedido | Dimensiones, mm |    |    |    | $l_1$ | $l_3$ | $r_e^{1)}$ |  Nm |
|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------|-----------------|----|----|----|-------|-------|------------|--------------------------------------------------------------------------------------|
| <br>95°   | <br>C   | A25T- DCLNR/L09  | 25              | 32 | 17 | 23 | 300   | 31    | 0.8        | 9IP 1.7                                                                              |
|                                                                                           |                                                                                          | A25T- DCLNR/L12  | 25              | 32 | 17 | 23 | 300   | 31    | 0.8        | 15IP 3.9                                                                             |
|                                                                                           |                                                                                          | A32T- DCLNR/L12  | 32              | 40 | 22 | 30 | 300   | 30    | 0.8        |                                                                                      |
|                                                                                           |                                                                                          | A40T- DCLNR/L12  | 40              | 50 | 27 | 37 | 300   | 32    | 0.8        |                                                                                      |
| <br>93°   | <br>D   | A25T- DDUNR/L11  | 25              | 32 | 17 | 23 | 300   | 28    | 0.8        | 9IP 1.7                                                                              |
|                                                                                           |                                                                                          | A32T- DDUNR/L11  | 32              | 40 | 22 | 30 | 300   | 30    | 0.8        |                                                                                      |
|                                                                                           |                                                                                          | A40T- DDUNR/L15  | 40              | 50 | 27 | 37 | 300   | 36    | 0.8        | 15IP 3.9                                                                             |
|                                                                                           |                                                                                          |                  |                 |    |    |    |       |       |            |                                                                                      |
| <br>75°  | <br>S   | A25T- DSKNR/L09  | 25              | 32 | 17 | 23 | 300   | 30    | 0.8        | 9IP 1.7                                                                              |
|                                                                                           |                                                                                          | A25T- DSKNR/L12  | 25              | 32 | 17 | 23 | 300   | 30    | 0.8        | 15IP 3.9                                                                             |
|                                                                                           |                                                                                          | A32T- DSKNR/L12  | 32              | 40 | 22 | 30 | 300   | 33    | 0.8        |                                                                                      |
|                                                                                           |                                                                                          | A40T- DSKNR/L12  | 40              | 50 | 27 | 37 | 300   | 34    | 0.8        |                                                                                      |
| <br>91° | <br>T | A25T- DTFNR/L16  | 25              | 32 | 17 | 23 | 300   | 32    | 0.8        | 9IP 1.7                                                                              |
|                                                                                           |                                                                                          | A32T- DTFNR/L16  | 32              | 40 | 22 | 30 | 300   | 33    | 0.8        |                                                                                      |
|                                                                                           |                                                                                          | A40T- DTFNR/L16  | 40              | 50 | 27 | 37 | 300   | 36    | 0.8        | 15IP 3.9                                                                             |
|                                                                                           |                                                                                          | A40T- DTFNR/L22  | 40              | 50 | 27 | 37 | 300   | 36    | 0.8        |                                                                                      |
| <br>93° | <br>V | A40T-DVUNR/L16   | 40              | 50 | 27 | 37 | 300   | 36    | 0.8        | 15IP 3.0                                                                             |
|                                                                                           |                                                                                          |                  |                 |    |    |    |       |       |            |                                                                                      |
| <br>95° | <br>W | A25T-DWLNRL/L06  | 25              | 32 | 17 | 23 | 300   | 31    | 0.8        | 9IP 1.7                                                                              |
|                                                                                           |                                                                                          | A32T-DWLNRL/L06  | 32              | 40 | 22 | 30 | 300   | 33    | 0.8        |                                                                                      |
|                                                                                           |                                                                                          | A40T-DWLNRL/L06  | 40              | 50 | 27 | 37 | 300   | 36    | 0.8        |                                                                                      |
|                                                                                           |                                                                                          | A25T-DWLNRL/L08  | 25              | 33 | 17 | 23 | 300   | 31    | 0.8        | 15IP 3.9                                                                             |
|                                                                                           |                                                                                          | A32T-DWLNRL/L08  | 32              | 40 | 22 | 30 | 300   | 33    | 0.8        |                                                                                      |
|                                                                                           |                                                                                          | A40T-DWLNRL/L08  | 40              | 50 | 27 | 37 | 300   | 36    | 0.8        |                                                                                      |

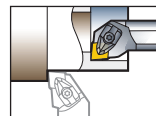
<sup>1)</sup>  $r_e$  = radio de punta en plaquita patrón

Ejemplo de pedido: 2 piezas A25T-DCLNR 09

(R=A derecha, L=A izquierda)

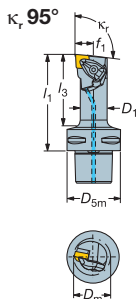
# Mecanizado interior con T-Max P, plaquitas negativas

Tamaños Coromant Capto C4 – C6

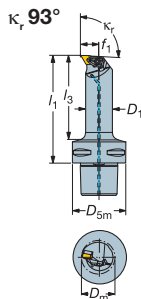


CoroTurn® RC sujeción rígida

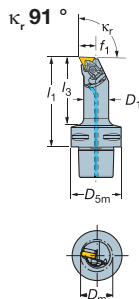
## DCLNR/L



## DDUNR/L



## DTFNR/L



## DWLNR/L

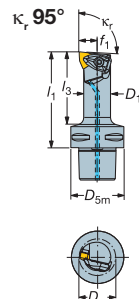
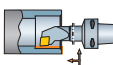
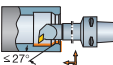
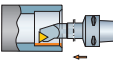
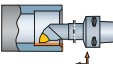
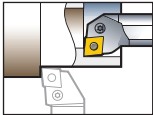


Ilustración a derecha

|                                                                                                   | Plaquita                                                                                                  | Tamaño | Código de pedido     | Dimensiones, mm |       |          |       |       |       |            |      | Nm  |
|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|--------|----------------------|-----------------|-------|----------|-------|-------|-------|------------|------|-----|
|                                                                                                   |                                                                                                           |        |                      | $D_m$ min.      | $D_1$ | $D_{5m}$ | $f_1$ | $l_1$ | $l_3$ | $r_e^{1)}$ |      |     |
| <br><b>95°</b>   | <br><b>C 12</b>          | C4     | C4-DCLNR/L -13080-09 | 25              | 20    | 40       | 13    | 80    | 57    | 0.8        | 9IP  | 1.7 |
|                                                                                                   |                                                                                                           | C5     | C5-DCLNR/L -13080-09 | 25              | 20    | 50       | 13    | 80    | 56    | 0.8        |      |     |
|                                                                                                   |                                                                                                           | C4     | C4-DCLNR/L -17090-12 | 32              | 25    | 40       | 17    | 90    | 68    | 0.8        | 15IP | 3.9 |
|                                                                                                   |                                                                                                           | C5     | C5-DCLNR/L -17090-12 | 32              | 25    | 50       | 17    | 90    | 66    | 0.8        |      |     |
|                                                                                                   |                                                                                                           | C6     | C6-DCLNR/L -17100-12 | 32              | 25    | 63       | 17    | 100   | 72    | 0.8        |      |     |
|                                                                                                   |                                                                                                           | C6     | C6-DCLNR/L -27140-16 | 50              | 40    | 63       | 27    | 140   | 114   | 1.2        | 20IP | 6.4 |
| <br><b>93°</b>   | <br><b>D 15</b>          | C4     | C4-DDUNR/L -17090-11 | 32              | 25    | 40       | 17    | 90    | 68    | 0.8        | 9IP  | 1.7 |
|                                                                                                   |                                                                                                           | C5     | C5-DDUNR/L -17090-11 | 32              | 25    | 50       | 17    | 90    | 66    | 0.8        |      |     |
|                                                                                                   |                                                                                                           | C4     | C4-DDUNR/L -27080-15 | 50              | 39.7  | 40       | 27    | 80    | 59    | 0.8        | 15IP | 3.9 |
|                                                                                                   |                                                                                                           | C5     | C5-DDUNR/L -27140-15 | 50              | 40    | 50       | 27    | 140   | 118   | 0.8        |      |     |
|                                                                                                   |                                                                                                           | C6     | C6-DDUNR/L -27140-15 | 50              | 40    | 63       | 27    | 140   | 114   | 0.8        |      |     |
|                                                                                                   |                                                                                                           |        |                      |                 |       |          |       |       |       |            |      |     |
| <br><b>91°</b> | <br><b>T 16</b>        | C4     | C4-DTFNR/L -17090-16 | 32              | 25    | 40       | 17    | 90    | 68    | 0.8        | 9IP  | 1.7 |
|                                                                                                   |                                                                                                           | C5     | C5-DTFNR/L -17090-16 | 32              | 25    | 50       | 17    | 90    | 66    | 0.8        |      |     |
| <br><b>95°</b> | <br><b>W 06<br/>08</b> | C4     | C4-DWLNR/L -13075-06 | 27              | 20    | 40       | 13    | 75    | 52    | 0.8        | 9IP  | 1.7 |
|                                                                                                   |                                                                                                           | C4     | C4-DWLNR/L -17090-08 | 33              | 25    | 40       | 17    | 90    | 68    | 0.8        | 15IP | 3.9 |
|                                                                                                   |                                                                                                           | C5     | C5-DWLNR/L -17090-08 | 33              | 25    | 50       | 17    | 90    | 66    | 0.8        |      |     |

<sup>1)</sup>  $r_e$  = radio de punta en plaquita patrón

**Ejemplo de pedido: 2 piezas C4-DCLNR-13080-09**  
(R=A derecha, L=A izquierda)

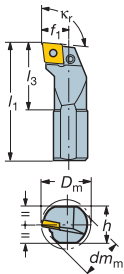


Mecanizado interior con T-Max P,  
plaquitas negativas

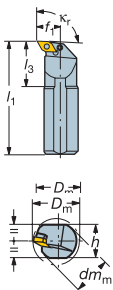
Diámetro de barra: 16 – 40 mm

T-MAX P diseño de sujeción por palanca  
Cilíndrica con plano de apriete

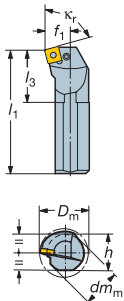
PCLNR/L  
 $\kappa_r$  95°



PDUNR/L  
 $\kappa_r$  93°

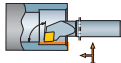
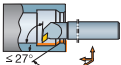
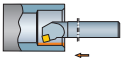


PSKNR/L  
 $\kappa_r$  75°



Voladizo máx. 4 x  $dm_m$

Ilustración a derecha

|                                                                                           | Plaquita   | Código de pedido | Dimensiones, mm |            |       |     |       |       |                            |
|-------------------------------------------------------------------------------------------|------------|------------------|-----------------|------------|-------|-----|-------|-------|----------------------------|
|                                                                                           |            |                  | $dm_m$          | $D_m$ mín. | $f_1$ | $h$ | $l_1$ | $l_3$ | $r_\epsilon$ <sup>1)</sup> |
| <br>95°   | C 09       | S16R-PCLNR/L 09  | 16              | 20         | 11    | 15  | 200   | 26    | 0.8                        |
|                                                                                           |            | S20S-PCLNR/L 09  | 20              | 25         | 13    | 18  | 250   | 29    | 0.8                        |
|                                                                                           |            | S25T-PCLNR/L 09  | 25              | 32         | 17    | 23  | 300   | 33    | 0.8                        |
|                                                                                           | 12         | S25T-PCLNR/L 12  | 25              | 32         | 17    | 23  | 300   | 37    | 0.8                        |
|                                                                                           |            | S32U-PCLNR/L 12  | 32              | 40         | 22    | 30  | 350   | 40    | 0.8                        |
|                                                                                           |            | S40V-PCLNR/L 12  | 40              | 50         | 27    | 37  | 400   | 56    | 0.8                        |
| <br>93° | D 11<br>15 | S25T-PDUNR/L 11  | 25              | 32         | 17    | 23  | 300   | 35    | 0.8                        |
|                                                                                           |            | S32U-PDUNR/L 11  | 32              | 40         | 22    | 30  | 350   | 40    | 0.8                        |
|                                                                                           |            | S40V-PDUNR/L 15  | 40              | 50         | 27    | 37  | 400   | 56    | 0.8                        |
| <br>75° | S 12       | S25T-PSKNR/L 12  | 25              | 32         | 17    | 23  | 300   | 36.8  | 0.8                        |
|                                                                                           |            | S32U-PSKNR/L 12  | 32              | 40         | 22    | 30  | 350   | 37.8  | 0.8                        |
|                                                                                           |            | S40V-PSKNR/L 12  | 40              | 50         | 27    | 37  | 400   | 49.8  | 0.8                        |

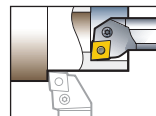
<sup>1)</sup>  $r_\epsilon$  = radio de punta en plaquita patrón

Ejemplo de pedido: 2 piezas S16R-PCLNR 09  
(R=A derecha, L=A izquierda)



# Mecanizado interior con T-Max P, plaquitas negativas

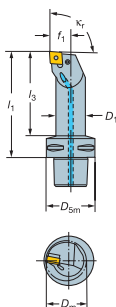
Tamaños Coromant Capto C4 – C6



T-MAX P diseño de sujeción por palanca

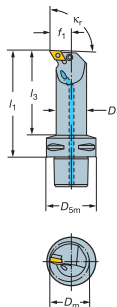
PCLNR/L

$\kappa_r 95^\circ$



PDUNR/L

$\kappa_r 93^\circ$



PSKNR/L

$\kappa_r 75^\circ$

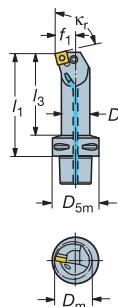
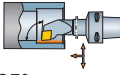
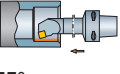


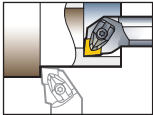
Ilustración a derecha

|                                                                                                   | Plaquita                                                                                                                          | Tamaño Código de pedido                                                                           |                                                                                                                  | Dimensiones, mm           |                           |          |       |       |       |            |     |
|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|----------|-------|-------|-------|------------|-----|
|                                                                                                   |                                                                                                                                   |                                                                                                   |                                                                                                                  | $D_m$ mín.                | $D_1$                     | $D_{5m}$ | $f_1$ | $l_1$ | $l_3$ | $r_e^{1)}$ |     |
| <br><b>95°</b>   | <br><b>09</b><br><br><b>C</b><br><br><b>12</b>   | <b>C4</b>                                                                                         | <b>C4-PCLNR/L -13080-09</b>                                                                                      | 25                        | 20                        | 40       | 13    | 80    | 58    | 0.8        |     |
|                                                                                                   |                                                                                                                                   | <b>C5</b>                                                                                         | <b>C5-PCLNR/L -13080-09</b>                                                                                      | 25                        | 20                        | 50       | 13    | 80    | 56    | 0.8        |     |
|                                                                                                   |                                                                                                                                   | <b>C4</b>                                                                                         | <b>C4-PCLNR/L -17090-12</b>                                                                                      | 32                        | 25                        | 40       | 17    | 90    | 69    | 0.8        |     |
|                                                                                                   |                                                                                                                                   |                                                                                                   | <b>-22110-12</b>                                                                                                 | 40                        | 32                        | 40       | 22    | 110   | 89    | 0.8        |     |
|                                                                                                   |                                                                                                                                   |                                                                                                   | <b>-27080-12</b>                                                                                                 | 50                        | 40                        | 40       | 27    | 80    | 60    | 0.8        |     |
|                                                                                                   |                                                                                                                                   |                                                                                                   | <b>-27120-12</b>                                                                                                 | 50                        | 40                        | 40       | 27    | 120   | 100   | 0.8        |     |
|                                                                                                   |                                                                                                                                   | <b>C5</b>                                                                                         | <b>C5-PCLNR/L -17090-12</b>                                                                                      | 32                        | 25                        | 50       | 17    | 90    | 67    | 0.8        |     |
|                                                                                                   |                                                                                                                                   |                                                                                                   | <b>-22110-12</b>                                                                                                 | 40                        | 32                        | 50       | 22    | 110   | 88    | 0.8        |     |
|                                                                                                   |                                                                                                                                   |                                                                                                   | <b>-27140-12</b>                                                                                                 | 50                        | 40                        | 50       | 27    | 140   | 119   | 0.8        |     |
|                                                                                                   |                                                                                                                                   | <b>C6</b>                                                                                         | <b>C6-PCLNR/L -17100-12</b>                                                                                      | 32                        | 25                        | 63       | 17    | 100   | 73    | 0.8        |     |
|                                                                                                   |                                                                                                                                   |                                                                                                   | <b>-22110-12</b>                                                                                                 | 40                        | 32                        | 63       | 22    | 110   | 84    | 0.8        |     |
|                                                                                                   | <b>16</b>                                                                                                                         | <b>C6</b>                                                                                         | <b>C6-PCLNR/L -27140-16</b>                                                                                      | 50                        | 40                        | 63       | 27    | 140   | 115   | 1.2        |     |
| <br><b>93°</b> | <br><b>11</b><br><br><b>D</b><br><br><b>15</b> | <b>C4</b>                                                                                         | <b>C4-PDUNR/L -17090-11</b>                                                                                      | 32                        | 25                        | 40       | 17    | 90    | 69    | 0.8        |     |
|                                                                                                   |                                                                                                                                   |                                                                                                   | <b>-22110-11</b>                                                                                                 | 40                        | 32                        | 40       | 22    | 110   | 89    | 0.8        |     |
|                                                                                                   |                                                                                                                                   | <b>C5</b>                                                                                         | <b>C5-PDUNR/L -17090-11</b>                                                                                      | 32                        | 25                        | 50       | 17    | 90    | 67    | 0.8        |     |
|                                                                                                   |                                                                                                                                   |                                                                                                   | <b>-22110-11</b>                                                                                                 | 40                        | 32                        | 50       | 22    | 110   | 88    | 0.8        |     |
|                                                                                                   |                                                                                                                                   | <b>C6</b>                                                                                         | <b>C6-PDUNR/L -17100-11</b>                                                                                      | 32                        | 25                        | 63       | 17    | 100   | 74    | 0.8        |     |
|                                                                                                   |                                                                                                                                   | <b>C4</b>                                                                                         | <b>C4-PDUNR/L -27080-15</b>                                                                                      | 50                        | 40                        | 40       | 27    | 80    | 60    | 0.8        |     |
|                                                                                                   |                                                                                                                                   |                                                                                                   | <b>-27120-15</b>                                                                                                 | 50                        | 40                        | 40       | 27    | 120   | 100   | 0.8        |     |
|                                                                                                   |                                                                                                                                   | <b>C5</b>                                                                                         | <b>C5-PDUNR/L -27140-15</b>                                                                                      | 50                        | 40                        | 50       | 27    | 140   | 119   | 0.8        |     |
|                                                                                                   |                                                                                                                                   | <b>C6</b>                                                                                         | <b>C6-PDUNR/L -22110-15</b>                                                                                      | 40                        | 32                        | 63       | 22    | 110   | 84    | 0.8        |     |
|                                                                                                   |                                                                                                                                   |                                                                                                   | <b>-27140-15</b>                                                                                                 | 50                        | 40                        | 63       | 27    | 140   | 115   | 0.8        |     |
|                                                                                                   |                                                                                                                                   | <br><b>75°</b> | <br><b>12</b><br><br><b>S</b> | <b>C4</b>                 | <b>C4-PSKNR -17090-12</b> | 32       | 25    | 40    | 17    | 90         | 89  |
|                                                                                                   | <b>C5</b>                                                                                                                         |                                                                                                   |                                                                                                                  | <b>C5-PSKNR -17090-12</b> | 32                        | 25       | 50    | 17    | 90    | 67         | 0.8 |
| <b>-22110-12</b>                                                                                  |                                                                                                                                   |                                                                                                   |                                                                                                                  | 40                        | 32                        | 50       | 22    | 110   | 88    | 0.8        |     |
| <b>-27140-12</b>                                                                                  |                                                                                                                                   |                                                                                                   |                                                                                                                  | 50                        | 40                        | 50       | 27    | 140   | 119   | 0.8        |     |
| <b>C6</b>                                                                                         |                                                                                                                                   |                                                                                                   |                                                                                                                  | <b>C6-PSKNR -22110-12</b> | 40                        | 32       | 63    | 22    | 110   | 84         | 0.8 |
|                                                                                                   |                                                                                                                                   |                                                                                                   |                                                                                                                  |                           |                           |          |       |       |       |            |     |

<sup>1)</sup>  $r_e$  = radio de punta en plaquita patrón

**Ejemplo de pedido: 2 piezas C4-PCLNR-13080-09**

(R=A derecha, L=A izquierda)

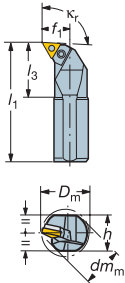


Mecanizado interior con T-Max P,  
plaquitas negativas

Diámetro de barra 20 – 40 mm

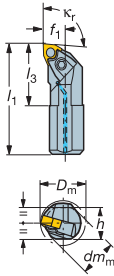
T-MAX P diseño de cuña  
Cilíndrica con plano de apriete

PTFNR/L  
 $\kappa_r 91^\circ$



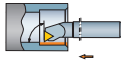
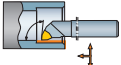
T-MAX P diseño de brida cuña  
Con suministro de refrigerante interno

MWLNRL  
 $\kappa_r 95^\circ$



Voladizo máx.  $4 \times dm_m$

Ilustración a derecha

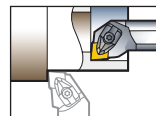
|                                                                                                  | Plaquita                                                                                                     | Código de pedido                    | Dimensiones, mm |            |       |     |       |       |            |
|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-------------------------------------|-----------------|------------|-------|-----|-------|-------|------------|
|                                                                                                  |                                                                                                              |                                     | $dm_m$          | $D_m$ mín. | $f_1$ | $h$ | $l_1$ | $l_3$ | $r_s^{1)}$ |
| <br>$91^\circ$   | <br>16<br><br>T             | S25T-PTFNR/L16-W                    | 25              | 32         | 17    | 23  | 300   | 36.8  | 0.8        |
|                                                                                                  |                                                                                                              | S32U-PTFNR/L16-W                    | 32              | 40         | 22    | 30  | 350   | 45.0  | 0.8        |
| <br>$95^\circ$ | <br>06<br><br>W<br><br>08 | Suministro de refrigerante interior |                 |            |       |     |       |       |            |
|                                                                                                  |                                                                                                              | A20S-MWLNRL/L 06                    | 20              | 25         | 13    | 18  | 250   | 32.3  | 0.8        |
|                                                                                                  |                                                                                                              | A25T-MWLNRL/L 06                    | 25              | 32         | 17    | 23  | 300   | 31.7  | 0.8        |
|                                                                                                  |                                                                                                              | A32U-MWLNRL/L 06                    | 32              | 40         | 22    | 30  | 350   | 40.0  | 0.8        |
|                                                                                                  |                                                                                                              | A25T-MWLNRL/L 08                    | 25              | 32         | 17    | 23  | 300   | 39.9  | 0.8        |
|                                                                                                  |                                                                                                              | A32U-MWLNRL/L 08                    | 32              | 40         | 22    | 30  | 350   | 40.0  | 0.8        |
|                                                                                                  |                                                                                                              | A40V-MWLNRL/L 08                    | 40              | 50         | 27    | 37  | 400   | 56.0  | 0.8        |

<sup>1)</sup>  $r_s$  = radio de punta en plaquita patrón

Ejemplo de pedido: 2 piezas S25T-PTFNR16-W  
(R=A derecha, L=A izquierda)

# Mecanizado interior con T-Max P, plaquitas negativas

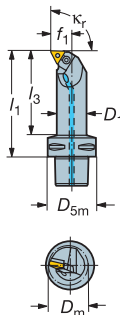
Tamaños Coromant Capto C4 – C6



**T-MAX P**  
diseño de cuña

**PTFNR/L**

$\kappa_r 91^\circ$



**T-MAX P** diseño  
de brida-cuña

**MWLN/L**

$\kappa_r 95^\circ$

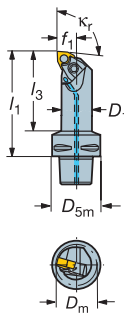
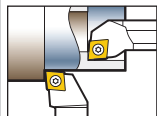


Ilustración a derecha

|                                   | Plaquita                 | Tamaño    | Código de pedido             | Dimensiones, mm |       |          |       |       |       |                   |
|-----------------------------------|--------------------------|-----------|------------------------------|-----------------|-------|----------|-------|-------|-------|-------------------|
|                                   |                          |           |                              | $D_m$ mín.      | $D_1$ | $D_{5m}$ | $f_1$ | $l_1$ | $l_3$ | $r_\epsilon^{1)}$ |
| <br>$\leq 24^\circ$<br>$91^\circ$ | <br><b>T</b><br>16       | <b>C4</b> | <b>C4-PTFNR/L -17090-16W</b> | 32              | 25    | 40       | 17    | 90    | 75    | 0.8               |
|                                   |                          |           | <b>-22110-16W</b>            | 40              | 32    | 40       | 22    | 110   | 69    | 0.8               |
|                                   |                          |           | <b>-27120-16W</b>            | 50              | 40    | 40       | 27    | 120   | 89    | 0.8               |
|                                   |                          | <b>C5</b> | <b>C5-PTFNR/L -17090-16W</b> | 32              | 25    | 50       | 17    | 90    | 67    | 0.8               |
|                                   |                          |           | <b>-22110-16W</b>            | 40              | 32    | 50       | 22    | 110   | 88    | 0.8               |
|                                   |                          |           | <b>-27140-16W</b>            | 50              | 40    | 50       | 27    | 140   | 119   | 0.8               |
|                                   | 22                       | <b>C6</b> | <b>C6-PTFNR/L -22110-16W</b> | 40              | 32    | 63       | 22    | 110   | 84    | 0.8               |
|                                   |                          |           | <b>-27140-16W</b>            | 50              | 40    | 63       | 27    | 140   | 115   | 0.8               |
|                                   |                          |           | <b>C4-PTFNR -27120-22W</b>   | 50              | 40    | 40       | 27    | 120   | 100   | 0.8               |
| <br>$95^\circ$                    | <br><b>W</b><br>06<br>08 | <b>C4</b> | <b>C4-MWLN/L -13075-06</b>   | 25              | 20    | 40       | 13    | 75    | 53    | 0.8               |
|                                   |                          |           | <b>-17090-06M1</b>           | 32              | 25    | 40       | 17    | 90    | 69    | 0.8               |
|                                   |                          | <b>C4</b> | <b>C4-MWLN/L -17090-08</b>   | 32              | 25    | 40       | 17    | 90    | 69    | 0.8               |
|                                   |                          |           | <b>-22110-08</b>             | 40              | 32    | 40       | 22    | 110   | 89    | 0.8               |
|                                   |                          |           | <b>-27120-08</b>             | 50              | 40    | 40       | 27    | 120   | 100   | 0.8               |
|                                   |                          | <b>C5</b> | <b>C5-MWLN/L -17090-08</b>   | 32              | 25    | 50       | 17    | 90    | 67    | 0.8               |
|                                   |                          |           | <b>-22110-08</b>             | 40              | 32    | 50       | 22    | 110   | 88    | 0.8               |
|                                   |                          |           | <b>-27140-08</b>             | 50              | 40    | 50       | 27    | 140   | 119   | 0.8               |

<sup>1)</sup>  $r_\epsilon$  = radio de punta en plaquita patrón

**Ejemplo de pedido: 2 piezas C4-PTFNR-17090-16W**  
(R=A derecha, L=A izquierda)



## ACABADO DE ACERO

Acero de baja aleación, HB 180

ISO/  
ANSI

**P**

**F**

### CoroTurn® 107

Una sola cara

CCMT 09 T3 04-WF

$a_p = 0,3 - 3,0$  mm

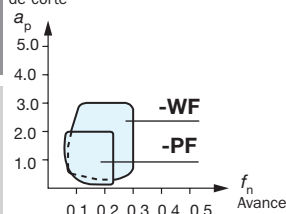
$f_n = 0,07 - 0,3$  mm/r

CCMT 09 T3 04-PF

$a_p = 0,1 - 2,0$  mm

$f_n = 0,06 - 0,23$  mm/r

Profundidad de corte



### -WF – para un cilindrado en acabado rentable

Operaciones: cilindrado y refrentado

**Ventajas:** avances dobles para el mismo acabado superficial o acabado superficial doble mejor con el mismo avance. Ideal cuando resulta prioritario un buen acabado superficial.

**Componentes:** husillos más estables, ejes, cubos, engranajes cuando resulta prioritario un buen acabado superficial

### -PF

Operaciones: cilindrado, refrentado, perfilado y refrentado de la cara posterior

Componentes: husillos, ejes, cubos y engranajes

**Ventajas:** geometría positiva de corte suave con fuerzas de corte bajas para componentes esbeltos, de paredes finas o de sujeción inestable

#### CONDICIONES BUENAS



- Cortes continuos
- Premecanizado o costra ligera de forja.

#### AVANCE ELEVADO



-WF / GC4215

#### AVANCE NORMAL



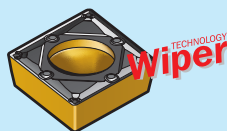
-PF / GC4215

#### CONDICIONES NORMALES



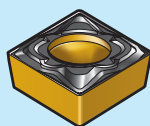
Operaciones de uso general.

#### AVANCE ELEVADO



-WF / GC4215

#### AVANCE NORMAL



-PF / GC4215

#### CONDICIONES DIFÍCILES



- Cortes intermitentes
- Bajas velocidades de corte.
- Cascarilla gruesa de forja.

#### AVANCE ELEVADO



-WF / GC4215

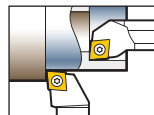
#### AVANCE NORMAL



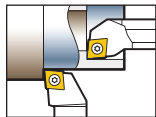
-PF / GC4225

ISO/  
ANSI**P F****ACABADO DE ACERO**

Plaquitas con forma básica positiva



| CÓDIGO DE PEDIDO |                                                                                                                   |  |  | DATOS DE CORTE, CMC 02.1 / HB 180 |            |                                  |        |
|------------------|-------------------------------------------------------------------------------------------------------------------|--|--|-----------------------------------|------------|----------------------------------|--------|
|                  |                                                                                                                   |  |  | Profundidad de corte              | Avance     | Velocidad de corte $v_c$ (m/min) |        |
| Una sola cara    |                                                                                                                   |  |  | $a_p$ mm                          | $f_n$ mm/r | GC4215                           | GC4225 |
|                  |                                                                                                                   |  |  |                                   |            |                                  |        |
|                  | <b>CCMT</b> 06 02 04-WF<br>06 02 08-WF<br>09 T3 04-WF<br>09 T3 08-WF                                              |  |  | ☆                                 | ★          | ☆                                |        |
|                  |                                                                                                                   |  |  | ☆                                 | ★          | ☆                                |        |
|                  |                                                                                                                   |  |  | ☆                                 | ★          | ☆                                |        |
|                  |                                                                                                                   |  |  | ☆                                 | ★          | ☆                                |        |
|                  | <b>DCMX</b> 07 02 04-WF<br>07 02 08-WF<br>11 T3 04-WF<br>11 T3 08-WF                                              |  |  | ☆                                 | ★          | ☆                                |        |
|                  |                                                                                                                   |  |  | ☆                                 | ★          | ☆                                |        |
|                  |                                                                                                                   |  |  | ☆                                 | ★          | ☆                                |        |
|                  |                                                                                                                   |  |  | ☆                                 | ★          | ☆                                |        |
|                  | <b>TCMX</b> 09 02 04-WF<br>11 03 04-WF<br>11 03 08-WF<br>16 T3 08-WF                                              |  |  | ☆                                 | ★          | ☆                                |        |
|                  |                                                                                                                   |  |  | ☆                                 | ★          | ☆                                |        |
|                  |                                                                                                                   |  |  | ☆                                 | ★          | ☆                                |        |
|                  |                                                                                                                   |  |  | ☆                                 | ★          | ☆                                |        |
|                  | <b>CCMT</b> 06 02 02-PF<br>06 02 04-PF<br>09 T3 02-PF<br>09 T3 04-PF<br>09 T3 08-PF                               |  |  | ☆                                 | ★          |                                  | ★      |
|                  |                                                                                                                   |  |  | ☆                                 | ★          |                                  | ★      |
|                  |                                                                                                                   |  |  | ☆                                 | ★          |                                  | ☆      |
|                  |                                                                                                                   |  |  | ☆                                 | ★          |                                  | ☆      |
|                  | <b>DCMT</b> 07 02 02-PF<br>07 02 04-PF<br>11 T3 02-PF<br>11 T3 04-PF<br>11 T3 08-PF                               |  |  | ☆                                 | ★          |                                  | ★      |
|                  |                                                                                                                   |  |  | ☆                                 | ★          |                                  | ☆      |
|                  |                                                                                                                   |  |  | ☆                                 | ★          |                                  | ☆      |
|                  |                                                                                                                   |  |  | ☆                                 | ★          |                                  | ☆      |
|                  | <b>SCMT</b> 09 T3 04-PF<br>09 T3 08-PF                                                                            |  |  | ☆                                 | ★          |                                  | ☆      |
|                  |                                                                                                                   |  |  | ☆                                 | ★          |                                  | ☆      |
|                  |                                                                                                                   |  |  |                                   |            |                                  |        |
|                  |                                                                                                                   |  |  |                                   |            |                                  |        |
|                  | <b>TCMT</b> 09 02 02-PF<br>09 02 04-PF<br>11 03 02-PF<br>11 03 04-PF<br>11 03 08-PF<br>16 T3 04-PF                |  |  | ☆                                 | ★          |                                  | ★      |
|                  |                                                                                                                   |  |  | ☆                                 | ★          |                                  | ☆      |
|                  |                                                                                                                   |  |  | ☆                                 | ★          |                                  | ☆      |
|                  |                                                                                                                   |  |  | ☆                                 | ★          |                                  | ☆      |
|                  | <b>VBMT</b> 11 03 02-PF<br>11 03 04-PF<br>11 03 08-PF<br>11 03 12-PF<br>16 04 04-PF<br>16 04 08-PF<br>16 04 12-PF |  |  | ☆                                 | ★          |                                  | ★      |
|                  |                                                                                                                   |  |  | ☆                                 | ★          |                                  | ☆      |
|                  |                                                                                                                   |  |  | ☆                                 | ★          |                                  | ☆      |
|                  |                                                                                                                   |  |  | ☆                                 | ★          |                                  | ☆      |



## MECANIZADO MEDIO DE ACERO

Acero de baja aleación, HB 180

ISO/  
ANSI

P

M

## CoroTurn® 107

Una sola cara

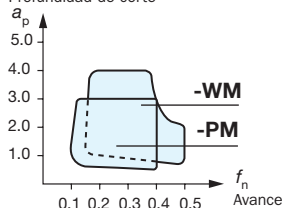
CCMT 09 T3 08-WM

 $a_p = 0,7 - 4,0 \text{ mm}$  $f_n = 0,15 - 0,5 \text{ mm/r}$ 

CCMT 09 T3 08-PM

 $a_p = 0,5 - 3,0 \text{ mm}$  $f_n = 0,1 - 0,3 \text{ mm/r}$ 

Profundidad de corte

**-WM – para un cilindrado medio productivo****Operaciones:** cilindrado y refrentado**Componentes:** husillos rígidos, ejes, cubos, engranajes, etc.**Ventajas:** avances dobles con el mismo acabado superficial o acabado superficial doble mejor con el mismo avance. Ideal cuando resulta prioritario un buen acabado superficial.**-PM****Operaciones:** cilindrado, refrentado y perfilado**Componentes:** husillos, ejes, cubos, engranajes, etc.**Ventajas:** geometría universal fiable con un mecanizado sin problemas

## CONDICIONES BUENAS

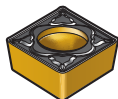


- Cortes continuos
- Premecanizado o costra ligera de forja.

## AVANCE ELEVADO

**-WM / GC4215**

## AVANCE NORMAL

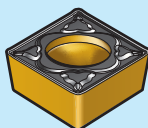
**-PM / GC4215**Primera elección  
CONDICIONES NORMALES

Operaciones de uso general.

## AVANCE ELEVADO

**-WM / GC4215**

## AVANCE NORMAL

**-PM / GC4225**

## CONDICIONES DIFÍCILES

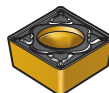


- Cortes intermitentes
- Bajas velocidades de corte.
- Cascarilla gruesa de forja.

## AVANCE ELEVADO

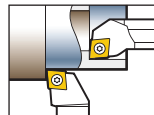
**-WM / GC4225**

## AVANCE NORMAL

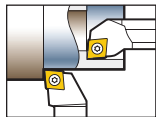
**-PM / GC4235**

ISO/  
ANSI**P M****MECANIZADO MEDIO DE ACERO**

Plaquitas con forma básica positiva



| CÓDIGO DE PEDIDO                                                                                                                                                       |                                                                                         |                                                                                   |                                                                                   |                                                                                   |        | DATOS DE CORTE, CMC 02.1 / HB 180 |                               |                   |        |        |        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------|-----------------------------------|-------------------------------|-------------------|--------|--------|--------|
|                                                                                                                                                                        |                                                                                         |  |  |  |        | Velocidad de corte $v_c$ (m/min)  |                               |                   |        |        |        |
| Una sola cara                                                                                                                                                          |  $r_e$ | GC4215                                                                            | GC4215                                                                            | GC4225                                                                            | GC4225 | GC4235                            | Profundidad de corte $a_p$ mm | Avance $f_n$ mm/r | GC4215 | GC4225 | GC4235 |
|                                                                                       | CCMT 06 02 08-WM                                                                        |                                                                                   | ★                                                                                 |                                                                                   | ☆      |                                   | 1.2 (0.5-2.5)                 | 0.2 (0.1-0.4)     | 475    | 395    |        |
|                                                                                                                                                                        | CCMT 09 T3 04-WM                                                                        | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆      |                                   | 1.5 (0.5-4)                   | 0.25 (0.12-0.4)   | 445    | 365    |        |
|                                                                                                                                                                        | 09 T3 08-WM                                                                             | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆      |                                   | 1.5 (0.7-4)                   | 0.3 (0.15-0.5)    | 415    | 345    |        |
| <br> | DCMX 11 T3 04-WM                                                                        | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆      |                                   | 1.5 (0.5-4)                   | 0.25 (0.12-0.4)   | 445    | 365    |        |
|                                                                                                                                                                        | 11 T3 08-WM                                                                             | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆      |                                   | 1.5 (0.5-4)                   | 0.3 (0.15-0.5)    | 415    | 345    |        |
|                                                                                                                                                                        |                                                                                         |                                                                                   |                                                                                   |                                                                                   |        |                                   |                               |                   |        |        |        |
|                                                                                       | TCMX 11 03 04-WM                                                                        | ☆                                                                                 | ★                                                                                 |                                                                                   |        |                                   | 1.2 (0.5-3)                   | 0.25 (0.12-0.35)  | 445    |        |        |
|                                                                                                                                                                        | 11 03 08-WM                                                                             | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆      |                                   | 1.2 (0.5-3)                   | 0.3 (0.15-0.5)    | 415    | 345    |        |
|                                                                                                                                                                        | 16 T3 08-WM                                                                             | ☆                                                                                 | ★                                                                                 |                                                                                   | ☆      |                                   | 1.5 (0.5-4)                   | 0.3 (0.15-0.5)    | 415    | 345    |        |
| <hr/>                                                                                                                                                                  |                                                                                         |                                                                                   |                                                                                   |                                                                                   |        |                                   |                               |                   |        |        |        |
|                                                                                       | CCMT 06 02 04-PM                                                                        | ☆                                                                                 | ★                                                                                 |                                                                                   |        |                                   | 0.64 (0.2-2.4)                | 0.11 (0.06-0.17)  | 545    |        |        |
|                                                                                                                                                                        | 06 02 08-PM                                                                             | ☆                                                                                 | ★                                                                                 |                                                                                   |        |                                   | 0.64 (0.4-2.4)                | 0.15 (0.08-0.23)  | 515    |        |        |
|                                                                                                                                                                        | 09 T3 04-PM                                                                             | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 0.64 (0.25-3)                 | 0.15 (0.08-0.23)  | 515    | 425    | 265    |
|                                                                                                                                                                        | 09 T3 08-PM                                                                             | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 0.8 (0.5-3)                   | 0.2 (0.1-0.3)     | 475    | 395    | 240    |
|                                                                                       | DCMT 07 02 04-PM                                                                        | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 0.6 (0.19-2.3)                | 0.11 (0.06-0.17)  | 545    | 450    | 295    |
|                                                                                                                                                                        | 07 02 08-PM                                                                             | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 0.6 (0.38-2.3)                | 0.15 (0.08-0.23)  | 515    | 425    | 265    |
|                                                                                                                                                                        | 11 T3 04-PM                                                                             | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 0.8 (0.25-3)                  | 0.15 (0.08-0.23)  | 515    | 425    | 265    |
|                                                                                                                                                                        | 11 T3 08-PM                                                                             | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 0.8 (0.5-3)                   | 0.2 (0.1-0.3)     | 475    | 395    | 240    |
|                                                                                                                                                                        | 11 T3 12-PM                                                                             | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 0.8 (0.6-3)                   | 0.24 (0.12-0.36)  | 450    | 370    | 225    |
|                                                                                      | SCMT 09 T3 04-PM                                                                        | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 0.8 (0.25-3)                  | 0.15 (0.08-0.23)  | 515    | 425    | 265    |
|                                                                                                                                                                        | 09 T3 08-PM                                                                             | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 0.8 (0.5-3)                   | 0.2 (0.1-0.3)     | 475    | 395    | 240    |
|                                                                                     | TCMT 09 02 04-PM                                                                        | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 0.6 (0.19-2.3)                | 0.11 (0.06-0.17)  | 545    | 450    | 295    |
|                                                                                                                                                                        | 09 02 08-PM                                                                             | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 0.6 (0.38-2.3)                | 0.15 (0.08-0.23)  | 515    | 425    | 265    |
|                                                                                                                                                                        | 11 03 04-PM                                                                             | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 0.67 (0.21-2.5)               | 0.13 (0.06-0.19)  | 530    | 440    | 280    |
|                                                                                                                                                                        | 11 03 08-PM                                                                             | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 0.67 (0.42-2.5)               | 0.17 (0.09-0.26)  | 500    | 410    | 255    |
|                                                                                                                                                                        | 11 03 12-PM                                                                             | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 0.67 (0.5-2.5)                | 0.2 (0.1-0.31)    |        | 395    |        |
|                                                                                                                                                                        | 16 T3 04-PM                                                                             | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 0.8 (0.25-3)                  | 0.15 (0.08-0.23)  | 515    | 425    | 265    |
|                                                                                                                                                                        | 16 T3 08-PM                                                                             | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 0.8 (0.5-3)                   | 0.2 (0.1-0.3)     | 475    | 395    | 240    |
|                                                                                                                                                                        | 16 T3 12-PM                                                                             | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 0.8 (0.6-3)                   | 0.24 (0.12-0.36)  | 450    | 370    | 225    |
|                                                                                     | VBMT 16 04 04-PM                                                                        | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 0.72 (0.23-2.7)               | 0.14 (0.07-0.2)   | 525    | 430    | 270    |
|                                                                                                                                                                        | 16 04 08-PM                                                                             | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 0.72 (0.45-2.7)               | 0.18 (0.09-0.27)  | 490    | 405    | 250    |
|                                                                                                                                                                        | 16 04 12-PM                                                                             | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 0.72 (0.54-2.7)               | 0.22 (0.11-0.32)  | 465    | 385    | 235    |
|                                                                                     | RCMT 08 03 M0                                                                           | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 2 (0.8-3.2)                   | 0.4 (0.08-0.8)    | 475    | 395    | 240    |
|                                                                                                                                                                        | 10 T3 M0                                                                                | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 2.5 (1-4)                     | 0.5 (0.1-1)       | 445    | 365    | 225    |
|                                                                                                                                                                        | 12 04 M0                                                                                | ☆                                                                                 |                                                                                   | ★                                                                                 |        | ☆                                 | 3 (1.2-4.8)                   | 0.6 (0.12-1.2)    | 415    | 345    | 210    |



## DESBASTE DE ACERO

Acero de baja aleación, HB 180

ISO/  
ANSI

**P**

**R**

### CoroTurn® 107

Una sola  
cara

CCMT 09 T3 08-PR

$a_p = 1,0 - 4,0$  mm

$f_n = 0,12 - 0,35$  mm/r

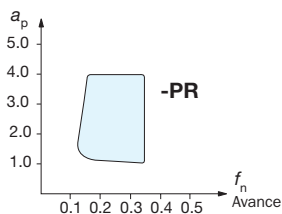
**-PR**

**Operaciones:** cilindrado, refrentado y perfilado

**Componentes:** husillos, ejes, cubos, engranajes, etc.

**Ventajas:** geometría positiva universal con buenas capacidades de desbaste y un buen equilibrio entre un elevado régimen de arranque del metal y una tendencia mínima a las vibraciones

Profundidad  
de corte

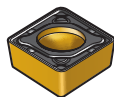


#### CONDICIONES BUENAS



- Cortes continuos
- Premecanizado o costra ligera de forja

AVANCE NORMAL



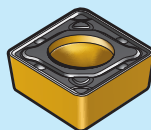
-PR / GC4215

#### Primera elección CONDICIONES NORMALES



Operaciones de uso  
general.

AVANCE NORMAL



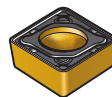
-PR / GC4225

#### CONDICIONES DIFÍCILES



- Cortes intermitentes
- Bajas velocidades de corte.
- Cascarilla gruesa de forja.

AVANCE NORMAL

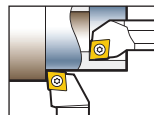


-PR / GC4235

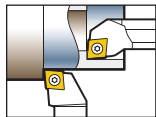


ISO/  
ANSI**P R****DESBASTE DE ACERO**

Plaquetas con forma básica positiva



| CÓDIGO DE PEDIDO                                                                  |                  |                                                                                   |       | DATOS DE CORTE, CMC 02.1 / HB 180                                                 |                                                                                   |                                                                                   |                                  |                      |        |        |        |
|-----------------------------------------------------------------------------------|------------------|-----------------------------------------------------------------------------------|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------|----------------------|--------|--------|--------|
| Una sola cara                                                                     |                  |  | $r_e$ |  |  |  | Velocidad de corte $v_c$ (m/min) |                      |        |        |        |
|                                                                                   |                  |                                                                                   |       | GC4215                                                                            | GC4225                                                                            | GC4235                                                                            | Profundidad de corte<br>$a_p$ mm | Avance<br>$f_n$ mm/r | GC4215 | GC4225 | GC4235 |
|  | CCMT 06 02 08-PR | ☆                                                                                 |       | ★                                                                                 |                                                                                   |                                                                                   | 1.6 (0.8-3.2)                    | 0.19 (0.09-0.26)     | 485    |        | 245    |
|                                                                                   | 09 T3 08-PR      | ☆                                                                                 | ★     | ☆                                                                                 |                                                                                   |                                                                                   | 2 (1-4)                          | 0.25 (0.12-0.35)     | 445    | 365    | 225    |
|                                                                                   | 09 T3 12-PR      |                                                                                   | ★     | ☆                                                                                 |                                                                                   |                                                                                   | 2 (1.2-4)                        | 0.3 (0.14-0.42)      |        | 345    | 210    |
|  | DCMT 11 T3 08-PR | ☆                                                                                 | ★     | ☆                                                                                 |                                                                                   |                                                                                   | 2 (1-4)                          | 0.25 (0.12-0.35)     | 445    | 365    | 225    |
|                                                                                   | 11 T3 12-PR      | ☆                                                                                 | ★     | ☆                                                                                 |                                                                                   |                                                                                   | 2 (1.2-4)                        | 0.3 (0.14-0.42)      | 415    | 345    | 210    |
|  | SCMT 09 T3 08-PR | ☆                                                                                 | ★     | ☆                                                                                 |                                                                                   |                                                                                   | 2 (1-4)                          | 0.25 (0.12-0.35)     | 445    | 365    | 225    |
|                                                                                   | 09 T3 12-PR      |                                                                                   | ★     | ☆                                                                                 |                                                                                   |                                                                                   | 2 (1.2-4)                        | 0.3 (0.14-0.42)      |        | 345    | 210    |
|  | TCMT 11 03 08-PR | ☆                                                                                 | ★     | ☆                                                                                 |                                                                                   |                                                                                   | 1.5 (0.75-3)                     | 0.21 (0.1-0.3)       | 470    | 390    | 235    |
|                                                                                   | 11 03 12-PR      |                                                                                   | ★     |                                                                                   |                                                                                   |                                                                                   | 1.5 (0.9-3)                      | 0.26 (0.12-0.36)     |        | 360    |        |
|                                                                                   | 16 T3 08-PR      | ☆                                                                                 | ★     | ☆                                                                                 |                                                                                   |                                                                                   | 2 (1-4)                          | 0.25 (0.12-0.35)     | 445    | 365    | 225    |
|                                                                                   | 16 T3 12-PR      | ☆                                                                                 | ★     | ☆                                                                                 |                                                                                   |                                                                                   | 2 (1.2-4)                        | 0.3 (0.14-0.42)      | 415    | 345    | 210    |
|  | VBMT 16 04 08-PR | ☆                                                                                 | ★     | ☆                                                                                 |                                                                                   |                                                                                   | 1.8 (0.9-3.6)                    | 0.23 (0.11-0.32)     | 455    | 380    | 230    |
|                                                                                   | 16 04 12-PR      | ☆                                                                                 | ★     | ☆                                                                                 |                                                                                   |                                                                                   | 1.8 (1.1-3.6)                    | 0.27 (0.13-0.38)     | 435    | 360    | 215    |



## ACABADO DE ACERO INOXIDABLE

Acero inoxidable, austenítico, HB 180

ISO/  
ANSI

**M**

**F**

### CoroTurn® 107

#### Una sola cara

CCMT 09 T3 04-WF

$a_p = 0,3 - 3,0$  mm

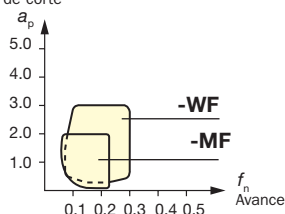
$f_n = 0,07 - 0,3$  mm/r

CCMT 09 T3 04-MF

$a_p = 0,11 - 2,0$  mm

$f_n = 0,06 - 0,23$  mm/r

Profundidad  
de corte



#### -WF – para un cilindrado en acabado rentable

Operaciones: cilindrado y refrentado

**Componentes:** husillos más estables, ejes, cubos, engranajes cuando resulta prioritario un buen acabado superficial

**Ventajas:** avances dobles con el mismo acabado superficial o acabado superficial doble mejor con el mismo avance. Ideal cuando resulta prioritario un buen acabado superficial.

#### -MF

Operaciones: cilindrado, refrentado y perfilado

**Componentes:** piezas de acero inoxidable en general

**Ventajas:** geometría positiva de corte suave con fuerzas de corte bajas para componentes esbeltos, de paredes finas o de sujeción inestable.

#### CONDICIONES BUENAS



- Cortes continuos
- Premecanizado o costra ligera de fundición/forja.

#### AVANCE ELEVADO



-WF / GC2015

#### AVANCE NORMAL



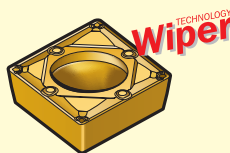
-MF / GC2015

#### Primera elección CONDICIONES NORMALES



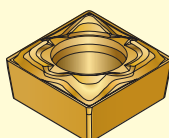
Operaciones en general.

#### AVANCE ELEVADO



-WF / GC2015

#### AVANCE NORMAL



-MF / GC2015

#### CONDICIONES DIFÍCILES



- Cortes intermitentes
- Fuerzas de corte bajas.
- Costra de fundición o cascarilla gruesa de forja.

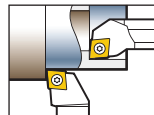
#### AVANCE NORMAL



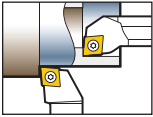
-MF / GC2025

ISO/  
ANSI**M F****ACABADO DE ACERO INOXIDABLE**

Plaquetas con forma básica positiva



| CÓDIGO DE PEDIDO                                                                    |             |                                                                                   |       | DATOS DE CORTE, CMC 05.21 / HB 180                                                |                                                                                   |                                                                                   |                                  |                      |                                  |        |     |
|-------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------|----------------------|----------------------------------|--------|-----|
| Una sola cara                                                                       |             |  | $r_e$ |  |  |  | Profundidad de corte<br>$a_p$ mm | Avance<br>$f_n$ mm/r | Velocidad de corte $v_c$ (m/min) |        |     |
|                                                                                     |             |                                                                                   |       | GC2015                                                                            | GC2015                                                                            | GC2025                                                                            |                                  |                      | GC2015                           | GC2025 |     |
|    | <b>CCMT</b> | 06 02 04-WF                                                                       | ☆     | ★                                                                                 |                                                                                   |                                                                                   | 0.8 (0.3-2)                      | 0.12 (0.05-0.3)      | 280                              |        |     |
|                                                                                     |             | 06 02 08-WF                                                                       | ☆     | ★                                                                                 |                                                                                   |                                                                                   |                                  | 0.8 (0.3-2)          | 0.15 (0.09-0.35)                 | 290    |     |
|                                                                                     |             | 09 T3 04-WF                                                                       | ☆     | ★                                                                                 |                                                                                   |                                                                                   |                                  | 1 (0.3-3)            | 0.2 (0.07-0.3)                   | 290    |     |
|                                                                                     |             | 09 T3 08-WF                                                                       | ☆     | ★                                                                                 |                                                                                   |                                                                                   |                                  | 1 (0.3-3)            | 0.25 (0.12-0.5)                  | 280    |     |
|    | <b>DCMX</b> | 07 02 04-WF                                                                       | ☆     | ★                                                                                 |                                                                                   |                                                                                   | 0.7 (0.3-2)                      | 0.12 (0.05-0.25)     | 280                              |        |     |
|                                                                                     |             | 07 02 08-WF                                                                       | ☆     | ★                                                                                 |                                                                                   |                                                                                   |                                  | 0.7 (0.3-2)          | 0.15 (0.09-0.35)                 | 290    |     |
|                                                                                     |             | 11 T3 04-WF                                                                       | ☆     | ★                                                                                 |                                                                                   |                                                                                   |                                  | 1 (0.3-3)            | 0.2 (0.07-0.3)                   | 290    |     |
|                                                                                     |             | 11 T3 08-WF                                                                       | ☆     | ★                                                                                 |                                                                                   |                                                                                   |                                  | 1 (0.3-3)            | 0.25 (0.12-0.4)                  | 280    |     |
|    | <b>TCMX</b> | 09 02 04-WF                                                                       | ☆     | ★                                                                                 |                                                                                   |                                                                                   | 0.7 (0.3-2)                      | 0.12 (0.05-0.3)      | 280                              |        |     |
|                                                                                     |             | 11 03 04-WF                                                                       | ☆     | ★                                                                                 |                                                                                   |                                                                                   |                                  | 1 (0.3-2.5)          | 0.2 (0.07-0.3)                   | 290    |     |
|                                                                                     |             | 11 03 08-WF                                                                       | ☆     | ★                                                                                 |                                                                                   |                                                                                   |                                  | 1 (0.3-2.5)          | 0.25 (0.12-0.4)                  | 280    |     |
|                                                                                     |             | 16 T3 08-WF                                                                       | ☆     | ★                                                                                 |                                                                                   |                                                                                   |                                  | 1.2 (0.3-3.5)        | 0.25 (0.12-0.5)                  | 280    |     |
|    | <b>CCMT</b> | 06 02 04-MF                                                                       | ☆     | ★                                                                                 |                                                                                   |                                                                                   | 0.3 (0.1-1.7)                    | 0.08 (0.05-0.17)     | 290                              |        |     |
|                                                                                     |             | 09 T3 04-MF                                                                       | ☆     | ★                                                                                 | ☆                                                                                 |                                                                                   |                                  | 0.35 (0.11-2)        | 0.11 (0.06-0.23)                 | 290    | 265 |
|                                                                                     |             | 09 T3 08-MF                                                                       | ☆     | ★                                                                                 | ☆                                                                                 |                                                                                   |                                  | 0.35 (0.15-2)        | 0.15 (0.08-0.3)                  | 290    | 260 |
|    | <b>DCMT</b> | 07 02 04-MF                                                                       | ☆     | ★                                                                                 | ☆                                                                                 |                                                                                   | 0.26 (0.08-1.5)                  | 0.08 (0.05-0.17)     | 290                              | 265    |     |
|                                                                                     |             | 11 T3 04-MF                                                                       | ☆     | ★                                                                                 | ☆                                                                                 |                                                                                   |                                  | 0.35 (0.11-2)        | 0.11 (0.06-0.23)                 | 290    | 265 |
|                                                                                     |             | 11 T3 08-MF                                                                       | ☆     | ★                                                                                 | ☆                                                                                 |                                                                                   |                                  | 0.35 (0.15-2)        | 0.15 (0.08-0.3)                  | 290    | 260 |
|   | <b>SCMT</b> | 09 T3 04-MF                                                                       |       |                                                                                   | ★                                                                                 |                                                                                   | 0.35 (0.11-2)                    | 0.11 (0.06-0.23)     |                                  | 265    |     |
|                                                                                     |             | 09 T3 08-MF                                                                       |       |                                                                                   | ★                                                                                 |                                                                                   |                                  | 0.35 (0.15-2)        | 0.15 (0.08-0.3)                  |        | 260 |
|  | <b>TCMT</b> | 09 02 04-MF                                                                       | ☆     | ★                                                                                 | ☆                                                                                 |                                                                                   | 0.3 (0.1-1.7)                    | 0.1 (0.05-0.19)      | 290                              | 265    |     |
|                                                                                     |             | 11 03 04-MF                                                                       | ☆     | ★                                                                                 | ☆                                                                                 |                                                                                   |                                  | 0.3 (0.1-1.7)        | 0.1 (0.05-0.19)                  | 290    | 265 |
|                                                                                     |             | 11 03 08-MF                                                                       | ☆     | ★                                                                                 | ☆                                                                                 |                                                                                   |                                  | 0.3 (0.13-1.7)       | 0.13 (0.07-0.26)                 | 285    | 265 |
|                                                                                     |             | 16 T3 04-MF                                                                       | ☆     | ★                                                                                 | ☆                                                                                 |                                                                                   |                                  | 0.35 (0.11-2)        | 0.11 (0.06-0.23)                 | 290    | 265 |
|  | <b>VBMT</b> | 11 03 04-MF                                                                       | ☆     | ★                                                                                 | ☆                                                                                 |                                                                                   | 0.3 (0.1-1.7)                    | 0.1 (0.05-0.19)      | 290                              | 265    |     |
|                                                                                     |             | 11 03 08-MF                                                                       | ☆     | ★                                                                                 | ☆                                                                                 |                                                                                   |                                  | 0.3 (0.13-1.7)       | 0.13 (0.07-0.26)                 | 285    | 265 |
|                                                                                     |             | 16 04 04-MF                                                                       | ☆     | ★                                                                                 | ☆                                                                                 |                                                                                   |                                  | 0.32 (0.1-1.8)       | 0.1 (0.05-0.2)                   | 290    | 265 |
|                                                                                     |             | 16 04 08-MF                                                                       | ☆     | ★                                                                                 | ☆                                                                                 |                                                                                   |                                  | 0.32 (0.14-1.8)      | 0.14 (0.07-0.27)                 | 290    | 260 |
|                                                                                     |             | 16 04 12-MF                                                                       | ☆     | ★                                                                                 |                                                                                   |                                                                                   | 0.32 (0.14-1.8)                  | 0.16 (0.09-0.32)     | 290                              |        |     |



MECANIZADO MEDIO DE ACERO INOXIDABLE

Acero inoxidable, austenítico, HB 180

ISO/  
ANSI

M

M

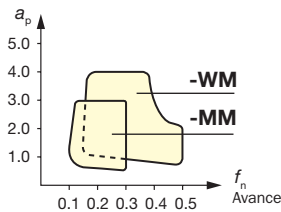
CoroTurn® 107

Una sola cara

CCMT 09 T3 08-WM  
 $a_p = 0,7 - 4,0 \text{ mm}$   
 $f_n = 0,15 - 0,5 \text{ mm/r}$

CCMT 09 T3 08-MM  
 $a_p = 0,5 - 3,0 \text{ mm}$   
 $f_n = 0,10 - 0,3 \text{ mm/r}$

Profundidad de corte



-WM – para un cilindrado medio productivo

Operaciones: cilindrado y refrentado

Componentes: husillos rígidos, ejes, cubos, engranajes, etc

Ventajas: avances dobles con el mismo acabado superficial o acabado superficial doble mejor con el mismo avance. Ideal cuando resulta prioritario un buen acabado superficial.

-MM

Operaciones: cilindrado, refrentado y perfilado

Ventajas: geometría universal fiable con un mecanizado sin problemas

Componentes: piezas de acero inoxidable en general

CONDICIONES BUENAS



- Cortes continuos
- Premecanizado o costra ligera de fundición/forja.

AVANCE ELEVADO



-WM / GC2015

AVANCE NORMAL



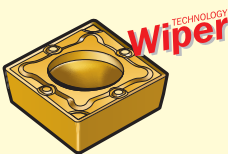
-MM / GC2015

CONDICIONES NORMALES



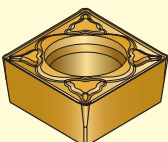
Operaciones en general.

AVANCE ELEVADO



-WM / GC2015

AVANCE NORMAL



-MM / GC2025

CONDICIONES DIFÍCILES



- Cortes intermitentes
- Fuerzas de corte bajas.
- Costra de fundición o cascarilla gruesa de forja.

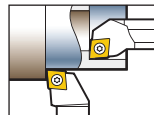
AVANCE NORMAL



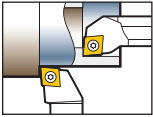
-MM / GC2035

ISO/  
ANSI**M M****MECANIZADO MEDIO DE ACERO INOXIDABLE**

Plaquetas con forma básica positiva



| CÓDIGO DE PEDIDO                                                                    |                  |                                                                                                   |                                                                                             | DATOS DE CORTE, CMC 05.21 / HB 180                                                          |                                                                                             |                                                                                             |                                     |                      |                                  |        |        |
|-------------------------------------------------------------------------------------|------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------|----------------------|----------------------------------|--------|--------|
| Una sola cara                                                                       |                  | <br>$r_e$        | <br>GC2015 | <br>GC2015 | <br>GC2025 | <br>GC2035 | Profundidad<br>de corte<br>$a_p$ mm | Avance<br>$f_n$ mm/r | Velocidad de corte $v_c$ (m/min) |        |        |
|                                                                                     |                  |                                                                                                   | GC2015                                                                                      | GC2015                                                                                      | GC2025                                                                                      | GC2035                                                                                      |                                     |                      | GC2015                           | GC2025 | GC2035 |
|    | CCMT 09 T3 04-WM | <br><b>Wiper</b> | ☆                                                                                           | ★                                                                                           |                                                                                             |                                                                                             | 1.5 (0.5-4)                         | 0.25 (0.12-0.4)      | 280                              |        |        |
|                                                                                     | 09 T3 08-WM      |                                                                                                   | ☆                                                                                           | ★                                                                                           |                                                                                             |                                                                                             | 1.5 (0.7-4)                         | 0.3 (0.15-0.5)       | 270                              |        |        |
|    | DCMX 11 T3 04-WM |                                                                                                   | ☆                                                                                           | ★                                                                                           |                                                                                             |                                                                                             | 1.5 (0.5-4)                         | 0.25 (0.12-0.4)      | 280                              |        |        |
|                                                                                     | 11 T3 08-WM      |                                                                                                   | ☆                                                                                           | ★                                                                                           |                                                                                             |                                                                                             | 1.5 (0.5-4)                         | 0.3 (0.15-0.5)       | 270                              |        |        |
|    | CCMT 06 02 04-MM |                                                                                                   | ★                                                                                           |                                                                                             |                                                                                             |                                                                                             | 0.64 (0.2-2.4)                      | 0.11 (0.06-0.17)     | 290                              |        |        |
|                                                                                     | 06 02 08-MM      |                                                                                                   | ★                                                                                           |                                                                                             |                                                                                             |                                                                                             | 0.64 (0.4-2.4)                      | 0.15 (0.08-0.23)     | 290                              |        |        |
|    | 09 T3 04-MM      |                                                                                                   | ☆                                                                                           |                                                                                             | ★                                                                                           | ☆                                                                                           | 0.64 (0.25-3)                       | 0.15 (0.08-0.23)     | 290                              | 260    | 170    |
|                                                                                     | 09 T3 08-MM      |                                                                                                   | ☆                                                                                           |                                                                                             | ★                                                                                           | ☆                                                                                           | 0.8 (0.5-3)                         | 0.2 (0.1-0.3)        | 290                              | 240    | 170    |
|                                                                                     | DCMT 07 02 04-MM |                                                                                                   | ☆                                                                                           |                                                                                             | ★                                                                                           | ☆                                                                                           | 0.6 (0.19-2.3)                      | 0.11 (0.06-0.17)     | 290                              | 265    | 170    |
|                                                                                     | 07 02 08-MM      |                                                                                                   | ☆                                                                                           |                                                                                             | ★                                                                                           | ☆                                                                                           | 0.6 (0.38-2.3)                      | 0.15 (0.08-0.23)     | 290                              | 260    | 170    |
|                                                                                     | 11 T3 04-MM      |                                                                                                   | ☆                                                                                           |                                                                                             | ★                                                                                           | ☆                                                                                           | 0.8 (0.25-3)                        | 0.15 (0.08-0.23)     | 290                              | 260    | 170    |
|                                                                                     | 11 T3 08-MM      |                                                                                                   | ☆                                                                                           |                                                                                             | ★                                                                                           | ☆                                                                                           | 0.8 (0.5-3)                         | 0.2 (0.1-0.3)        | 290                              | 240    | 170    |
|    | 11 T3 12-MM      |                                                                                                   | ☆                                                                                           |                                                                                             | ★                                                                                           | ☆                                                                                           | 0.8 (0.6-3)                         | 0.24 (0.12-0.36)     | 225                              | 225    | 170    |
|                                                                                     | SCMT 09 T3 04-MM |                                                                                                   | ☆                                                                                           |                                                                                             | ★                                                                                           | ☆                                                                                           | 0.8 (0.25-3)                        | 0.15 (0.08-0.23)     | 290                              | 260    | 170    |
|                                                                                     | 09 T3 08-MM      |                                                                                                   | ☆                                                                                           |                                                                                             | ★                                                                                           | ☆                                                                                           | 0.8 (0.5-3)                         | 0.2 (0.1-0.3)        | 290                              | 240    | 170    |
|   | TCMT 09 02 04-MM |                                                                                                   | ☆                                                                                           |                                                                                             | ★                                                                                           | ☆                                                                                           | 0.6 (0.19-2.3)                      | 0.11 (0.06-0.17)     | 290                              | 265    | 170    |
|                                                                                     | 09 02 08-MM      |                                                                                                   | ☆                                                                                           |                                                                                             | ★                                                                                           | ☆                                                                                           | 0.6 (0.38-2.3)                      | 0.15 (0.08-0.23)     | 290                              | 260    | 170    |
|                                                                                     | 11 03 04-MM      |                                                                                                   | ☆                                                                                           |                                                                                             | ★                                                                                           | ☆                                                                                           | 0.67 (0.21-2.5)                     | 0.13 (0.06-0.19)     | 290                              | 265    | 170    |
|                                                                                     | 11 03 08-MM      |                                                                                                   | ☆                                                                                           |                                                                                             | ★                                                                                           | ☆                                                                                           | 0.67 (0.42-2.5)                     | 0.17 (0.09-0.26)     | 290                              | 250    | 170    |
|                                                                                     | 16 T3 04-MM      |                                                                                                   | ☆                                                                                           |                                                                                             | ★                                                                                           | ☆                                                                                           | 0.8 (0.25-3)                        | 0.15 (0.08-0.23)     | 290                              | 260    | 170    |
|                                                                                     | 16 T3 08-MM      |                                                                                                   | ☆                                                                                           |                                                                                             | ★                                                                                           | ☆                                                                                           | 0.8 (0.5-3)                         | 0.2 (0.1-0.3)        | 290                              | 240    | 170    |
|                                                                                     | 16 T3 12-MM      |                                                                                                   | ☆                                                                                           |                                                                                             | ★                                                                                           | ☆                                                                                           | 0.8 (0.6-3)                         | 0.24 (0.12-0.36)     | 285                              | 225    |        |
|  | VBMT 16 04 04-MM |                                                                                                   | ☆                                                                                           |                                                                                             | ★                                                                                           | ☆                                                                                           | 0.72 (0.23-2.7)                     | 0.14 (0.07-0.2)      | 290                              | 260    | 170    |
|                                                                                     | 16 04 08-MM      |                                                                                                   | ☆                                                                                           |                                                                                             | ★                                                                                           | ☆                                                                                           | 0.72 (0.45-2.7)                     | 0.18 (0.09-0.27)     | 290                              | 250    | 170    |
|                                                                                     | 16 04 12-MM      |                                                                                                   | ☆                                                                                           |                                                                                             | ★                                                                                           | ☆                                                                                           | 0.72 (0.54-2.7)                     | 0.22 (0.11-0.32)     | 285                              | 235    | 170    |
|  | RCMT 08 03 M0    |                                                                                                   |                                                                                             |                                                                                             | ★                                                                                           |                                                                                             | 2 (0.8-3.2)                         | 0.4 (0.08-0.8)       |                                  | 240    |        |
|                                                                                     | 10 T3 M0         |                                                                                                   |                                                                                             |                                                                                             | ★                                                                                           |                                                                                             | 2.5 (1-4)                           | 0.5 (0.1-1)          |                                  | 225    |        |
|                                                                                     | 12 04 M0         |                                                                                                   |                                                                                             |                                                                                             | ★                                                                                           |                                                                                             | 3 (1.2-4.8)                         | 0.6 (0.12-1.2)       |                                  | 205    |        |



DESBASTE DE ACERO INOXIDABLE

Acero inoxidable, austenítico, HB 180

ISO/  
ANSI

M

R

CoroTurn® 107

Una sola cara

CCMT 09 T3 08-MR

$a_p = 1,0 - 4,0 \text{ mm}$

$f_n = 0,12 - 0,35 \text{ mm/r}$

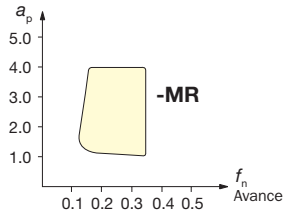
-MR

Operaciones: cilindrado, refrentado y perfilado

Componentes: piezas de acero inoxidable en general

Ventajas: geometría positiva universal con buenas capacidades en desbaste y un buen equilibrio entre un elevado régimen de arranque del metal y menos tendencias a las vibraciones. Para operaciones con cortes interrumpidos.

Profundidad  
de corte



CONDICIONES BUENAS



- Cortes continuos
- Premecanizado o costra ligera de fundición/forja.

AVANCE NORMAL



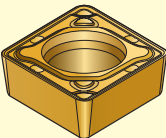
-MR / GC2015

CONDICIONES NORMALES



Operaciones en general.

AVANCE NORMAL



-MR / GC2025

CONDICIONES DIFÍCILES



- Cortes intermitentes
- Fuerzas de corte bajas.
- Costra de fundición o cascarrilla gruesa de forja.

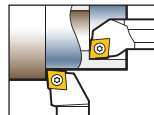
AVANCE NORMAL



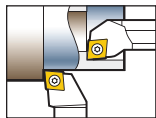
-MR / GC2035

ISO/  
ANSI**M R****DESBASTE DE ACERO INOXIDABLE**

Plaquetas con forma básica positiva



| CÓDIGO DE PEDIDO                                                                                      |                  |                                                                                   |                                                                                   | DATOS DE CORTE, CMC 05.21 / HB 180                                                |                                  |                   |        |        |        |
|-------------------------------------------------------------------------------------------------------|------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------|-------------------|--------|--------|--------|
|                                                                                                       |                  |  |  |  | Velocidad de corte $v_c$ (m/min) |                   |        |        |        |
| Una sola cara  $r_e$ |                  | GC2015                                                                            | GC2025                                                                            | GC2035                                                                            | Profundidad de corte $a_p$ mm    | Avance $f_n$ mm/r | GC2015 | GC2025 | GC2035 |
|                      | CCMT 06 02 08-MR | ☆                                                                                 |                                                                                   | ★                                                                                 | 1.6 (0.8-3.2)                    | 0.19 (0.09-0.26)  | 290    |        | 170    |
|                                                                                                       | 09 T3 08-MR      | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 2 (1-4)                          | 0.25 (0.12-0.35)  | 280    | 225    | 165    |
|                                                                                                       | 09 T3 12-MR      |                                                                                   | ★                                                                                 |                                                                                   | 2 (1.2-4)                        | 0.3 (0.14-0.42)   |        | 205    |        |
|                      | DCMT 11 T3 08-MR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 2 (1-4)                          | 0.25 (0.12-0.35)  | 280    | 225    | 165    |
|                                                                                                       | 11 T3 12-MR      | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 2 (1.2-4)                        | 0.3 (0.14-0.42)   | 270    | 205    | 160    |
|                      | SCMT 09 T3 08-MR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 2 (1-4)                          | 0.25 (0.12-0.35)  | 280    | 225    | 165    |
|                                                                                                       | 09 T3 12-MR      |                                                                                   | ★                                                                                 | ★                                                                                 | 2 (1.2-4)                        | 0.3 (0.14-0.42)   |        |        | 160    |
|                      | TCMT 11 03 08-MR |                                                                                   | ★                                                                                 | ☆                                                                                 | 1.5 (0.75-3)                     | 0.21 (0.1-0.3)    |        | 235    | 170    |
|                                                                                                       | 16 T3 08-MR      | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 2 (1-4)                          | 0.25 (0.12-0.35)  | 280    | 225    | 165    |
|                                                                                                       | 16 T3 12-MR      |                                                                                   | ★                                                                                 | ☆                                                                                 | 2 (1.2-4)                        | 0.3 (0.14-0.42)   |        | 205    | 160    |
|                      | VBMT 16 04 08-MR | ☆                                                                                 | ★                                                                                 | ☆                                                                                 | 1.8 (0.9-3.6)                    | 0.23 (0.11-0.32)  | 285    | 230    | 170    |
|                                                                                                       | 16 04 12-MR      |                                                                                   | ★                                                                                 | ☆                                                                                 | 1.8 (1.1-3.6)                    | 0.27 (0.13-0.38)  |        | 215    | 165    |



## Acabado de fundición gris y fundición nodular

Alta resistencia a la tracción, HB 220 / HB 250

ISO/  
ANSI

**K**

**F**

### CoroTurn® 107

Una sola cara

CCMT 09 T3 04-WF

$a_p = 0,3 - 3,0$  mm

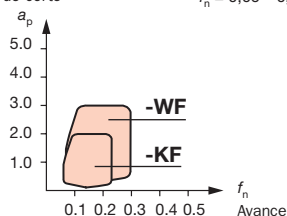
$f_n = 0,07 - 0,3$  mm/r

CCMT 09 T3 04-KF

$a_p = 0,11 - 2,0$  mm

$f_n = 0,06 - 0,23$  mm/r

Profundidad de corte



**-WF – para un cilindrado en acabado rentable**

**Operaciones:** cilindrado y refrentado

**Componentes:** husillos más estables, ejes, cubos, engranajes cuando resulta prioritario un buen acabado superficial

**Ventajas:** avances dobles con el mismo acabado superficial o acabado superficial doble mejor con el mismo avance. Ideal cuando resulta prioritario un buen acabado superficial.

**-KF**

**Operaciones:** torneado, refrentado y perfilado

**Componentes:** piezas de fundición en general

**Ventajas:** mecanizado ligero, geometría positiva con fuerzas de corte bajas para piezas esbeltas con sujeción inestable

#### CONDICIONES BUENAS



- Cortes continuos
- Premecanizado o costra ligera de fundición.

#### AVANCE ELEVADO



-WF / GC3215

#### AVANCE NORMAL



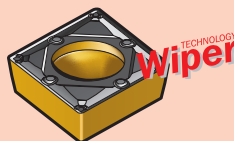
-KF / GC3005

#### Primera elección CONDICIONES NORMALES



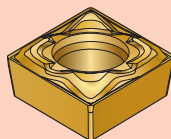
Operaciones de uso general.

#### AVANCE ELEVADO



-WF / GC3215

#### AVANCE NORMAL



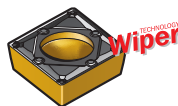
-KF / GC3005

#### CONDICIONES DIFÍCILES



- Cortes intermitentes
- Velocidades de corte bajas.
- Cascarilla gruesa de fundición.

#### AVANCE ELEVADO



-WF / GC3215

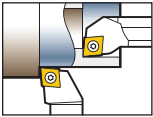


K F

## Plaquitas de forma básica positivas

| CÓDIGO DE PEDIDO                                                                    |                  |  | DATOS DE CORTE, CMC 08.2 <sup>1)</sup> / HB 220                                   |   |                                                                                   |   |                                                                                   |                  |                                                                                   |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|-------------------------------------------------------------------------------------|------------------|--|-----------------------------------------------------------------------------------|---|-----------------------------------------------------------------------------------|---|-----------------------------------------------------------------------------------|------------------|-----------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------|--|----------------------------------|--|----------------------|--|------------------------------------------------------|--|
| Una sola cara                                                                       |                  |  |  |   |  |   |  |                  |  |  |  |  | Profundidad de corte<br>$a_p$ mm |  | Avance<br>$f_n$ mm/r |  | Velocidad de corte $v_c$ (m/min)<br>GC3005<br>GC3215 |  |
|    | CCMT 06 02 04-WF |  | ☆                                                                                 | ☆ | ★                                                                                 | ☆ | 0.8 (0.3-2)                                                                       | 0.12 (0.05-0.3)  | 235                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|                                                                                     | 06 02 08-WF      |  | ☆                                                                                 | ☆ | ★                                                                                 | ☆ | 0.8 (0.3-2)                                                                       | 0.15 (0.09-0.35) | 225                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|                                                                                     | 09 T3 04-WF      |  | ☆                                                                                 | ☆ | ★                                                                                 | ☆ | 1 (0.3-3)                                                                         | 0.2 (0.07-0.3)   | 215                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|                                                                                     | 09 T3 08-WF      |  | ☆                                                                                 | ☆ | ★                                                                                 | ☆ | 1 (0.3-3)                                                                         | 0.25 (0.12-0.5)  | 200                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|                                                                                     |                  |  |                                                                                   |   |                                                                                   |   |                                                                                   |                  |                                                                                   |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|    | DCMX 11 T3 04-WF |  | ☆                                                                                 | ☆ | ★                                                                                 | ☆ | 1 (0.3-3)                                                                         | 0.2 (0.07-0.3)   | 215                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|                                                                                     |                  |  |                                                                                   |   |                                                                                   |   |                                                                                   |                  |                                                                                   |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|    | TCMX 09 02 04-WF |  | ☆                                                                                 | ☆ | ★                                                                                 | ☆ | 0,7 (0.3-2)                                                                       | 0.12 (0.05-0.3)  | 235                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|                                                                                     | 09 02 08-WF      |  | ☆                                                                                 | ☆ | ★                                                                                 | ☆ | 0,7 (0.3-2)                                                                       | 0.25 (0.1-0.35)  | 200                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|                                                                                     | 11 03 04-WF      |  | ☆                                                                                 | ☆ | ★                                                                                 | ☆ | 1 (0.3-2.5)                                                                       | 0.2 (0.07-0.3)   | 215                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|                                                                                     | 16 T3 04-WF      |  | ☆                                                                                 | ☆ | ★                                                                                 | ☆ | 1.2 (0.3-3.5)                                                                     | 0.2 (0.07-0.35)  | 215                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|    | CCMT 06 02 04-KF |  | ☆                                                                                 | ☆ | ★                                                                                 |   | 0.3 (0.1-1.7)                                                                     | 0.08 (0.05-0.17) | 250                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|                                                                                     | 09 T3 04-KF      |  | ☆                                                                                 | ☆ | ★                                                                                 |   | 0.35 (0.11-2)                                                                     | 0.11 (0.06-0.23) | 245                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|    | DCMT 07 02 04-KF |  | ☆                                                                                 | ☆ | ★                                                                                 |   | 0.26 (0.08-1.5)                                                                   | 0.08 (0.05-0.17) | 250                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|                                                                                     | 11 T3 04-KF      |  | ☆                                                                                 | ☆ | ★                                                                                 |   | 0.35 (0.11-2)                                                                     | 0.11 (0.06-0.23) | 245                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|   | SCMT 09 T3 04-KF |  | ☆                                                                                 | ☆ | ★                                                                                 |   | 0.35 (0.11-2)                                                                     | 0.11 (0.06-0.23) | 245                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|                                                                                     | 09 T3 08-KF      |  | ☆                                                                                 | ☆ | ★                                                                                 |   | 0.35 (0.15-2)                                                                     | 0.15 (0.08-0.3)  | 240                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|  | TCMT 09 02 04-KF |  | ☆                                                                                 | ☆ | ★                                                                                 |   | 0.3 (0.1-1.7)                                                                     | 0.1 (0.05-0.19)  | 250                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|                                                                                     | 11 03 04-KF      |  | ☆                                                                                 | ☆ | ★                                                                                 |   | 0.3 (0.1-1.7)                                                                     | 0.1 (0.05-0.19)  | 250                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|                                                                                     | 16 T3 04-KF      |  | ☆                                                                                 | ☆ | ★                                                                                 |   | 0.35 (0.11-2)                                                                     | 0.11 (0.06-0.23) | 245                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|  | VBMT 11 03 04-KF |  | ☆                                                                                 | ☆ | ★                                                                                 |   | 0.3 (0.1-1.7)                                                                     | 0.1 (0.05-0.19)  | 250                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|                                                                                     | 11 03 08-KF      |  | ☆                                                                                 | ☆ | ★                                                                                 |   | 0.3 (0.13-1.7)                                                                    | 0.13 (0.07-0.26) | 240                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|                                                                                     | 16 04 04-KF      |  | ☆                                                                                 | ☆ | ★                                                                                 |   | 0.32 (0.1-1.8)                                                                    | 0.1 (0.05-0.2)   | 250                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|                                                                                     | 16 04 08-KF      |  | ☆                                                                                 | ☆ | ★                                                                                 |   | 0.32 (0.14-1.8)                                                                   | 0.14 (0.07-0.27) | 240                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|  | RCMT 08 03 M0    |  | ☆                                                                                 | ☆ | ★                                                                                 | ☆ | 2 (0.8-3.2)                                                                       | 0.4 (0.08-0.8)   | 215                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|                                                                                     | 10 T3 M0         |  | ☆                                                                                 | ☆ | ★                                                                                 | ☆ | 2.5 (1-4)                                                                         | 0.5 (0.1-1)      | 200                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |
|                                                                                     | 12 04 M0         |  | ☆                                                                                 | ☆ | ★                                                                                 | ☆ | 3 (1.2-4.8)                                                                       | 0.6 (0.12-1.2)   | 190                                                                               |  |                                                                                   |  |                                  |  |                      |  |                                                      |  |

<sup>1)</sup> Para CMC 09.2 reducir la velocidad de corte ( $v_c$ ) un 10%.



Mecanizado medio de fundición gris y fundición nodular

Alta resistencia a la tracción, HB 220 / HB 250

ISO/  
ANSI

K

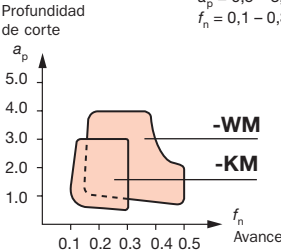
M

CoroTurn® 107

Una sola cara

CCMT 09 T3 08-WM  
 $a_p = 0,7 - 4,0 \text{ mm}$   
 $f_n = 0,15 - 0,5 \text{ mm/r}$

CCMT 09 T3 08-KM  
 $a_p = 0,5 - 3,0 \text{ mm}$   
 $f_n = 0,1 - 0,3 \text{ mm/r}$



-WM – para un cilindrado medio rentable

Operaciones: cilindrado y refrentado

Componentes: husillos rígidos, ejes, cubos, engranajes, etc.

Ventajas: avances dobles con el mismo acabado superficial o acabado superficial doble mejor con el mismo avance. Ideal cuando resulta prioritario un buen acabado superficial.

-KM

Operaciones: cilindrado, refrentado y perfilado

Componentes: piezas de fundición en general.

Ventajas: fiable para un mecanizado sin problemas. Buena geometría universal para fundición gris y fundición nodular.

CONDICIONES BUENAS



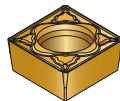
- Cortes continuos
- Premecanizado o costra ligera de fundición.

AVANCE ELEVADO



-WM / GC3215

AVANCE NORMAL



-KM / GC3005

CONDICIONES NORMALES



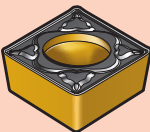
Operaciones de uso general.

AVANCE ELEVADO



-WM / GC3215

AVANCE NORMAL



-KM / GC3215

CONDICIONES DIFÍCILES



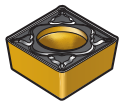
- Cortes intermitentes
- Velocidades de corte bajas.
- Cascarilla gruesa de fundición.

AVANCE ELEVADO

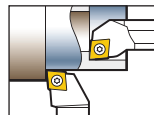


-WM / GC3215

AVANCE NORMAL

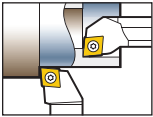


-KM / GC3215

ISO/  
ANSI**K M****Mecanizado medio de fundición gris y  
fundición nodular****Plaquitas de forma básica positivas**

| CÓDIGO DE PEDIDO                                                                                      |                         |   |   | DATOS DE CORTE, CMC 08.2 <sup>1)</sup> / HB 220 |                      |        |        |
|-------------------------------------------------------------------------------------------------------|-------------------------|---|---|-------------------------------------------------|----------------------|--------|--------|
|                                                                                                       |                         |   |   | Velocidad de corte $v_c$ (m/min)                |                      |        |        |
| Una sola cara  $r_e$ |                         |   |   |                                                 |                      |        |        |
|                                                                                                       |                         |   |   | Profundidad<br>de corte<br>$a_p$ mm             | Avance<br>$f_n$ mm/r | GC3005 | GC3215 |
|                                                                                                       |                         |   |   |                                                 |                      |        |        |
|                      | <b>CCMT 09 T3 08-WM</b> |   | ☆ | 1.5 (0.7-4)                                     | 0.3 (0.15-0.5)       |        | 190    |
|                      | <b>DCMX 11 T3 08-WM</b> |   | ☆ | 1.5 (0.5-4)                                     | 0.3 (0.15-0.5)       |        | 190    |
|                      | <b>TCMX 11 03 08-WM</b> |   | ☆ | 1.2 (0.5-3)                                     | 0.3 (0.15-0.5)       |        | 190    |
|                                                                                                       | <b>16 T3 08-WM</b>      |   | ☆ | 1.5 (0.5-4)                                     | 0.3 (0.15-0.5)       |        | 190    |
|                      | <b>CCMT 06 02 04-KM</b> | ☆ | ★ | 0.64 (0.2-2.4)                                  | 0.11 (0.06-0.17)     | 245    | 235    |
|                                                                                                       | <b>06 02 08-KM</b>      | ☆ | ★ | 0.64 (0.4-2.4)                                  | 0.15 (0.08-0.23)     | 240    | 225    |
|                                                                                                       | <b>09 T3 04-KM</b>      | ☆ | ★ | 0.64 (0.25-3)                                   | 0.15 (0.08-0.23)     | 240    | 225    |
|                                                                                                       | <b>09 T3 08-KM</b>      | ☆ | ★ | 0.8 (0.5-3)                                     | 0.2 (0.1-0.3)        | 230    | 215    |
|                      | <b>DCMT 07 02 04-KM</b> | ☆ | ★ | 0.6 (0.19-2.3)                                  | 0.11 (0.06-0.17)     | 245    | 235    |
|                                                                                                       | <b>07 02 08-KM</b>      | ☆ | ★ | 0.6 (0.38-2.3)                                  | 0.15 (0.08-0.23)     | 240    | 225    |
|                                                                                                       | <b>11 T3 04-KM</b>      | ☆ | ★ | 0.8 (0.25-3)                                    | 0.15 (0.08-0.23)     | 240    | 225    |
|                                                                                                       | <b>11 T3 08-KM</b>      | ☆ | ★ | 0.8 (0.5-3)                                     | 0.2 (0.1-0.3)        | 230    | 215    |
|                      | <b>SCMT 09 T3 04-KM</b> | ☆ | ★ | 0.8 (0.25-3)                                    | 0.15 (0.08-0.23)     | 240    | 225    |
|                                                                                                       | <b>09 T3 08-KM</b>      | ☆ | ★ | 0.8 (0.5-3)                                     | 0.2 (0.1-0.3)        | 230    | 215    |
|                      | <b>TCMT 09 02 04-KM</b> | ☆ | ★ | 0.6 (0.19-2.3)                                  | 0.11 (0.06-0.17)     | 245    | 235    |
|                                                                                                       | <b>09 02 08-KM</b>      | ☆ | ★ | 0.6 (0.38-2.3)                                  | 0.15 (0.08-0.23)     | 240    | 225    |
|                                                                                                       | <b>11 03 04-KM</b>      | ☆ | ★ | 0.67 (0.21-2.5)                                 | 0.13 (0.06-0.19)     | 240    | 230    |
|                                                                                                       | <b>11 03 08-KM</b>      | ☆ | ★ | 0.67 (0.42-2.5)                                 | 0.17 (0.09-0.26)     | 235    | 220    |
|                                                                                                       | <b>16 T3 04-KM</b>      | ☆ | ★ | 0.8 (0.25-3)                                    | 0.15 (0.08-0.23)     | 240    | 225    |
|                                                                                                       | <b>16 T3 08-KM</b>      | ☆ | ★ | 0.8 (0.5-3)                                     | 0.2 (0.1-0.3)        | 230    | 215    |
|                    | <b>VBMT 16 04 04-KM</b> | ☆ | ★ | 0.72 (0.23-2.7)                                 | 0.14 (0.07-0.2)      | 240    | 230    |
|                                                                                                       | <b>16 04 08-KM</b>      | ☆ | ★ | 0.72 (0.45-2.7)                                 | 0.18 (0.09-0.27)     | 235    | 220    |
|                    | <b>RCMT 08 03 M0</b>    | ☆ | ★ | 2 (0.8-3.2)                                     | 0.4 (0.08-0.8)       |        | 215    |
|                                                                                                       | <b>10 T3 M0</b>         | ☆ | ★ | 2.5 (1-4)                                       | 0.5 (0.1-1)          |        | 200    |
|                                                                                                       | <b>12 04 M0</b>         | ☆ | ★ | 3 (1.2-4.8)                                     | 0.6 (0.12-1.2)       |        | 190    |

<sup>1)</sup> Para CMC 09.2 reducir la velocidad de corte ( $v_c$ ) un 10%.



Mecanizado medio de fundición gris y fundición nodular

Alta resistencia a la tracción, HB 220 / HB 250

ISO/  
ANSI

K

R

CoroTurn® 107

Una sola cara

CCMT 09 T3 08-KR

$a_p = 1,0 - 4,0 \text{ mm}$

$f_n = 0,12 - 0,35 \text{ mm/r}$

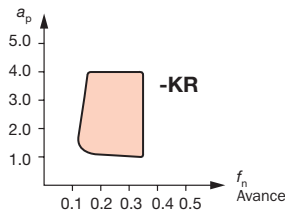
-KR

Operaciones: cilindrado, refrentado y perfilado

Componentes: piezas de fundición en general

Ventajas: geometría positiva con buenas capacidades para desbaste con un buen equilibrio entre un elevado régimen de arranque del metal y una tendencia mínima a las vibraciones. Para operaciones con cortes interrumpidos.

Profundidad de corte

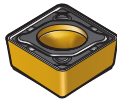


CONDICIONES BUENAS



- Cortes continuos
- Premecanizado o costra ligera de fundición.

AVANCE NORMAL



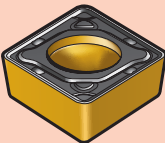
-KR / GC3210

Primera elección  
CONDICIONES NORMALES



Operaciones de uso general.

AVANCE NORMAL



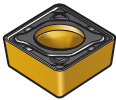
-KR / GC3210

CONDICIONES DIFÍCILES



- Cortes intermitentes
- Velocidades de corte bajas.
- Cascarilla gruesa de fundición.

AVANCE NORMAL

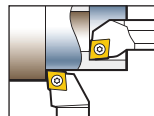


-KR / GC3215

Para fundición gris, CMC 08.2, utilice la calidad GC3205.

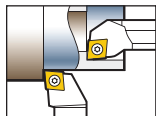
ISO/  
ANSI**K R****Mecanizado medio de fundición gris y  
fundición nodular**

Plaquetas de forma básica positivas



| CÓDIGO DE PEDIDO                                                                                      |                  |        |        |        |        |        | DATOS DE CORTE, CMC 08.2 <sup>1)</sup> / HB 220 |                   |        |        |        |
|-------------------------------------------------------------------------------------------------------|------------------|--------|--------|--------|--------|--------|-------------------------------------------------|-------------------|--------|--------|--------|
|                                                                                                       |                  | ○      |        | ◐      |        | ●      | Velocidad de corte $v_c$ (m/min)                |                   |        |        |        |
| Una sola cara  $r_e$ |                  | GC3205 | GC3210 | GC3205 | GC3210 | GC3215 | Profundidad de corte $a_p$ mm                   | Avance $f_n$ mm/r | GC3205 | GC3210 | GC3215 |
|                      | CCMT 06 02 08-KR |        |        |        |        | ★      | 1.6 (0.8-3.2)                                   | 0.19 (0.09-0.26)  | 215    |        |        |
|                                                                                                       | 09 T3 08-KR      |        |        |        |        | ★      | 2 (1-4)                                         | 0.25 (0.12-0.35)  | 200    |        |        |
|                                                                                                       | 09 T3 12-KR      |        |        |        |        | ★      | 2 (1.2-4)                                       | 0.3 (0.14-0.42)   | 190    |        |        |
|                      | DCMT 11 T3 08-KR | ☆      | ☆      | ☆      | ★      | ☆      | 2 (1-4)                                         | 0.25 (0.12-0.35)  | 355    | 300    | 200    |
|                                                                                                       | 11 T3 12-KR      | ☆      | ☆      | ☆      | ★      | ☆      | 2 (1.2-4)                                       | 0.3 (0.14-0.42)   | 340    | 285    | 190    |
|                      | SCMT 09 T3 08-KR |        |        |        |        | ★      | 2 (1-4)                                         | 0.25 (0.12-0.35)  | 200    |        |        |
|                                                                                                       | 09 T3 12-KR      |        |        |        |        | ★      | 2 (1.2-4)                                       | 0.3 (0.14-0.42)   | 190    |        |        |
|                      | TCMT 11 03 08-KR |        |        |        |        | ★      | 1.5 (0.75-3)                                    | 0.21 (0.1-0.3)    | 210    |        |        |
|                                                                                                       | 11 03 12-KR      |        |        |        |        | ★      | 1.5 (0.9-3)                                     | 0.26 (0.12-0.36)  | 200    |        |        |
|                                                                                                       | 16 T3 08-KR      | ☆      | ☆      | ☆      | ★      | ☆      | 2 (1-4)                                         | 0.25 (0.12-0.35)  | 355    | 300    | 200    |
|                                                                                                       | 16 T3 12-KR      | ☆      | ☆      | ☆      | ★      | ☆      | 2 (1.2-4)                                       | 0.3 (0.14-0.42)   | 340    | 285    | 190    |
|                      | VBMT 16 04 08-KR | ☆      | ☆      | ☆      | ★      | ☆      | 1.8 (0.9-3.6)                                   | 0.23 (0.11-0.32)  | 365    | 305    | 205    |
|                                                                                                       | 16 04 12-KR      | ☆      | ☆      | ☆      | ★      | ☆      | 1.8 (1.1-3.6)                                   | 0.27 (0.13-0.38)  | 350    | 290    | 200    |

<sup>1)</sup> Para CMC 09.2 reducir la velocidad de corte ( $v_c$ ) un 10%.



## MECANIZADO DE ALUMINIO

Aleaciones de aluminio fundidas

ISO/ANSI

**N**

### CoroTurn® 107

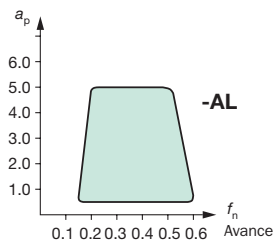
Una sola cara

CCGX 09 T3 08-AL

$a_p = 0,5 - 5,0$  mm

$f_n = 0,15 - 0,6$  mm/r

Profundidad de corte



**-AL-** para cilindrado de aluminio

**Operaciones:** cilindrado, refrentado y perfilado.

**Componentes:** aluminio y otros componentes no féreos en general

**Ventajas:** geometría positiva abierta que proporciona una acción de corte suave a altas velocidades de corte

Mejora de la productividad



- Cortes continuos
- Superficie pre-mecanizada
- También para cilindrado de aluminio >12% Si.

AVANCE NORMAL



...F / CD10

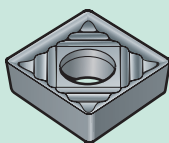
Con punta de diamante

**Primera elección**



- Uso universal
- Aluminio ≤12% Si

AVANCE NORMAL

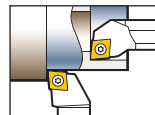


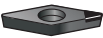
-AL / H10

ISO/ANSI

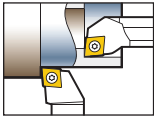
**N****MECANIZADO DE ALUMINIO**

Plaquitas con forma básica positiva



| CÓDIGO DE PEDIDO                                                                    |                                                                                   |      |     | DATOS DE CORTE, CMC 30.21 / HB 75 |                         |             |             |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|-----|-----------------------------------|-------------------------|-------------|-------------|
| Una sola cara                                                                       |                                                                                   | CD10 | H10 | Velocidad de corte $v_c$ (m/min)  |                         |             |             |
|                                                                                     |  |      |     | Profundidad de corte $a_p$ mm     | Avance $f_n$ mm/r       | CD10        | H10         |
|    | <b>CCGX 06 02 02-AL</b>                                                           |      | ★   | 1 (0.3-3)                         | <b>0.12</b> (0.05-0.15) |             | <b>2000</b> |
|                                                                                     | <b>06 02 04-AL</b>                                                                |      | ★   | 1.5 (0.5-3)                       | <b>0.2</b> (0.1-0.3)    |             | <b>2000</b> |
|                                                                                     | <b>09 T3 04-AL</b>                                                                |      | ★   | 1.5 (0.5-5)                       | <b>0.2</b> (0.1-0.3)    |             | <b>2000</b> |
|                                                                                     | <b>09 T3 08-AL</b>                                                                |      | ★   | 1.5 (0.5-5)                       | <b>0.3</b> (0.15-0.6)   |             | <b>2000</b> |
|    | <b>CCMW 06 02 04FP</b>                                                            | ★    |     | 0.5 (0.1-2.3)                     | <b>0.1</b> (0.05-0.2)   | <b>2000</b> |             |
|                                                                                     | <b>09 T3 04FP</b>                                                                 | ★    |     | 0.5 (0.1-3.4)                     | <b>0.1</b> (0.05-0.2)   | <b>2000</b> |             |
|                                                                                     | <b>09 T3 08FP</b>                                                                 | ★    |     | 1 (0.1-3.4)                       | <b>0.15</b> (0.05-0.4)  | <b>2000</b> |             |
|    | <b>DCGX 07 02 02-AL</b>                                                           |      | ★   | 1 (0.3-4)                         | <b>0.12</b> (0.05-0.15) |             | <b>2000</b> |
|                                                                                     | <b>07 02 04-AL</b>                                                                |      | ★   | 1.5 (0.5-4)                       | <b>0.2</b> (0.1-0.3)    |             | <b>2000</b> |
|                                                                                     | <b>11 T3 02-AL</b>                                                                |      | ★   | 1 (0.3-5.5)                       | <b>0.12</b> (0.05-0.15) |             | <b>2000</b> |
|                                                                                     | <b>11 T3 04-AL</b>                                                                |      | ★   | 1.5 (0.5-5.5)                     | <b>0.2</b> (0.1-0.3)    |             | <b>2000</b> |
|                                                                                     | <b>11 T3 08-AL</b>                                                                |      | ★   | 1.5 (0.5-5.5)                     | <b>0.3</b> (0.15-0.6)   |             | <b>2000</b> |
|    | <b>DCMW 11 T3 04FP</b>                                                            | ★    |     | 0.5 (0.1-3.3)                     | <b>0.1</b> (0.05-0.2)   | <b>2000</b> |             |
|                                                                                     | <b>11 T3 08FP</b>                                                                 | ★    |     | 1 (0.1-3)                         | <b>0.15</b> (0.05-0.4)  | <b>2000</b> |             |
|    | <b>SCGX 09 T3 08-AL</b>                                                           |      | ★   | 1.5 (0.5-5)                       | <b>0.3</b> (0.15-0.6)   |             | <b>2000</b> |
|    | <b>TCGX 09 02 02-AL</b>                                                           |      | ★   | 1 (0.3-4)                         | <b>0.12</b> (0.05-0.15) |             | <b>2000</b> |
|                                                                                     | <b>09 02 04-AL</b>                                                                |      | ★   | 1.5 (0.5-4)                       | <b>0.2</b> (0.1-0.3)    |             | <b>2000</b> |
|                                                                                     | <b>11 03 02-AL</b>                                                                |      | ★   | 1 (0.3-5)                         | <b>0.12</b> (0.05-0.15) |             | <b>2000</b> |
|                                                                                     | <b>11 03 04-AL</b>                                                                |      | ★   | 1.5 (0.5-5)                       | <b>0.2</b> (0.1-0.3)    |             | <b>2000</b> |
|                                                                                     | <b>11 03 08-AL</b>                                                                |      | ★   | 1.5 (0.5-5)                       | <b>0.3</b> (0.15-0.6)   |             | <b>2000</b> |
|                                                                                     | <b>16 T3 04-AL</b>                                                                |      | ★   | 1.5 (0.5-7)                       | <b>0.2</b> (0.1-0.3)    |             | <b>2000</b> |
|                                                                                     | <b>16 T3 08-AL</b>                                                                |      | ★   | 1.5 (0.5-7)                       | <b>0.3</b> (0.15-0.6)   |             | <b>2000</b> |
|                                                                                     | <b>TCMW 09 02 04FP</b>                                                            | ★    |     | 0.5 (0.1-2.2)                     | <b>0.1</b> (0.05-0.2)   | <b>2000</b> |             |
|  | <b>11 03 04FP</b>                                                                 | ★    |     | 0.5 (0.1-2.2)                     | <b>0.1</b> (0.05-0.2)   | <b>2000</b> |             |
|                                                                                     | <b>11 03 08FP</b>                                                                 | ★    |     | 1 (0.1-1.9)                       | <b>0.15</b> (0.05-0.4)  | <b>2000</b> |             |
|                                                                                     | <b>16 T3 04FP</b>                                                                 | ★    |     | 0.5 (0.1-3.4)                     | <b>0.1</b> (0.05-0.2)   | <b>2000</b> |             |
|                                                                                     | <b>16 T3 08FP</b>                                                                 | ★    |     | 1 (0.1-3.1)                       | <b>0.15</b> (0.05-0.4)  | <b>2000</b> |             |
|                                                                                     | <b>TCMW 16 T3 04FRP <sup>1)</sup></b>                                             | ★    |     | 0.5 (0.1-7)                       | <b>0.1</b> (0.05-0.2)   | <b>2000</b> |             |
|  | <b>16 T3 04FLP <sup>1)</sup></b>                                                  | ★    |     | 0.5 (0.1-7)                       | <b>0.1</b> (0.05-0.2)   | <b>2000</b> |             |
|  | <b>VCGX 11 03 02-AL</b>                                                           |      | ★   | 1 (0.3-3)                         | <b>0.12</b> (0.05-0.15) | <b>2000</b> |             |
|                                                                                     | <b>11 03 04-AL</b>                                                                |      | ★   | 1.5 (0.5-3)                       | <b>0.2</b> (0.1-0.3)    | <b>2000</b> |             |
|                                                                                     | <b>16 04 04-AL</b>                                                                |      | ★   | 1.5 (0.5-5)                       | <b>0.2</b> (0.1-0.3)    |             | <b>2000</b> |
|                                                                                     | <b>16 04 08-AL</b>                                                                |      | ★   | 1.5 (0.5-5)                       | <b>0.3</b> (0.15-0.6)   |             | <b>2000</b> |
|                                                                                     | <b>16 04 12-AL</b>                                                                |      | ★   | 1.5 (0.5-5)                       | <b>0.4</b> (0.15-0.8)   |             | <b>2000</b> |
|  | <b>VCMW 11 03 04FP</b>                                                            | ★    |     | 0.5 (0.1-3.5)                     | <b>0.1</b> (0.05-0.2)   | <b>2000</b> |             |
|                                                                                     | <b>16 04 04FP</b>                                                                 | ★    |     | 0.5 (0.1-3.5)                     | <b>0.1</b> (0.05-0.2)   | <b>2000</b> |             |
|                                                                                     | <b>16 04 08FP</b>                                                                 | ★    |     | 1 (0.1-2.8)                       | <b>0.15</b> (0.05-0.4)  | <b>2000</b> |             |
|                                                                                     | <b>16 04 12FP</b>                                                                 | ★    |     | 1 (0.1-2.1)                       | <b>0.15</b> (0.05-0.4)  | <b>2000</b> |             |
|  | <b>RCGX 08 03 M0-AL</b>                                                           |      | ★   | 1.5 (0.8-3.2)                     | <b>0.8</b> (0.25-1.7)   |             | <b>2000</b> |
|                                                                                     | <b>10 T3 M0-AL</b>                                                                |      | ★   | 2 (1-4)                           | <b>0.8</b> (0.25-2)     |             | <b>2000</b> |
|                                                                                     | <b>12 04 M0-AL</b>                                                                |      | ★   | 2.5 (1.2-4.8)                     | <b>1</b> (0.3-2.5)      |             | <b>2000</b> |

<sup>1)</sup> R = a derecha, L = a izquierda



ACABADO DE SUPER ALEACIONES

Super aleaciones termorresistentes, HB 350

ISO/  
ANSI

S

F

CoroTurn® 107

Una sola cara

CCMT 09 T3 04-WF  
 $a_p = 0,3 - 2,1 \text{ mm}$   
 $f_n = 0,07 - 0,21 \text{ mm/r}$   
CCMT 09 T3 04-MF  
 $a_p = 0,1 - 1,4 \text{ mm}$   
 $f_n = 0,06 - 0,16 \text{ mm/r}$

WF – para un cilindrado en acabado productivo

Operaciones: cilindrado y refrentado

Componentes: piezas en super aleaciones termorresistentes en general

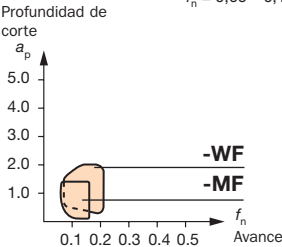
Ventajas: acabado superficial doble mejor con el mismo avance. Ideal cuando resulta prioritario un buen acabado superficial.

-MF

Operaciones: cilindrado, refrentado y perfilado

Componentes: piezas en super aleaciones termorresistentes en general

Ventajas: geometría positiva de corte ligero con fuerzas de corte bajas para piezas esbeltas, de paredes finas o de sujeción inestable.



CONDICIONES BUENAS



- Cortes continuos
- Superficie pre-mecanizada.

AVANCE NORMAL



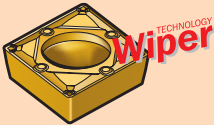
-UM / S05F

CONDICIONES NORMALES



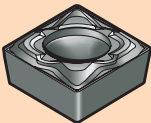
Operaciones de uso general.

AVANCE ELEVADO



-WF / GC1115

AVANCE NORMAL



-MF / GC1105  
(-UM / GC1105)

CONDICIONES DIFÍCILES



- Cortes intermitentes
- Velocidades de corte bajas.
- Condiciones tenaces/envejecidas, cascarilla de forja.

AVANCE NORMAL



-MF / GC1115

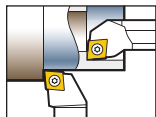
-UM = plaquita rectificadora con gran precisión y filo de corte agudo precisión.



**S F**

## Plaquetas con forma básica positiva

| CÓDIGO DE PEDIDO                                                                                               |                                                                                     |             | DATOS DE CORTE, CMC 20.22/HB 350                                                  |                                                                                   |                                                                                   |                                                                                   |                                           |                            |        |        |
|----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------|----------------------------|--------|--------|
|                                                                                                                |                                                                                     |             |  |  |  |  | Velocidad de corte v <sub>c</sub> (m/min) |                            |        |        |
| Una sola cara  r <sub>e</sub> |                                                                                     |             | S05F                                                                              | GC1115                                                                            | GC1105                                                                            | GC1115                                                                            | Profundidad de corte a <sub>p</sub> mm    | Avance f <sub>n</sub> mm/r | GC1105 | GC1115 |
|                               | CCMT                                                                                | 06 02 04-WF |                                                                                   | ★                                                                                 |                                                                                   |                                                                                   | 0.8 (0.3-1.4)                             | 0.09 (0.05-0.21)           |        | 45     |
|                                                                                                                |                                                                                     | 06 02 08-WF |                                                                                   | ★                                                                                 |                                                                                   |                                                                                   | 0.8 (0.3-1.4)                             | 0.11 (0.09-0.25)           |        | 45     |
|                                                                                                                |                                                                                     | 09 T3 04-WF |                                                                                   | ★                                                                                 |                                                                                   |                                                                                   | 1 (0.3-2.1)                               | 0.14 (0.07-0.21)           |        | 45     |
|                                                                                                                |                                                                                     | 09 T3 08-WF |                                                                                   | ★                                                                                 |                                                                                   |                                                                                   | 1 (0.3-2.1)                               | 0.18 (0.12-0.35)           |        | 45     |
|                                                                                                                | DCMX                                                                                | 07 02 04-WF |                                                                                   | ★                                                                                 |                                                                                   |                                                                                   | 0.7 (0.3-1.4)                             | 0.08 (0.05-0.18)           |        | 45     |
|                                                                                                                |                                                                                     | 07 02 08-WF |                                                                                   | ★                                                                                 |                                                                                   |                                                                                   | 0.7 (0.3-1.4)                             | 0.11 (0.09-0.25)           |        | 45     |
|                                                                                                                |                                                                                     | 11 T3 04-WF |                                                                                   | ★                                                                                 |                                                                                   |                                                                                   | 1 (0.3-2.1)                               | 0.14 (0.07-0.21)           |        | 45     |
|                                                                                                                |                                                                                     | 11 T3 08-WF |                                                                                   | ★                                                                                 |                                                                                   |                                                                                   | 1 (0.3-2.1)                               | 0.18 (0.12-0.28)           |        | 45     |
|                                                                                                                | TCMX                                                                                | 09 02 04-WF |                                                                                   | ★                                                                                 |                                                                                   |                                                                                   | 0.7 (0.3-1.4)                             | 0.08 (0.05-0.21)           |        | 45     |
|                                                                                                                |                                                                                     | 09 02 08-WF |                                                                                   | ★                                                                                 |                                                                                   |                                                                                   | 0.7 (0.3-1.4)                             | 0.15 (0.1-0.2)             |        | 45     |
|                                                                                                                |                                                                                     | 11 03 04-WF |                                                                                   | ★                                                                                 |                                                                                   |                                                                                   | 1 (0.3-1.8)                               | 0.14 (0.07-0.21)           |        | 45     |
|                                                                                                                |                                                                                     | 11 03 08-WF |                                                                                   | ★                                                                                 |                                                                                   |                                                                                   | 1 (0.3-1.8)                               | 0.18 (0.12-0.28)           |        | 45     |
|                               | CCMT                                                                                | 09 02 04-WF |                                                                                   | ★                                                                                 |                                                                                   |                                                                                   | 1.2 (0.3-2.4)                             | 0.14 (0.07-0.2)            |        | 45     |
|                                                                                                                |                                                                                     | 16 T3 04-WF |                                                                                   | ★                                                                                 |                                                                                   |                                                                                   | 1.2 (0.3-2.4)                             | 0.14 (0.07-0.2)            |        | 45     |
|                                                                                                                |                                                                                     | 16 T3 08-WF |                                                                                   | ★                                                                                 |                                                                                   |                                                                                   | 1.2 (0.3-2.5)                             | 0.18 (0.12-0.35)           |        | 45     |
|                                                                                                                |                                                                                     |             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                           |                            |        |        |
|                                                                                                                | CCGT                                                                                | 06 02 02-MF |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.3 (0.06-1.2)                            | 0.04 (0.03-0.08)           |        | 45     |
|                                                                                                                |                                                                                     | 06 02 04-MF |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.3 (0.1-1.2)                             | 0.06 (0.05-0.12)           |        | 45     |
|                                                                                                                |                                                                                     | 09 T3 02-MF |                                                                                   |                                                                                   | ★                                                                                 | ★                                                                                 | 0.35 (0.08-1.4)                           | 0.05 (0.04-0.11)           | 80     | 45     |
|                                                                                                                |                                                                                     | 09 T3 04-MF |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.35 (0.1-1.4)                            | 0.08 (0.06-0.16)           |        | 45     |
|                                                                                                                | CCGT                                                                                | 09 T3 08-MF |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.35 (0.15-1.4)                           | 0.11 (0.08-0.21)           |        | 45     |
|                                                                                                                |                                                                                     | 06 02 02-UM |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.5 (0.1-1.1)                             | 0.05 (0.02-0.08)           |        | 45     |
|                                                                                                                |                                                                                     | 06 02 04-UM |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 1 (0.5-1.4)                               | 0.14 (0.08-0.21)           |        | 45     |
|                                                                                                                |                                                                                     | 09 T3 02-UM |                                                                                   |                                                                                   | ★                                                                                 | ★                                                                                 | 0.5 (0.1-1.1)                             | 0.05 (0.02-0.08)           | 80     | 45     |
| DCMT                                                                                                           | 09 T3 04-UM                                                                         |             |                                                                                   |                                                                                   | ★                                                                                 | 1.3 (0.5-2.1)                                                                     | 0.11 (0.08-0.18)                          | 80                         | 45     |        |
|                                                                                                                | 09 T3 08-UM                                                                         |             |                                                                                   |                                                                                   | ★                                                                                 | 1.3 (0.5-2.1)                                                                     | 0.14 (0.12-0.25)                          | 80                         | 45     |        |
|                                                                                                                | 07 02 02-MF                                                                         |             |                                                                                   |                                                                                   | ★                                                                                 | 0.26 (0.06-1.1)                                                                   | 0.04 (0.03-0.08)                          |                            | 45     |        |
|                                                                                                                | 07 02 04-MF                                                                         |             |                                                                                   |                                                                                   | ★                                                                                 | 0.26 (0.08-1.1)                                                                   | 0.06 (0.05-0.12)                          |                            | 45     |        |
|                               | DCMT                                                                                | 11 T3 02-MF |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.35 (0.08-1.4)                           | 0.05 (0.04-0.11)           |        | 45     |
|                                                                                                                |                                                                                     | 11 T3 04-MF |                                                                                   |                                                                                   | ★                                                                                 | ★                                                                                 | 0.35 (0.11-1.4)                           | 0.08 (0.06-0.16)           | 80     | 45     |
|                                                                                                                |                                                                                     | 11 T3 08-MF |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.35 (0.15-1.4)                           | 0.11 (0.08-0.21)           |        | 45     |
|                                                                                                                |                                                                                     |             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                           |                            |        |        |
|                                                                                                                | DCGT                                                                                | 07 02 02-UM |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.5 (0.1-1.1)                             | 0.05 (0.02-0.08)           |        | 45     |
|                                                                                                                |                                                                                     | 07 02 04-UM |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 1 (0.5-1.8)                               | 0.11 (0.08-0.18)           |        | 45     |
|                                                                                                                |                                                                                     | 11 T3 02-UM |                                                                                   |                                                                                   | ★                                                                                 | ★                                                                                 | 0.5 (0.1-1.1)                             | 0.02 (0.01-0.08)           | 80     | 45     |
|                                                                                                                |                                                                                     | 11 T3 04-UM |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 1.3 (0.5-2.1)                             | 0.11 (0.08-0.18)           | 80     | 45     |
|                                                                                                                | SCMT                                                                                | 11 T3 08-UM | ☆                                                                                 |                                                                                   |                                                                                   | ★                                                                                 | 1.3 (0.5-2.1)                             | 0.14 (0.12-0.25)           | 80     | 45     |
|                                                                                                                |                                                                                     | 09 T3 04-MF |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.35 (0.11-1.4)                           | 0.08 (0.06-0.16)           |        | 45     |
|                                                                                                                |                                                                                     | 09 T3 08-MF |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.35 (0.15-1.4)                           | 0.11 (0.08-0.21)           |        | 45     |
|                                                                                                                |                                                                                     |             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                           |                            |        |        |
|                             | TCMT                                                                                | 09 02 02-MF |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.3 (0.06-1.2)                            | 0.04 (0.03-0.09)           |        | 45     |
|                                                                                                                |                                                                                     | 09 02 04-MF |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.3 (0.1-1.2)                             | 0.07 (0.05-0.13)           |        | 45     |
|                                                                                                                |                                                                                     | 11 03 02-MF |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.3 (0.06-1.2)                            | 0.04 (0.03-0.09)           |        | 45     |
|                                                                                                                |                                                                                     | 11 03 04-MF |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.3 (0.1-1.2)                             | 0.07 (0.05-0.13)           |        | 45     |
|                                                                                                                | VBMT                                                                                | 11 03 08-MF |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.3 (0.13-1.2)                            | 0.09 (0.07-0.18)           |        | 45     |
|                                                                                                                |                                                                                     | 16 T3 04-MF |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.35 (0.11-1.4)                           | 0.08 (0.06-0.16)           |        | 45     |
|                                                                                                                |                                                                                     | 11 03 02-MF |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.3 (0.06-1.2)                            | 0.04 (0.03-0.09)           |        | 45     |
|                                                                                                                |                                                                                     | 11 03 04-MF |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.3 (0.1-1.2)                             | 0.07 (0.05-0.13)           |        | 45     |
|                                                                                                                | VBGT                                                                                | 11 03 08-MF |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.32 (0.07-1.3)                           | 0.05 (0.04-0.09)           |        | 45     |
|                                                                                                                |                                                                                     | 16 04 02-MF |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.32 (0.1-1.3)                            | 0.07 (0.05-0.14)           |        | 45     |
|                                                                                                                |                                                                                     | 16 04 04-MF |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.32 (0.1-1.3)                            | 0.09 (0.07-0.19)           |        | 45     |
|                                                                                                                |                                                                                     | 16 04 08-MF |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.32 (0.14-1.3)                           | 0.09 (0.07-0.19)           |        | 45     |
|                             | VCMT                                                                                | 16 04 02-UM |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.5 (0.1-1.1)                             | 0.05 (0.02-0.08)           |        | 45     |
|                                                                                                                |                                                                                     | 16 04 04-UM | ☆                                                                                 |                                                                                   | ★                                                                                 | ★                                                                                 | 1.3 (0.5-2.8)                             | 0.14 (0.08-0.21)           | 80     | 45     |
|                                                                                                                |                                                                                     | 16 04 08-UM |                                                                                   |                                                                                   | ★                                                                                 | ★                                                                                 | 1.3 (0.5-2.8)                             | 0.18 (0.12-0.28)           | 75     | 45     |
|                                                                                                                |                                                                                     |             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                           |                            |        |        |
|                                                                                                                | RCMT                                                                                | 11 03 01-UM |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.3 (0.1-0.7)                             | 0.02 (0.01-0.06)           |        | 45     |
|                                                                                                                |                                                                                     | 11 03 02-UM |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 0.5 (0.1-1.1)                             | 0.05 (0.02-0.08)           |        | 45     |
|                                                                                                                |                                                                                     | 11 03 04-UM |                                                                                   |                                                                                   |                                                                                   | ★                                                                                 | 1.3 (0.5-2.1)                             | 0.11 (0.08-0.18)           |        | 45     |
|                                                                                                                |                                                                                     |             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                           |                            |        |        |
|                                                                                                                |  | RCMT        | 08 03 M0-SM                                                                       | ☆                                                                                 |                                                                                   | ★                                                                                 | 1 (0.33-2)                                | 0.2 (0.15-0.3)             | 70     |        |
|                                                                                                                |                                                                                     |             | 10 T3 M0-SM                                                                       | ☆                                                                                 |                                                                                   | ★                                                                                 | 1.5 (0.4-2.5)                             | 0.25 (0.18-0.4)            | 80     |        |
|                                                                                                                |                                                                                     |             | 12 04 M0-SM                                                                       | ☆                                                                                 |                                                                                   | ★                                                                                 | 2 (0.5-3)                                 | 0.3 (0.2-0.5)              | 80     |        |



## MECANIZADO MEDIO DE SUPER ALEACIONES

ISO/  
ANSI**S****M**

Super aleaciones termorresistentes, HB 350

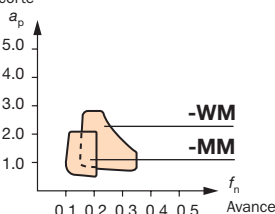
### CoroTurn® 107

Una sola  
cara

CCMT 09 T3 08-WM

 $a_p = 0,7 - 2,8 \text{ mm}$  $f_n = 0,15 - 0,35 \text{ mm/r}$ 

CCMT 09 T3 08-MM

 $a_p = 0,5 - 2,1 \text{ mm}$  $f_n = 0,10 - 0,21 \text{ mm/r}$ Profundidad de  
corte

**-WM – para un cilindrado medio productivo**

**Operaciones:** cilindrado y refrentado

**Componentes:** husillos rígidos, ejes, cubos, engranajes, etc.

**Ventajas:** acabado superficial doble mejor con el mismo avance. Ideal cuando resulta prioritario un buen acabado superficial.

**-MM**

**Operaciones:** cilindrado, refrentado y perfilado

**Componentes:** componentes en super aleaciones termorresistentes en general

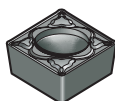
**Ventajas:** geometría universal fiable con un mecanizado sin problemas

### CONDICIONES BUENAS



- Cortes continuos
- Superficie pre-mecanizada.

### AVANCE NORMAL



**-MM / GC1105**  
(-UM / GC1105)

### Primera elección CONDICIONES NORMALES



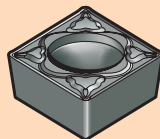
Operaciones de uso  
general.

### AVANCE ELEVADO



**-WM / GC1115**

### AVANCE NORMAL



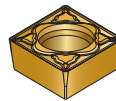
**-MM / GC1105**  
(-UM / GC1105)

### CONDICIONES DIFÍCILES



- Cortes intermitentes
- Bajas velocidades de corte.
- Condiciones tenaces/envejecidas, cascarilla de forja.

### AVANCE NORMAL

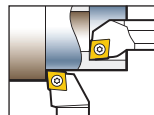


**-MM / GC1115**

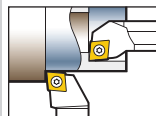
-UM = plaquita rectificada con gran precisión y filo de corte agudo precisión.

ISO/  
ANSI**S M****MECANIZADO MEDIO DE SUPER ALEACIONES**

Plaquetas con forma básica positiva



| CÓDIGO DE PEDIDO                                                                  |  |  | DATOS DE CORTE, CMC 20.22/HB 350 |        |        |        |                                  |  |
|-----------------------------------------------------------------------------------|--|--|----------------------------------|--------|--------|--------|----------------------------------|--|
|                                                                                   |  |  |                                  |        |        |        | Velocidad de corte $v_c$ (m/min) |  |
| Una sola cara                                                                     |  |  |                                  |        |        |        |                                  |  |
|  |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  | GC1105                           | GC1115 | GC1105 | GC1115 |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |
|                                                                                   |  |  |                                  |        |        |        |                                  |  |



# ACABADO DE PIEZAS TEMPLADAS

Endurecido y templado, HRC 60

ISO/  
ANSI

**H**

**F**

## CoroTurn® 107

Una sola  
cara

CCGW09T308T01020FWH

$a_p = 0,07 - 0,8 \text{ mm}$

$f_n = 0,05 - 0,35 \text{ mm/r}$

Profundidad de  
corte

$a_p$

0.8

0.7

0.6

0.5

0.4

0.3

0.2

0.1

CCGW09T308S01020F

$a_p = 0,07 - 0,8 \text{ mm}$

$f_n = 0,05 - 0,30 \text{ mm/r}$

.CGW

.CGW WH

$f_n$   
Avance

**Operaciones:** cilindrado longitudinal, refrentado y perfilado.

**Componentes:** cajas de cambios templadas y otros componentes de trenes de engranajes.

**Ventajas:** excelente acabado en materiales templados. A veces comparado con el rectificado.

**Posible optimización:** geometría Wiper WH.

### CONDICIONES BUENAS



- Cortes continuos
- Superficie pre-mecanizada.

#### AVANCE ELEVADO



.CGW WH / CB7015

#### AVANCE NORMAL



.CGW / CB7015

### Primera elección CONDICIONES NORMALES



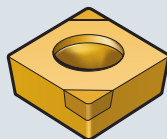
Operaciones de uso  
general.

#### AVANCE ELEVADO



.CGW WH / CB7015

#### AVANCE NORMAL



.CGW / CB7015

### CONDICIONES DIFÍCILES



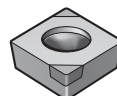
- Cortes interrumpidos.
- Condiciones inestables.

#### AVANCE ELEVADO



.CGW WH / CB7015

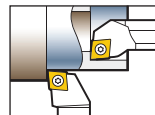
#### AVANCE NORMAL



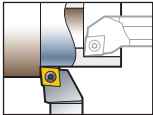
.CGW / CB7015

ISO/  
ANSI**H F****ACABADO DE PIEZAS TEMPLADAS**

Plaquetas con forma básica positiva



| CÓDIGO DE PEDIDO                                                                                      |                      | <br>CB7015      CB7025 |   | DATOS DE CORTE, CMC 04.1/HRC 60  |                      |                                                        |     |
|-------------------------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------------------------------------------|---|----------------------------------|----------------------|--------------------------------------------------------|-----|
| Una sola cara  $r_e$ |                      |                                                                                                         |   | Profundidad de corte<br>$a_p$ mm | Avance<br>$f_n$ mm/r | Velocidad de corte $v_c$ (m/min)<br>CB7015      CB7025 |     |
|                      | CCGW 09T304T01020FWH | ★                                                                                                       |   | 0.1(0.07-0.4)                    | 0.18(0.05-0.25)      | 180                                                    |     |
|                                                                                                       | CCGW 09T308T01020FWH | ★                                                                                                       |   | 0.2(0.07-0.8)                    | 0.28(0.05-0.35)      | 155                                                    |     |
| <b>TECHNOLOGY</b><br><b>Wiper</b>                                                                     |                      |                                                                                                         |   |                                  |                      |                                                        |     |
|                      | CCGW 09T304S01020FWH |                                                                                                         | ★ | 0.1(0.07-0.4)                    | 0.18(0.05-0.25)      |                                                        | 145 |
|                                                                                                       | CCGW 09T308S01020FWH |                                                                                                         | ★ | 0.2(0.07-0.8)                    | 0.28(0.05-0.35)      |                                                        | 130 |
|                      | CCGW 09T304S01020F   | ★                                                                                                       |   | 0.1(0.07-0.4)                    | 0.1(0.05-0.2)        | 215                                                    |     |
|                                                                                                       | CCGW 09T308S01020F   | ★                                                                                                       |   | 0.2(0.07-0.8)                    | 0.15(0.05-0.3)       | 190                                                    |     |
|                      | CCGW 09T304S01020F   |                                                                                                         | ★ | 0.1(0.07-0.4)                    | 0.1(0.05-0.2)        |                                                        | 165 |
|                                                                                                       | CCGW 09T308S01020F   |                                                                                                         | ★ | 0.2(0.07-0.8)                    | 0.15(0.05-0.3)       |                                                        | 150 |
|                      | DCGW 11T304S01020F   | ★                                                                                                       |   | 0.1(0.07-0.4)                    | 0.1(0.05-0.2)        | 215                                                    |     |
|                                                                                                       | 11T308S01020F        | ★                                                                                                       |   | 0.2(0.07-0.8)                    | 0.15(0.05-0.3)       | 190                                                    |     |
|                      | DCGW 11T304S01020F   |                                                                                                         | ★ | 0.1(0.07-0.4)                    | 0.1(0.05-0.2)        |                                                        | 165 |
|                                                                                                       | 11T308S01020F        |                                                                                                         | ★ | 0.2(0.07-0.8)                    | 0.15(0.05-0.3)       |                                                        | 150 |
|                     | TCGW 090202S01020F   | ★                                                                                                       |   | 0.07(0.04-0.2)                   | 0.07(0.03-0.1)       | 235                                                    |     |
|                                                                                                       | 090204S01020F        | ★                                                                                                       |   | 0.1(0.07-0.4)                    | 0.1(0.05-0.2)        | 215                                                    |     |
|                                                                                                       | TCGW 110304S01020F   | ★                                                                                                       |   | 0.1(0.07-0.4)                    | 0.1(0.05-0.2)        | 215                                                    |     |
|                                                                                                       | 110308S01020F        | ★                                                                                                       |   | 0.2(0.07-0.8)                    | 0.15(0.05-0.3)       | 190                                                    |     |
|                    | TCGW 090202S01020F   |                                                                                                         | ★ | 0.07(0.04-0.2)                   | 0.07(0.03-0.1)       |                                                        | 170 |
|                                                                                                       | 090204S01020F        |                                                                                                         | ★ | 0.1(0.07-0.4)                    | 0.1(0.05-0.2)        |                                                        | 165 |
|                                                                                                       | TCGW 110304S01020F   |                                                                                                         | ★ | 0.1(0.07-0.4)                    | 0.1(0.05-0.2)        |                                                        | 165 |
|                                                                                                       | 110308S01020F        |                                                                                                         | ★ | 0.2(0.07-0.8)                    | 0.15(0.05-0.3)       |                                                        | 150 |
|                    | VBGW 160404S01020F   | ★                                                                                                       |   | 0.1(0.07-0.4)                    | 0.1(0.05-0.2)        | 215                                                    |     |
|                                                                                                       | 160408S01020F        | ★                                                                                                       |   | 0.2(0.07-0.8)                    | 0.15(0.05-0.3)       | 190                                                    |     |
|                    | VBGW 160404S01020F   |                                                                                                         | ★ | 0.1(0.07-0.4)                    | 0.1(0.05-0.2)        |                                                        | 165 |
|                                                                                                       | 160408S01020F        |                                                                                                         | ★ | 0.2(0.07-0.8)                    | 0.15(0.05-0.3)       |                                                        | 150 |



Mecanizado exterior con CoroTurn® 107,  
plaquitas positivas  
Tamaños de mango 0808 – 2525

CoroTurn® 107 Diseño de sujeción por tornillo

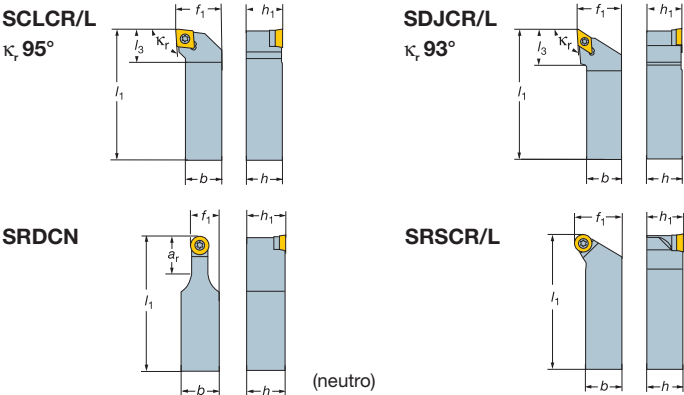
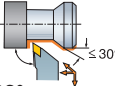
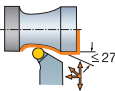


Ilustración a derecha

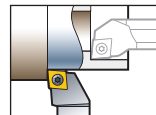
|                                                                                                  | Plaquita                                                                                        | Código de pedido                   | Dimensiones, mm |     |       |     |       |       |       |            |  Nm |
|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------|-----------------|-----|-------|-----|-------|-------|-------|------------|--------------------------------------------------------------------------------------|
|                                                                                                  |                                                                                                 |                                    | $a_r$           | $h$ | $h_1$ | $b$ | $l_1$ | $l_3$ | $f_1$ | $r_e^{1)}$ |                                                                                      |
| <br><b>95°</b>   | <br><b>C</b>   | <b>06</b> <b>SCLCR/L 0808D06</b>   | –               | 8   | 8     | 8   | 60    | 13    | 10    | 0.4        | <b>7IP 0.9</b><br><b>15IP 3.0</b>                                                    |
|                                                                                                  |                                                                                                 | <b>1010E06</b>                     | –               | 10  | 10    | 10  | 70    | 13    | 12    | 0.4        |                                                                                      |
|                                                                                                  |                                                                                                 | <b>09</b> <b>SCLCR/L 1212F09-M</b> | –               | 12  | 12    | 12  | 80    | 19.5  | 16    | 0.8        |                                                                                      |
|                                                                                                  |                                                                                                 | <b>1616H09</b>                     | –               | 16  | 16    | 16  | 100   | 18    | 20    | 0.8        |                                                                                      |
|                                                                                                  |                                                                                                 | <b>2020K09</b>                     | –               | 20  | 20    | 20  | 125   | 18    | 25    | 0.8        |                                                                                      |
| <br><b>93°</b>   | <br><b>D</b>   | <b>07</b> <b>SDJCR/L 1010E07</b>   | –               | 10  | 10    | 10  | 70    | 17    | 12    | 0.4        | <b>7IP 0.9</b><br><b>15IP 3.0</b>                                                    |
|                                                                                                  |                                                                                                 | <b>1212F07</b>                     | –               | 12  | 12    | 12  | 80    | 19    | 16    | 0.4        |                                                                                      |
|                                                                                                  |                                                                                                 | <b>1616H07</b>                     | –               | 16  | 16    | 16  | 100   | 19    | 20    | 0.4        |                                                                                      |
|                                                                                                  |                                                                                                 | <b>2020K07</b>                     | –               | 20  | 20    | 20  | 125   | 22    | 25    | 0.4        |                                                                                      |
|                                                                                                  |                                                                                                 | <b>11</b> <b>SDJCR/L 1616H11</b>   | –               | 16  | 16    | 16  | 100   | 24    | 20    | 0.8        |                                                                                      |
|                                                                                                  |                                                                                                 | <b>2020K11</b>                     | –               | 20  | 20    | 20  | 125   | 24    | 25    | 0.8        |                                                                                      |
|                                                                                                  |                                                                                                 | <b>2525M11</b>                     | –               | 25  | 25    | 25  | 150   | 28    | 32    | 0.8        |                                                                                      |
| <br><b>90°</b> | <br><b>R</b> | <b>08</b> <b>SRDCN 1616H08</b>     | 16              | 16  | 16    | 16  | 100   | –     | 12    | –          | <b>9IP 1.4</b>                                                                       |
|                                                                                                  |                                                                                                 | <b>10</b> <b>SRDCN 2020K10-A</b>   | 25              | 20  | 20    | 20  | 125   | –     | 15    | –          | <b>15IP 3.0</b>                                                                      |
|                                                                                                  |                                                                                                 | <b>2525M10-A</b>                   | 25              | 25  | 25    | 25  | 150   | –     | 17.5  | –          |                                                                                      |
|                                                                                                  |                                                                                                 | <b>12</b> <b>SRDCN 2020K12-A</b>   | 25              | 20  | 20    | 20  | 125   | –     | 16    | –          | <b>15IP 3.0</b>                                                                      |
|                                                                                                  |                                                                                                 | <b>2525M12-A</b>                   | 28              | 25  | 25    | 25  | 150   | –     | 18.5  | –          |                                                                                      |
| <br><b>27°</b> | <br><b>R</b> | <b>10</b> <b>SRSCR/L 2020K10</b>   | –               | 20  | 20    | 20  | 125   | –     | 25    | –          | <b>15IP 3.0</b>                                                                      |
|                                                                                                  |                                                                                                 | <b>2525M10</b>                     | –               | 25  | 25    | 25  | 150   | –     | 32    | –          |                                                                                      |
|                                                                                                  |                                                                                                 | <b>12</b> <b>SRSCR/L 2525M12</b>   | –               | 25  | 25    | 25  | 150   | –     | 32    | –          | <b>15IP 3.0</b>                                                                      |

<sup>1)</sup>  $r_e$  = radio de punta en plaquita patrón

Ejemplo de pedido: 2 piezas SCLCR 0808D06  
(R=A derecha, N=Neutro, L=A izquierda)

# Mecanizado exterior con CoroTurn® 107, plaquitas positivas

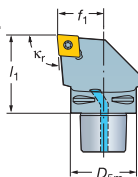
Tamaños Coromant Capto C4 – C6



CoroTurn® 107 Diseño de sujeción por tornillo

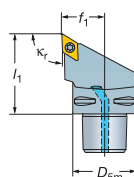
**SCLCR/L**

$\kappa_r 95^\circ$

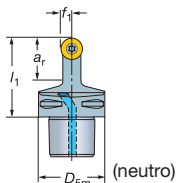


**SDJCR/L**

$\kappa_r 93^\circ$



**SRDCN**



**SRSCR/L**

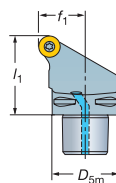


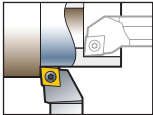
Ilustración a derecha

|                | Plaquita     | Tamaño | Código de pedido    | Dimensiones, mm |          |       |       |            | Nm       |
|----------------|--------------|--------|---------------------|-----------------|----------|-------|-------|------------|----------|
|                |              |        |                     | $a_r$           | $D_{5m}$ | $l_1$ | $f_1$ | $r_e^{1)}$ |          |
| <br><b>95°</b> | <br><b>C</b> | C4     | C4-SCLCR/L-27050-09 | –               | 40       | 50    | 27    | 0.8        | 15IP 3.0 |
|                |              | C5     | C5-SCLCR/L-35060-09 | –               | 50       | 60    | 35    | 0.8        |          |
|                |              | C6     | C6-SCLCR/L-45065-09 | –               | 63       | 65    | 45    | 0.8        |          |
| <br><b>93°</b> | <br><b>D</b> | C4     | C4-SDJCR/L-27050-07 | –               | 40       | 50    | 27    | 0.4        | 7IP 0.9  |
|                |              | C4     | C4-SDJCR/L-27050-11 | –               | 40       | 50    | 27    | 0.8        | 15IP 3.0 |
|                |              | C5     | C5-SDJCR/L-35060-11 | –               | 50       | 60    | 35    | 0.8        |          |
|                |              | C6     | C6-SDJCR/L-45065-11 | –               | 63       | 65    | 45    | 0.8        |          |
| <br><b>90°</b> | <br><b>R</b> | C4     | C4-SRDCN -00050-08A | 16              | 40       | 50    | 4     | –          | 9IP 1.4  |
|                |              | C5     | C5-SRDCN -00060-08A | 16              | 50       | 60    | 4     | –          |          |
|                |              | C4     | C4-SRDCN -00050-10A | 25              | 40       | 50    | 5     | –          | 15IP 3.0 |
|                |              | C5     | C5-SRDCN -00060-10A | 25              | 50       | 60    | 5     | –          |          |
|                |              | C6     | C6-SRDCN -00065-10A | 25              | 63       | 65    | 5     | –          |          |
|                |              | C4     | C4-SRDCN -00050-12A | 28              | 40       | 50    | 6     | –          | 15IP 3.0 |
|                |              | C5     | C5-SRDCN -00060-12A | 28              | 50       | 60    | 6     | –          |          |
|                |              | C6     | C6-SRDCN -00065-12A | 28              | 63       | 65    | 6     | –          |          |
| <br><b>27°</b> | <br><b>R</b> | C4     | C4-SRSCR/L-27050-08 | –               | 40       | 50    | 27    | –          | 9IP 1.4  |
|                |              | C5     | C5-SRSCR/L-35060-08 | –               | 50       | 60    | 35    | –          |          |
|                |              | C4     | C4-SRSCR/L-27050-10 | –               | 40       | 50    | 27    | –          | 15IP 3.0 |
|                |              | C5     | C5-SRSCR/L-35060-10 | –               | 50       | 60    | 35    | –          |          |
|                |              | C6     | C6-SRSCR/L-45065-10 | –               | 63       | 65    | 45    | –          |          |
|                |              | C4     | C4-SRSCR/L-27050-12 | –               | 40       | 50    | 27    | –          | 15IP 3.0 |
|                |              | C5     | C5-SRSCR/L-35060-12 | –               | 50       | 60    | 35    | –          |          |
|                |              | C6     | C6-SRSCR/L-45065-12 | –               | 63       | 65    | 45    | –          |          |

<sup>1)</sup>  $r_e$  = radio de punta en plaquita patrón

**Ejemplo de pedido: 2 piezas C4-SCLCR-27050-09**

(R=A derecha, N=Neutro, L=A izquierda)



Mecanizado exterior con CoroTurn® 107,  
plaquitas positivas

Tamaños de mango 0808 – 2525

CoroTurn® 107 Diseño de sujeción por tornillo

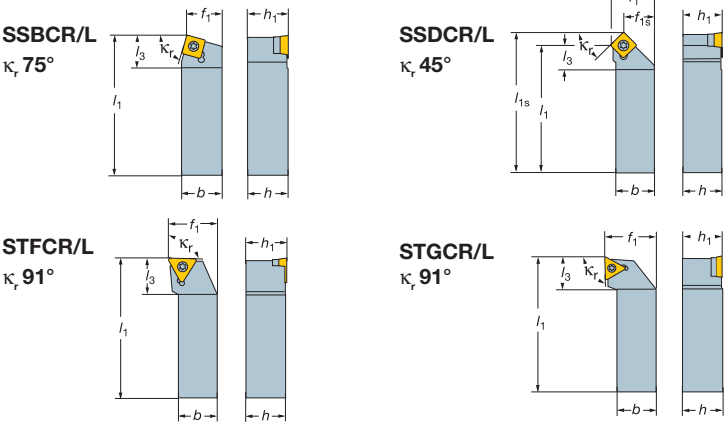
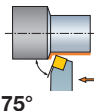
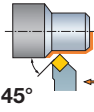
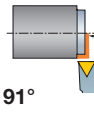
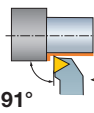


Ilustración a derecha

|                                                                                           | Plaquita                                                                                                        | Código de pedido                                                                                                                    | Dimensiones, mm                       |                                       |                                       |                                            |                                 |                                                |                                        |                                 |                                               |                                |  Nm |
|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|--------------------------------------------|---------------------------------|------------------------------------------------|----------------------------------------|---------------------------------|-----------------------------------------------|--------------------------------|--------------------------------------------------------------------------------------|
|                                                                                           |                                                                                                                 |                                                                                                                                     | <i>h</i>                              | <i>h</i> <sub>1</sub>                 | <i>b</i>                              | <i>l</i> <sub>1</sub>                      | <i>l</i> <sub>18</sub>          | <i>l</i> <sub>3</sub>                          | <i>f</i> <sub>1</sub>                  | <i>f</i> <sub>18</sub>          | <i>r</i> <sub>e</sub> <sup>1)</sup>           |                                |                                                                                      |
| <br>75°   |  09<br><br>S                   | SSBCR/L 1616H09                                                                                                                     | 16                                    | 16                                    | 16                                    | 100                                        | –                               | 15.5                                           | 13                                     | –                               | 0.8                                           | 15IP 3.0                       |                                                                                      |
| <br>45°  |  09<br><br>S                   | SSDCR/L 1616H09<br>2020K09                                                                                                          | 16<br>20                              | 16<br>20                              | 16<br>20                              | 93.9<br>118.9                              | 100<br>125                      | 9.4<br>12.9                                    | 17<br>22                               | 10.9<br>15.9                    | 0.8<br>0.8                                    | 15IP 3.0                       |                                                                                      |
| <br>91° |  09<br>11<br><br>T<br><br>16 | STFCR/L 1010E09<br>STFCR/L 1212F11-B1 <sup>2)</sup><br>1616H11-B1 <sup>2)</sup><br>STFCR/L 1616H16<br>2020K16<br>2525M16            | 10<br>12<br>16                        | 10<br>12<br>16                        | 10<br>12<br>16                        | 70<br>80<br>100                            | –<br>–<br>–                     | 14<br>16<br>16                                 | 12<br>16<br>20                         | –<br>–<br>–                     | 0.4<br>0.4<br>0.4                             | 7IP 0.9<br>7IP 0.9<br>15IP 3.0 |                                                                                      |
| <br>91° |  09<br>11<br><br>T<br><br>16 | STGCR/L 0808D09<br>1010E09<br>STGCR/L 1212F11-B1 <sup>2)</sup><br>1616H11-B1 <sup>2)</sup><br>STGCR/L 1616H16<br>2020K16<br>2525M16 | 8<br>10<br>12<br>16<br>16<br>20<br>25 | 8<br>10<br>12<br>16<br>16<br>20<br>25 | 8<br>10<br>12<br>16<br>16<br>20<br>25 | 60<br>70<br>80<br>100<br>100<br>125<br>150 | –<br>–<br>–<br>–<br>–<br>–<br>– | 13.8<br>11.8<br>16.3<br>16.3<br>25<br>26<br>27 | 10<br>12<br>16<br>20<br>20<br>25<br>32 | –<br>–<br>–<br>–<br>–<br>–<br>– | 0.4<br>0.4<br>0.4<br>0.4<br>0.8<br>0.8<br>0.8 | 7IP 0.9<br>7IP 0.9<br>15IP 3.0 |                                                                                      |

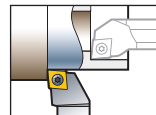
<sup>1)</sup> r<sub>E</sub> = radio de punta en plaquita patrón  
<sup>2)</sup> Para plaquitas de espesor 03 = 3.18 mm

Ejemplo de pedido: 2 piezas SSBCR 1616H09  
(R=A derecha, L=A izquierda)



# Mecanizado exterior con CoroTurn® 107, plaquitas positivas

Tamaños Coromant Capto C4 – C6



CoroTurn® 107 Diseño de sujeción por tornillo

STGCR/L

$\kappa_r 91^\circ$

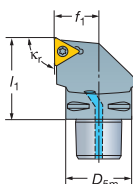
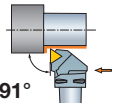


Ilustración a derecha

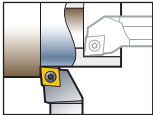
|                                                                                          | Plaquita | Tamaño | Código de pedido                     | Dimensiones, mm |       |       |            |  Nm |
|------------------------------------------------------------------------------------------|----------|--------|--------------------------------------|-----------------|-------|-------|------------|---------------------------------------------------------------------------------------|
|                                                                                          |          |        |                                      | $D_{5m}$        | $l_1$ | $f_1$ | $r_e^{1)}$ |                                                                                       |
| <br>91° | 11       | C4     | C4-STGCR/L-27050-11-B1 <sup>2)</sup> | 40              | 50    | 27    | 0.4        | 7IP 0.9                                                                               |
|                                                                                          | 16       | C4     | C4-STGCR/L-27050-16                  | 40              | 50    | 27    | 0.8        | 15IP 3.0                                                                              |
|                                                                                          | T        | C5     | C5-STGCR/L-35060-16                  | 50              | 60    | 35    | 0.8        |                                                                                       |
|                                                                                          |          | C6     | C6-STGCR/L-45065-16                  | 63              | 65    | 45    | 0.8        |                                                                                       |

<sup>1)</sup>  $r_e$  = radio de punta en plaquita patrón

<sup>2)</sup> Para plaquitas de de espesor 03 = 3.18 mm

**Ejemplo de pedido: 2 piezas C4-STGCR-27050-11-B1**

(R=A derecha, L=A izquierda)



Mecanizado exterior con CoroTurn® 107,  
plaquitas positivas  
Tamaños de mango 1212 – 2525

CoroTurn® 107 Diseño de sujeción por tornillo

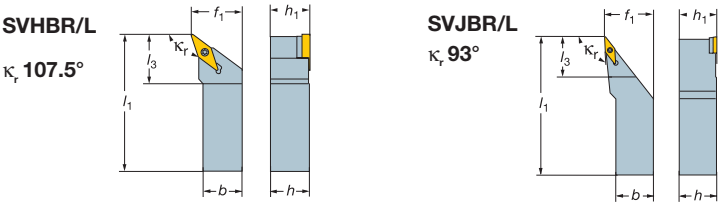


Ilustración a derecha

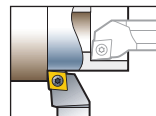
|                                                                                                   | Plaquita                                                                                      | Código de pedido                        | Dimensiones, mm |                       |          |                       |                       |                       |                                     |  Nm |
|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------|-----------------|-----------------------|----------|-----------------------|-----------------------|-----------------------|-------------------------------------|--------------------------------------------------------------------------------------|
|                                                                                                   |                                                                                               |                                         | <i>h</i>        | <i>h</i> <sub>1</sub> | <i>b</i> | <i>l</i> <sub>1</sub> | <i>l</i> <sub>3</sub> | <i>f</i> <sub>1</sub> | <i>r</i> <sub>e</sub> <sup>1)</sup> |                                                                                      |
| <br><b>107.5°</b> | <br><b>V</b> | <b>SVHBR/L 2020K16</b>                  | 20              | 20                    | 20       | 125                   | 31.5                  | 25                    | 0.8                                 | 15IP 3.0                                                                             |
|                                                                                                   |                                                                                               | <b>2525M16</b>                          | 25              | 25                    | 25       | 150                   | 31.5                  | 32                    | 0.8                                 |                                                                                      |
| <br><b>93°</b>    | <br><b>V</b> | <b>SVJBR/L 1212F11-B1</b> <sup>2)</sup> | 12              | 12                    | 12       | 80                    | 27                    | 16                    | 0.4                                 | 7IP 0.9                                                                              |
|                                                                                                   |                                                                                               | <b>1616H11-B1</b> <sup>2)</sup>         | 16              | 16                    | 16       | 100                   | 27                    | 20                    | 0.4                                 |                                                                                      |
|                                                                                                   |                                                                                               | <b>2020K11-B1</b> <sup>2)</sup>         | 20              | 20                    | 20       | 125                   | 27                    | 25                    | 0.4                                 |                                                                                      |
|                                                                                                   |                                                                                               | <b>2525M11-B1</b> <sup>2)</sup>         | 25              | 25                    | 25       | 150                   | 27                    | 32                    | 0.4                                 |                                                                                      |
|                                                                                                   | <b>16</b>                                                                                     | <b>SVJBR/L 2020K16</b>                  | 20              | 20                    | 20       | 125                   | 31.5                  | 25                    | 0.8                                 | 15IP 3.0                                                                             |
|                                                                                                   |                                                                                               | <b>2525M16</b>                          | 25              | 25                    | 25       | 150                   | 31.5                  | 32                    | 0.8                                 |                                                                                      |

<sup>1)</sup> *r*<sub>e</sub> = radio de punta en plaquita patrón  
<sup>2)</sup> Para plaquitas de espesor 03 = 3.18 mm

Ejemplo de pedido: 2 piezas SVHBR 2020K16  
(R=A derecha, L=A izquierda)

# Mecanizado exterior con CoroTurn® 107, plaquitas positivas

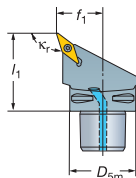
Tamaños Coromant Capto C4 – C6



## CoroTurn® 107 Diseño de sujeción por tornillo

SVHBR/L

$\kappa_r$  107.5°



SVJBR/L

$\kappa_r$  93°

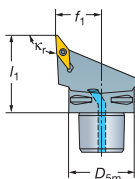
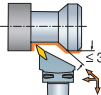
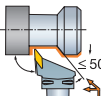


Ilustración a derecha

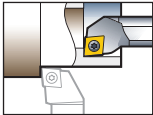
|                                                                                                    | Plaquita                                                                                           | Tamaño | Código de pedido                      | Dimensiones, mm |       |       |            |  Nm |
|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------|---------------------------------------|-----------------|-------|-------|------------|---------------------------------------------------------------------------------------|
|                                                                                                    |                                                                                                    |        |                                       | $D_{5m}$        | $l_1$ | $f_1$ | $r_e^{1)}$ |                                                                                       |
| <br><b>107.5°</b> | <br>11<br>16<br>V | C4     | C4-SVHBR/L -27050-11-B1 <sup>2)</sup> | 40              | 50    | 27    | 0.4        | 7IP 0.9                                                                               |
|                                                                                                    |                                                                                                    | C4     | C4-SVHBR/L -27050-16                  | 40              | 50    | 27    | 0.8        | 15IP 3.0                                                                              |
|                                                                                                    |                                                                                                    | C5     | C5-SVHBR/L -35060-16                  | 50              | 60    | 35    | 0.8        |                                                                                       |
|                                                                                                    |                                                                                                    | C6     | C6-SVHBR/L -45065-16                  | 63              | 65    | 45    | 0.8        |                                                                                       |
| <br><b>93°</b>   | <br>11<br>16<br>V | C4     | C4-SVJBR/L -27050-11-B1 <sup>2)</sup> | 40              | 50    | 27    | 0.4        | 7IP 0.9                                                                               |
|                                                                                                    |                                                                                                    | C4     | C4-SVJBR/L -27050-16                  | 40              | 50    | 27    | 0.8        | 15IP 3.0                                                                              |
|                                                                                                    |                                                                                                    | C5     | C5-SVJBR/L -35060-16                  | 50              | 60    | 35    | 0.8        |                                                                                       |
|                                                                                                    |                                                                                                    | C6     | C6-SVJBR/L -45065-16                  | 63              | 65    | 45    | 0.8        |                                                                                       |

<sup>1)</sup>  $r_e$  = radio de punta en plaquita patrón

<sup>2)</sup> Para plaquitas de espesor 03 = 3.18 mm

**Ejemplo de pedido: 2 piezas C4-SVHBR-27050-11-B1**

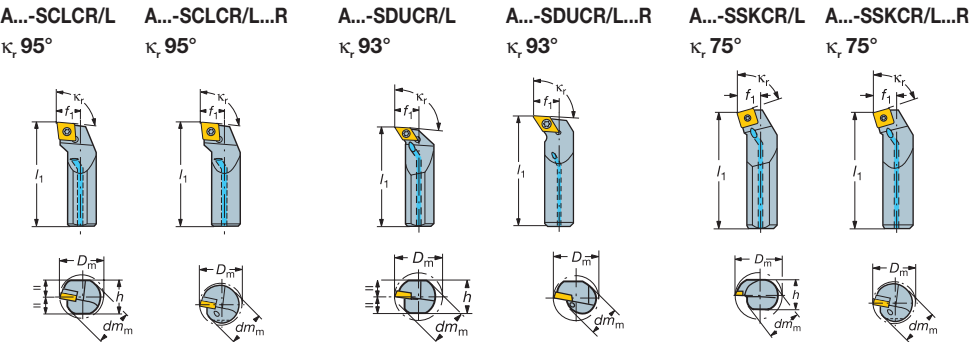
(R=A derecha, L=A izquierda)



Mecanizado interior con CoroTurn® 107,  
plaquetas positivas

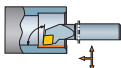
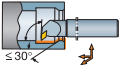
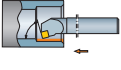
Diámetro de barra 8 – 25 mm

CoroTurn® 107 Diseño de sujeción por tornillo



Voladizo máx. 4 x dm<sub>m</sub>  
Con suministro de refrigerante interior

Ilustración a derecha

|                                                                                                  | Plaquita                                                                                         | Código de pedido                                                                                | Dimensiones, mm                                        |                     |       |     |       |            |  | Nm   |     |     |
|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------|---------------------|-------|-----|-------|------------|-----------------------------------------------------------------------------------|------|-----|-----|
|                                                                                                  |                                                                                                  |                                                                                                 | $d_{m\text{ min.}}$                                    | $D_{m\text{ min.}}$ | $f_1$ | $h$ | $l_1$ | $r_e^{1)}$ |                                                                                   |      |     |     |
| <br><b>95°</b>   | <br><b>C</b>    | <b>Barra cilíndrica de acero con planos de apriete</b>                                          |                                                        |                     |       |     |       |            |                                                                                   | 7IP  | 0.9 |     |
|                                                                                                  |                                                                                                  | A08H -SCLCR/L 06                                                                                | 8                                                      | 10                  | 5     | 7   | 100   | 0.4        |                                                                                   |      |     |     |
|                                                                                                  |                                                                                                  | A10K -SCLCR/L 06                                                                                | 10                                                     | 12                  | 6     | 9   | 125   | 0.4        |                                                                                   |      |     |     |
|                                                                                                  |                                                                                                  | A12M -SCLCR/L 06                                                                                | 12                                                     | 16                  | 9     | 11  | 150   | 0.4        |                                                                                   |      |     |     |
|                                                                                                  |                                                                                                  | A16R -SCLCR/L 06                                                                                | 16                                                     | 20                  | 11    | 15  | 200   | 0.4        |                                                                                   |      |     |     |
|                                                                                                  |                                                                                                  | A16R -SCLCR/L 09                                                                                | 16                                                     | 20                  | 11    | 15  | 200   | 0.4        |                                                                                   |      |     |     |
|                                                                                                  | 09                                                                                               | A20S -SCLCR/L 09                                                                                | 20                                                     | 25                  | 13    | 18  | 250   | 0.8        | 15IP                                                                              | 3.0  |     |     |
|                                                                                                  |                                                                                                  | A25T -SCLCR/L 09                                                                                | 25                                                     | 32                  | 17    | 23  | 300   | 0.8        |                                                                                   |      |     |     |
|                                                                                                  |                                                                                                  | <b>Barra cilíndrica de acero<sup>2)</sup></b>                                                   |                                                        |                     |       |     |       |            |                                                                                   |      |     |     |
|                                                                                                  |                                                                                                  | A08H-SCLCR/L 06-R                                                                               | 8                                                      | 10                  | 5     | –   | 100   | 0.4        |                                                                                   |      | 7IP | 0.9 |
|                                                                                                  |                                                                                                  | A10K-SCLCR/L 06-R                                                                               | 10                                                     | 12                  | 6     | –   | 125   | 0.4        |                                                                                   |      |     |     |
|                                                                                                  |                                                                                                  | A12M-SCLCR/L 06-R                                                                               | 12                                                     | 16                  | 9     | –   | 150   | 0.4        |                                                                                   |      |     |     |
| A16R-SCLCR/L 06-R                                                                                | 16                                                                                               | 20                                                                                              | 11                                                     | –                   | 200   | 0.4 |       |            |                                                                                   |      |     |     |
| 09                                                                                               | A16R-SCLCR/L 09-R                                                                                | 16                                                                                              | 20                                                     | 11                  | –     | 200 | 0.8   | 15IP       | 3.0                                                                               |      |     |     |
|                                                                                                  | A20S-SCLCR/L 09-R                                                                                | 20                                                                                              | 25                                                     | 13                  | –     | 250 | 0.8   |            |                                                                                   |      |     |     |
|                                                                                                  | <br><b>93°</b> | <br><b>D</b> | <b>Barra cilíndrica de acero con planos de apriete</b> |                     |       |     |       |            |                                                                                   |      | 7IP | 0.9 |
|                                                                                                  |                                                                                                  |                                                                                                 | A10K -SDUCR/L 07                                       | 10                  | 13    | 7   | 9     | 125        | 0.4                                                                               |      |     |     |
| A12M -SDUCR/L 07                                                                                 |                                                                                                  |                                                                                                 | 12                                                     | 16                  | 9     | 11  | 150   | 0.4        |                                                                                   |      |     |     |
| A16R -SDUCR/L 07                                                                                 |                                                                                                  |                                                                                                 | 16                                                     | 20                  | 11    | 15  | 200   | 0.4        |                                                                                   |      |     |     |
| A20S -SDUCR/L 11                                                                                 |                                                                                                  |                                                                                                 | 20                                                     | 25                  | 13    | 18  | 250   | 0.8        |                                                                                   |      |     |     |
| A25T -SDUCR/L 11                                                                                 |                                                                                                  |                                                                                                 | 25                                                     | 32                  | 17    | 23  | 300   | 0.8        |                                                                                   |      |     |     |
| 07                                                                                               |                                                                                                  | <b>Barra cilíndrica de acero<sup>2)</sup></b>                                                   |                                                        |                     |       |     |       |            |                                                                                   | 7IP  | 0.9 |     |
|                                                                                                  |                                                                                                  | A10K -SDUCR/L 07-ER                                                                             | 10                                                     | 15                  | 9     | –   | 125   | 0.4        |                                                                                   |      |     |     |
|                                                                                                  |                                                                                                  | A12M -SDUCR/L 07-ER                                                                             | 12                                                     | 18                  | 11    | –   | 150   | 0.4        |                                                                                   |      |     |     |
|                                                                                                  |                                                                                                  | A16R-SDUCR/L 07-R                                                                               | 16                                                     | 20                  | 11    | –   | 200   | 0.4        |                                                                                   |      |     |     |
|                                                                                                  |                                                                                                  | A20S-SDUCR/L 11-R                                                                               | 20                                                     | 25                  | 13    | –   | 250   | 0.8        |                                                                                   |      |     |     |
|                                                                                                  |                                                                                                  | A20S-SDUCR/L 11-R                                                                               | 20                                                     | 25                  | 13    | –   | 250   | 0.8        |                                                                                   |      |     |     |
| 11                                                                                               | <b>Barra cilíndrica de acero con planos de apriete</b>                                           |                                                                                                 |                                                        |                     |       |     |       |            | 15IP                                                                              | 3.0  |     |     |
|                                                                                                  | A16R -SSKCR/L 09                                                                                 | 16                                                                                              | 20                                                     | 11                  | 15    | 200 | 0.8   |            |                                                                                   |      |     |     |
|                                                                                                  | A20S -SSKCR/L 09                                                                                 | 20                                                                                              | 25                                                     | 13                  | 18    | 250 | 0.8   |            |                                                                                   |      |     |     |
|                                                                                                  | <b>Barra cilíndrica de acero<sup>2)</sup></b>                                                    |                                                                                                 |                                                        |                     |       |     |       |            |                                                                                   |      |     |     |
|                                                                                                  | A16R -SSKCR/L 09-R                                                                               | 16                                                                                              | 20                                                     | 11                  | –     | 200 | 0.8   |            |                                                                                   |      |     |     |
|                                                                                                  | A20S -SSKCR/L 09-R                                                                               | 20                                                                                              | 25                                                     | 13                  | –     | 250 | 0.8   |            |                                                                                   |      |     |     |
| <br><b>75°</b> | <br><b>S</b>  | <b>Barra cilíndrica de acero con planos de apriete</b>                                          |                                                        |                     |       |     |       |            |                                                                                   | 15IP | 3.0 |     |
|                                                                                                  |                                                                                                  | A16R -SSKCR/L 09                                                                                | 16                                                     | 20                  | 11    | 15  | 200   | 0.8        |                                                                                   |      |     |     |
|                                                                                                  |                                                                                                  | A20S -SSKCR/L 09                                                                                | 20                                                     | 25                  | 13    | 18  | 250   | 0.8        |                                                                                   |      |     |     |
|                                                                                                  |                                                                                                  | <b>Barra cilíndrica de acero<sup>2)</sup></b>                                                   |                                                        |                     |       |     |       |            |                                                                                   |      |     |     |
|                                                                                                  |                                                                                                  | A16R -SSKCR/L 09-R                                                                              | 16                                                     | 20                  | 11    | –   | 200   | 0.8        |                                                                                   |      |     |     |
|                                                                                                  |                                                                                                  | A20S -SSKCR/L 09-R                                                                              | 20                                                     | 25                  | 13    | –   | 250   | 0.8        |                                                                                   |      |     |     |

<sup>1)</sup> r<sub>e</sub> = radio de punta en plaqueta patrón

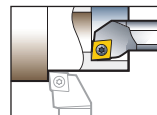
<sup>2)</sup> Para utilizar con manguitos EasyFix. Consulte el catálogo principal.

**Ejemplo de pedido: 2 piezas A08H-SCLCR 06**  
(R=A derecha, L=A izquierda)



# Mecanizado interior con CoroTurn® 107, plaquitas positivas

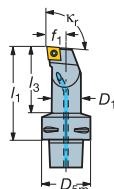
Tamaños Coromant Capto C4 – C5



## CoroTurn® 107 Diseño de sujeción por tornillo

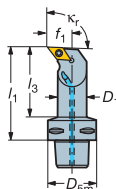
### SCLCR/L

$K_r 95^\circ$



### SDUCR/L

$K_r 93^\circ$



### SSKCR/L

$K_r 75^\circ$

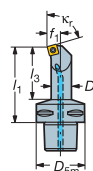
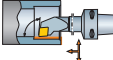
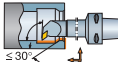
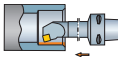


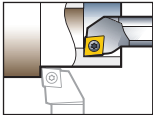
Ilustración a derecha

|                                                                                                 | Plaquita                                                                                      | Tamaño                                                                                            | Código de pedido                                                                                | Dimensiones, mm |                           |          |       |       |       |            |      |  | Nm   |
|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------|---------------------------|----------|-------|-------|-------|------------|------|------------------------------------------------------------------------------------|------|
|                                                                                                 |                                                                                               |                                                                                                   |                                                                                                 | $D_m$ mín.      | $D_1$                     | $D_{5m}$ | $f_1$ | $l_1$ | $l_3$ | $r_e^{1)}$ |      |                                                                                    |      |
| <br><b>95°</b> | <br><b>C</b> | <b>C4</b>                                                                                         | <b>C4-SCLCR/L -11070-09</b>                                                                     | 20              | 16                        | 40       | 11    | 70    | 47    | 0.8        | 15IP | 3.0                                                                                |      |
|                                                                                                 |                                                                                               |                                                                                                   | <b>-13080-09</b>                                                                                | 25              | 20                        | 40       | 13    | 80    | 58    | 0.8        |      |                                                                                    |      |
|                                                                                                 |                                                                                               |                                                                                                   | <b>-17090-09</b>                                                                                | 32              | 25                        | 40       | 17    | 90    | 69    | 0.8        |      |                                                                                    |      |
|                                                                                                 |                                                                                               | <b>C5</b>                                                                                         | <b>C5-SCLCR/L -11070-09</b>                                                                     | 20              | 16                        | 50       | 11    | 70    | 46    | 0.8        | 15IP | 3.0                                                                                |      |
|                                                                                                 |                                                                                               |                                                                                                   | <b>-13080-09</b>                                                                                | 25              | 20                        | 50       | 13    | 80    | 56    | 0.8        |      |                                                                                    |      |
|                                                                                                 |                                                                                               |                                                                                                   | <b>-17090-09</b>                                                                                | 32              | 25                        | 50       | 17    | 90    | 67    | 0.8        |      |                                                                                    |      |
| <br><b>93°</b> | <br><b>D</b> | <b>C4</b>                                                                                         | <b>C4-SDUCR/L -11070-07</b>                                                                     | 20              | 16                        | 40       | 11    | 70    | 47    | 0.4        | 7IP  | 0.9                                                                                |      |
|                                                                                                 |                                                                                               | <b>C5</b>                                                                                         | <b>C5-SDUCR/L -11070-07</b>                                                                     | 20              | 16                        | 50       | 11    | 70    | 46    | 0.4        | 7IP  | 0.9                                                                                |      |
|                                                                                                 |                                                                                               | <b>C4</b>                                                                                         | <b>C4-SDUCR/L -13080-11</b>                                                                     | 25              | 20                        | 40       | 13    | 80    | 58    | 0.8        | 15IP | 3.0                                                                                |      |
|                                                                                                 |                                                                                               |                                                                                                   | <b>-17090-11</b>                                                                                | 32              | 25                        | 40       | 17    | 90    | 69    | 0.8        |      |                                                                                    |      |
|                                                                                                 |                                                                                               |                                                                                                   | <b>-22110-11</b>                                                                                | 40              | 32                        | 40       | 22    | 110   | 89    | 0.8        |      |                                                                                    |      |
|                                                                                                 |                                                                                               | <b>C5</b>                                                                                         | <b>C5-SDUCR/L -13080-11</b>                                                                     | 25              | 20                        | 50       | 13    | 80    | 56    | 0.8        | 15IP | 3.0                                                                                |      |
|                                                                                                 |                                                                                               |                                                                                                   | <b>-17090-11</b>                                                                                | 32              | 25                        | 50       | 17    | 90    | 67    | 0.8        |      |                                                                                    |      |
|                                                                                                 |                                                                                               |                                                                                                   | <b>-22110-11</b>                                                                                | 40              | 32                        | 50       | 22    | 110   | 88    | 0.8        |      |                                                                                    |      |
|                                                                                                 |                                                                                               | <br><b>75°</b> | <br><b>S</b> | <b>C4</b>       | <b>C4-SSKCR -13080-09</b> | 25       | 20    | 40    | 13    | 80         | 58   | 0.8                                                                                | 15IP |
| <b>C5</b>                                                                                       | <b>C5-SSKCR/L -13080-09</b>                                                                   |                                                                                                   |                                                                                                 | 25              | 20                        | 50       | 13    | 80    | 56    | 0.8        | 15IP | 3.0                                                                                |      |

<sup>1)</sup>  $r_e$  = radio de punta en plaquita patrón

**Ejemplo de pedido: 2 piezas C4-SCLCR-11070-09**

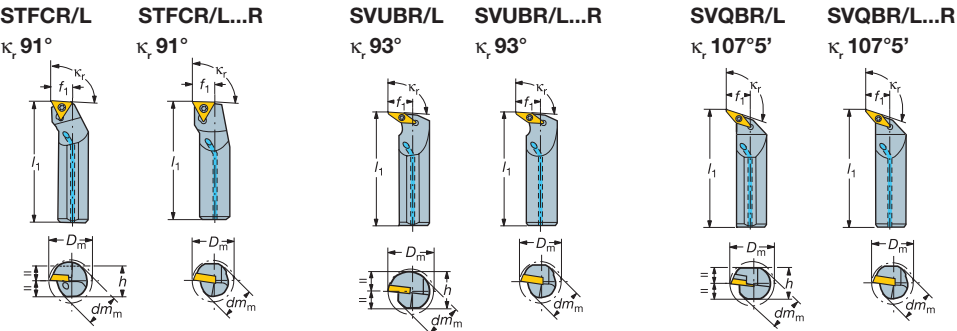
(R=A derecha, L=A izquierda)



Mecanizado interior con CoroTurn® 107,  
plaquetas positivas

Diámetro de barra 10 – 32 mm

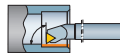
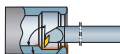
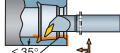
CoroTurn® 107 Diseño de sujeción por tornillo



Voladizo máx. 4 x dm<sub>m</sub>

Con suministro de refrigerante interior

Ilustración a derecha

|                                                                                           | Plaquita                                                                                     | Código de pedido                                                                         | Dimensiones, mm                                 |            |       |     |       | $r_e^{1)}$ |  | Nm  |     |
|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------|------------|-------|-----|-------|------------|-----------------------------------------------------------------------------------|-----|-----|
|                                                                                           |                                                                                              |                                                                                          | $dm_m$                                          | $D_m$ mín. | $f_1$ | $h$ | $l_1$ |            |                                                                                   |     |     |
| <br>91°   | <br>T       | Barra cilíndrica de acero con planos de apriete                                          |                                                 |            |       |     |       |            |                                                                                   |     |     |
|                                                                                           |                                                                                              | A10K-STFCR/L 09                                                                          | 10                                              | 13         | 7     | 9   | 125   | 0.4        | 7IP                                                                               | 0.9 |     |
|                                                                                           |                                                                                              | A12M-STFCR/L 09                                                                          | 12                                              | 16         | 9     | 11  | 150   | 0.4        |                                                                                   |     |     |
|                                                                                           |                                                                                              | A12M-STFCR/L 11-B1 <sup>3)</sup>                                                         | 12                                              | 16         | 9     | 11  | 150   | 0.4        | 7IP                                                                               | 0.9 |     |
|                                                                                           |                                                                                              | A16R-STFCR/L 11-B1 <sup>3)</sup>                                                         | 16                                              | 20         | 11    | 15  | 200   | 0.4        |                                                                                   |     |     |
|                                                                                           |                                                                                              | A20S-STFCR/L 11-B1 <sup>3)</sup>                                                         | 20                                              | 25         | 13    | 18  | 250   | 0.4        |                                                                                   |     |     |
|                                                                                           |                                                                                              | A25T-STFCR/L 16                                                                          | 25                                              | 32         | 17    | 23  | 300   | 0.8        | 15IP                                                                              | 3.0 |     |
|                                                                                           |                                                                                              | A32T-STFCR/L 16                                                                          | 32                                              | 40         | 22    | 30  | 300   | 0.8        |                                                                                   |     |     |
|                                                                                           | Barra cilíndrica de acero <sup>2)</sup>                                                      |                                                                                          |                                                 |            |       |     |       |            |                                                                                   |     |     |
|                                                                                           | 09                                                                                           | A10K-STFCR/L 09-R                                                                        | 10                                              | 13         | 7     | –   | 125   | 0.4        | 7IP                                                                               | 0.9 |     |
|                                                                                           |                                                                                              | A12M-STFCR/L 09-R                                                                        | 12                                              | 16         | 9     | –   | 150   | 0.4        |                                                                                   |     |     |
|                                                                                           | 11                                                                                           | A12M-STFCR/L 11-RB1 <sup>3)</sup>                                                        | 12                                              | 16         | 9     | –   | 150   | 0.4        | 7IP                                                                               | 0.9 |     |
|                                                                                           | A16R-STFCR/L 11-RB1 <sup>3)</sup>                                                            | 16                                                                                       | 20                                              | 11         | –     | 200 | 0.4   |            |                                                                                   |     |     |
|                                                                                           | A20S-STFCR/L 11-RB1 <sup>3)</sup>                                                            | 20                                                                                       | 25                                              | 13         | –     | 250 | 0.4   |            |                                                                                   |     |     |
| <br>93° | <br>V     | Barra cilíndrica de acero con planos de apriete                                          |                                                 |            |       |     |       |            |                                                                                   |     |     |
|                                                                                           |                                                                                              | A16R-SVUBR/L 11-EB1 <sup>2)</sup>                                                        | 16                                              | 22         | 13    | 15  | 200   | 0.4        | 7IP                                                                               | 0.9 |     |
|                                                                                           |                                                                                              | A20S-SVUBR/L 11-EB1 <sup>2)</sup>                                                        | 20                                              | 27         | 15    | 18  | 250   | 0.4        |                                                                                   |     |     |
|                                                                                           |                                                                                              | A25T-SVUBR/L 11-DB1 <sup>2)</sup>                                                        | 25                                              | 33         | 18    | 23  | 300   | 0.4        |                                                                                   |     |     |
|                                                                                           |                                                                                              | A25T-SVUBR/L 16-D                                                                        | 25                                              | 33         | 18    | 23  | 300   | 0.8        | 15IP                                                                              | 3.0 |     |
|                                                                                           |                                                                                              | A32T-SVUBR/L 16                                                                          | 32                                              | 40         | 22    | 30  | 300   | 0.8        |                                                                                   |     |     |
|                                                                                           |                                                                                              | Barra cilíndrica de acero <sup>2)</sup>                                                  |                                                 |            |       |     |       |            |                                                                                   |     |     |
|                                                                                           |                                                                                              | 11                                                                                       | A16R-SVUBR/L 11-ERB1 <sup>3)</sup>              | 16         | 22    | 13  | –     | 200        | 0.4                                                                               | 7IP | 0.9 |
|                                                                                           | 16                                                                                           | A20S-SVUBR/L 11-ERB1 <sup>3)</sup>                                                       | 20                                              | 27         | 15    | –   | 250   | 0.4        |                                                                                   |     |     |
|                                                                                           | <br>107°5' | <br>V | Barra cilíndrica de acero con planos de apriete |            |       |     |       |            |                                                                                   |     |     |
|                                                                                           |                                                                                              |                                                                                          | A16R-SVQBR/L 11-EB1 <sup>3)</sup>               | 16         | 22    | 13  | 15    | 200        | 0.4                                                                               | 7IP | 0.9 |
|                                                                                           |                                                                                              |                                                                                          | A20S-SVQBR/L 11-EB1 <sup>3)</sup>               | 20         | 27    | 15  | 18    | 250        | 0.4                                                                               |     |     |
| A25T-SVQBR/L 11-DB1 <sup>3)</sup>                                                         |                                                                                              |                                                                                          | 25                                              | 33         | 18    | 23  | 300   | 0.4        |                                                                                   |     |     |
| A25T-SVQBR/L 16-D                                                                         |                                                                                              |                                                                                          | 25                                              | 33         | 18    | 23  | 300   | 0.8        | 15IP                                                                              | 3.0 |     |
| A32T-SVQBR/L 16                                                                           |                                                                                              |                                                                                          | 32                                              | 40         | 22    | 30  | 300   | 0.8        |                                                                                   |     |     |
| Barra cilíndrica de acero <sup>2)</sup>                                                   |                                                                                              |                                                                                          |                                                 |            |       |     |       |            |                                                                                   |     |     |
| 11                                                                                        |                                                                                              |                                                                                          | A16R-SVQBR/L 11-ERB1 <sup>3)</sup>              | 16         | 22    | 13  | –     | 200        | 0.4                                                                               | 7IP | 0.9 |
|                                                                                           |                                                                                              | A25S-SVQBR/L 11-ERB1 <sup>3)</sup>                                                       | 20                                              | 27         | 15    | –   | 250   | 0.4        |                                                                                   |     |     |

<sup>1)</sup> r<sub>e</sub> = radio de punta en plaqueta patrón

<sup>2)</sup> Para utilizar con manguitos EasyFix. Consulte el catálogo principal.

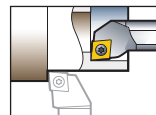
<sup>3)</sup> Para plaquetas de espesor 03 = 3.18 mm

Ejemplo de pedido: 2 piezas A10K-STFCR 09

(R=A derecha, L=A izquierda)

# Mecanizado interior con CoroTurn® 107, plaquitas positivas

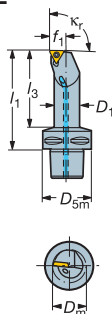
Tamaños Coromant Capto C4 – C6



## CoroTurn® 107 Diseño de sujeción por tornillo

### STFCR/L

$\kappa_r 91^\circ$



### SVQBR/L

$\kappa_r 107^\circ 5'$

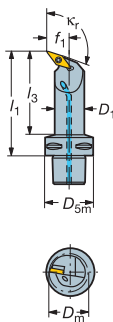
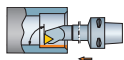
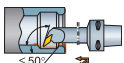


Ilustración a derecha

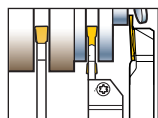
|                                                                                                     | Plaquita                                                                                                                                            | Tamaño    | Código de pedido                            | Dimensiones, mm |       |          |       |       |       |            |      |  | Nm |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------------------------------|-----------------|-------|----------|-------|-------|-------|------------|------|------------------------------------------------------------------------------------|----|
|                                                                                                     |                                                                                                                                                     |           |                                             | $D_m$ min.      | $D_1$ | $D_{5m}$ | $f_1$ | $l_1$ | $l_3$ | $r_e^{1)}$ |      |                                                                                    |    |
| <br><b>91°</b>     | <br><b>11</b><br><br><b>T</b><br><br><br><br><br><br><br><b>16</b> | <b>C4</b> | <b>C4-STFCR/L -11070-11-B1<sup>2)</sup></b> | 20              | 16    | 40       | 11    | 70    | 47    | 0.4        | 7IP  | 0.9                                                                                |    |
|                                                                                                     |                                                                                                                                                     |           | <b>-13080-11-B1<sup>2)</sup></b>            | 25              | 20    | 40       | 13    | 80    | 57    | 0.4        | 7IP  | 0.9                                                                                |    |
|                                                                                                     |                                                                                                                                                     | <b>C5</b> | <b>C5-STFCR/L -11070-11-B1<sup>2)</sup></b> | 20              | 16    | 50       | 11    | 70    | 46    | 0.4        | 7IP  | 0.9                                                                                |    |
|                                                                                                     |                                                                                                                                                     |           | <b>-13080-11-B1<sup>2)</sup></b>            | 25              | 20    | 50       | 13    | 80    | 56    | 0.4        | 7IP  | 0.9                                                                                |    |
|                                                                                                     |                                                                                                                                                     | <b>C4</b> | <b>C4-STFCR/L -17090-16</b>                 | 32              | 25    | 40       | 17    | 90    | 69    | 0.8        | 15IP | 3.0                                                                                |    |
|                                                                                                     |                                                                                                                                                     |           | <b>-22110-16</b>                            | 40              | 32    | 40       | 22    | 110   | 89    | 0.8        | 15IP | 3.0                                                                                |    |
| <b>C5</b>                                                                                           | <b>C5-STFCR/L -17090-16</b>                                                                                                                         | 32        | 25                                          | 50              | 17    | 90       | 67    | 0.8   | 15IP  | 3.0        |      |                                                                                    |    |
|                                                                                                     | <b>-22110-16</b>                                                                                                                                    | 40        | 32                                          | 50              | 22    | 110      | 88    | 0.8   | 15IP  | 3.0        |      |                                                                                    |    |
| <br><b>107°5'</b> | <br><b>11</b><br><br><b>V</b><br><br><br><br><br><br><br><b>16</b> | <b>C4</b> | <b>C4-SVQBR/L-13070-11-B1<sup>2)</sup></b>  | 25              | 20    | 40       | 13    | 70    | 48    | 0.4        | 7IP  | 0.9                                                                                |    |
|                                                                                                     |                                                                                                                                                     |           | <b>-15080-11-B1<sup>2)</sup></b>            | 27              | 20    | 40       | 15    | 80    | 58    | 0.4        | 7IP  | 0.9                                                                                |    |
|                                                                                                     |                                                                                                                                                     | <b>C5</b> | <b>C5-SVQBR/L-15080-11-B1<sup>2)</sup></b>  | 27              | 20    | 50       | 15    | 80    | 57    | 0.4        | 7IP  | 0.9                                                                                |    |
|                                                                                                     |                                                                                                                                                     |           |                                             |                 |       |          |       |       |       |            |      |                                                                                    |    |
|                                                                                                     |                                                                                                                                                     | <b>C4</b> | <b>C4-SVQBR/L-18090-16</b>                  | 33              | 25    | 40       | 18    | 90    | 69    | 0.8        | 15IP | 3.0                                                                                |    |
|                                                                                                     |                                                                                                                                                     |           | <b>-22110-16</b>                            | 40              | 32    | 40       | 22    | 110   | 89    | 0.8        | 15IP | 3.0                                                                                |    |
|                                                                                                     |                                                                                                                                                     | <b>C5</b> | <b>C5-SVQBR/L-18090-16</b>                  | 33              | 25    | 50       | 18    | 90    | 67    | 0.8        | 15IP | 3.0                                                                                |    |
|                                                                                                     |                                                                                                                                                     |           | <b>-22110-16</b>                            | 40              | 32    | 50       | 22    | 110   | 88    | 0.8        | 15IP | 3.0                                                                                |    |
|                                                                                                     |                                                                                                                                                     | <b>C6</b> | <b>C6-SVQBR/L-22120-16</b>                  | 40              | 32    | 63       | 22    | 120   | 94    | 0.8        | 15IP | 3.0                                                                                |    |
|                                                                                                     |                                                                                                                                                     |           |                                             |                 |       |          |       |       |       |            |      |                                                                                    |    |

<sup>1)</sup>  $r_e$  = radio de punta en plaquita patrón

<sup>2)</sup> Para plaquitas de espesor O3 = 3.18 mm

**Ejemplo de pedido: 2 piezas C4-STFCR-11070-11-B1**

(R=A derecha, L=A izquierda)



# Cómo usar la guía

ISO/ANSI



Defina la operación

Consulte la página de plaquitas para las geometrías, calidades y datos de corte

Para seleccionar el portaplaquitas, consulte la página correspondiente.



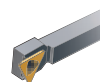
## Tronzado poco profundo



CoroCut® 3

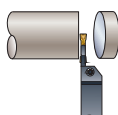


Página 108



Páginas 122-123

## Tronzado medio y profundo



CoroCut® 1-2

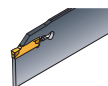


Página 110

T-Max Q-Cut® 151.2



Página 112

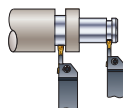


Página 124



Páginas 126-128

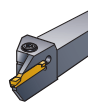
## Ranurado



CoroCut® 1-2

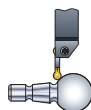


Página 114



Páginas 126-128

## Perfilado



CoroCut® 1-2

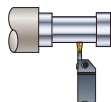


Páginas 116-119



Páginas 126-128

## Cilindrado



CoroCut® 1-2

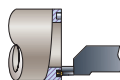


Página 120



Páginas 126-128

## Ranurado frontal



CoroCut® 1-2

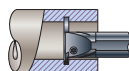


Página 120



Página 129

## Ranurado interior



CoroCut® 1-2



Página 110

T-Max Q-Cut® 151.3



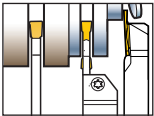
Página 131



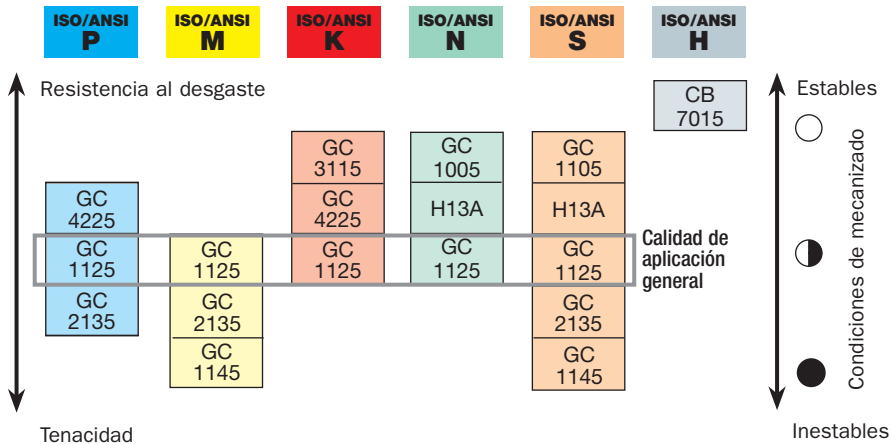
Páginas 130-131



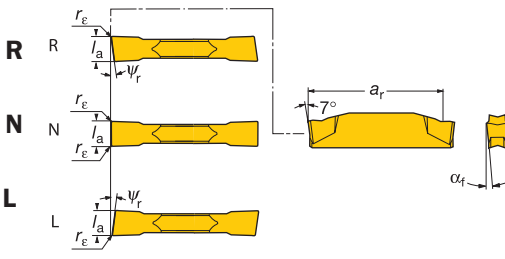
Aplicaciones generales



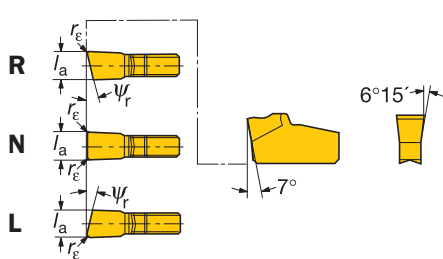
Resumen de calidades



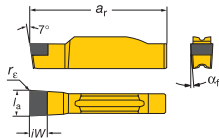
Dimensiones para plaquitas CoroCut® 1-2



Dimensiones para plaquitas T-Max Q-Cut®



Para plaquitas con punta de CBN/CD

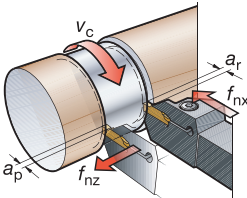


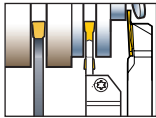
Tolerancias en la dimensión  $l_a$

| Geometría                         | Tolerancia, mm |
|-----------------------------------|----------------|
| <b>CoroCut®</b>                   |                |
| -CF, -CM, -CR, -GM, -RM, -TF, -TM | 0/+0.1         |
| -GF, -GE, -RO, -RE, -RS, -AM      | ±0.02          |
| <b>T-Max Q-Cut®</b>               |                |
| -5F, -5E, -4E,                    | 0/+0.25        |

Dirección del avance

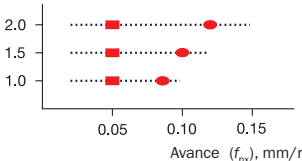
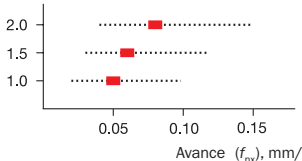
$f_{nx}$  – avance recto radial hacia el centro  
 $f_{nz}$  – avance recto axial sobre la línea central



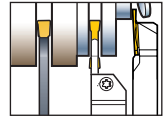


Tronzado  
Tronzado superficial  $\varnothing \leq 12\text{ mm}$   
CoroCut® 3



| CONDICIONES BUENAS                                                                                                 |              | CONDICIONES NORMALES                                                                                                             |  |
|--------------------------------------------------------------------------------------------------------------------|--------------|----------------------------------------------------------------------------------------------------------------------------------|--|
|                                   |              |                                                 |  |
| Elección de avance reducido                                                                                        |              | Elección de avance medio                                                                                                         |  |
| Tronzado sin tetones ni rebabas                                                                                    |              | Para tronzar tubos y barras                                                                                                      |  |
| <b>-CS</b><br>                    |              | <b>-CM</b><br>                                  |  |
| <ul style="list-style-type: none"><li>• Filo de corte agudo.</li><li>• Amplia gama de ángulos frontales.</li></ul> |              | <ul style="list-style-type: none"><li>• Rotura de la viruta.</li><li>• Recomendada para condiciones de corte normales.</li></ul> |  |
| Avance radial                                                                                                      |              | Avance radial                                                                                                                    |  |
| Ancho de plaquita ( $l_a$ ), mm                                                                                    |              | Ancho de plaquita ( $l_a$ ), mm                                                                                                  |  |
|                                   |              |                                                |  |
| <b>P</b>                                                                                                           | -CS / GC1125 | <b>-CM / GC1125</b>                                                                                                              |  |
| <b>M</b>                                                                                                           | -CS / GC1125 | <b>-CM / GC1125</b>                                                                                                              |  |
| <b>N</b>                                                                                                           | -CS / GC1125 |                                                                                                                                  |  |
| <b>S</b>                                                                                                           | -CS / GC1125 |                                                                                                                                  |  |

# Tronzado

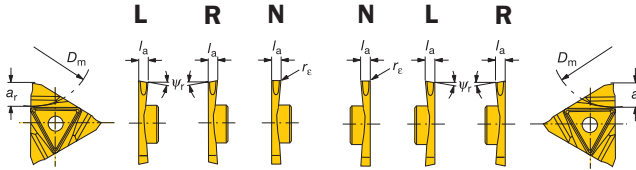


CoroCut® 3 123T

Plaquita de corte a derecha

123U

Plaquita de corte a izquierda



## Tolerancia, mm

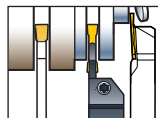
|            |                                      |
|------------|--------------------------------------|
| N123 -CM   | $l_a \pm 0.03$<br>$r_e +0, -0.1$     |
| N123 -CS   | $l_a \pm 0.03$<br>$r_e +0.1, -0$     |
| R/L123 -CS | $l_a +0.03, -0.07$<br>$r_e +0.1, -0$ |

|                                               | Tamaño de asiento <sup>1)</sup> | Código de pedido       | GC1125 | Dimensiones, mm |          |       |           |           | Recomendaciones de calidad y datos de corte |               |        |        |        |        |
|-----------------------------------------------|---------------------------------|------------------------|--------|-----------------|----------|-------|-----------|-----------|---------------------------------------------|---------------|--------|--------|--------|--------|
|                                               |                                 |                        |        | $l_a$           | $\psi_r$ | $r_e$ | $D_m$ máx | $a_r$ máx | $f_{nx}$ mm/r                               | Calidades     |        |        |        |        |
|                                               |                                 |                        |        |                 |          |       |           |           |                                             | P             | M      | N      | S      |        |
| Avance bajo<br>Sin tetones ni rebabas         | T                               | N123T3 -0100-0000-CS   | ★      | 1.00            | 0°       | 0     | 50        | 4.3       | 0.05                                        | (0.03 – 0.10) | GC1125 | GC1125 | GC1125 | GC1125 |
|                                               |                                 | R/L123T3 -0100-0500-CS | ★      | 1.00            | 5°       | 0     | 50        | 4.2       | 0.05                                        | (0.02 – 0.09) |        |        |        |        |
|                                               |                                 | -0100-1000-CS          | ★      | 1.00            | 10°      | 0     | 50        | 4.2       | 0.04                                        | (0.02 – 0.08) |        |        |        |        |
|                                               |                                 | -0100-1500-CS          | ★      | 1.00            | 15°      | 0     | 50        | 4.2       | 0.04                                        | (0.02 – 0.07) |        |        |        |        |
|                                               |                                 | N123T3 -0150-0000-CS   | ★      | 1.50            | 0°       | 0     | 100       | 6.4       | 0.05                                        | (0.03 – 0.12) | GC1125 | GC1125 | GC1125 | GC1125 |
|                                               |                                 | R/L123T3 -0150-0500-CS | ★      | 1.50            | 5°       | 0     | 100       | 6.3       | 0.05                                        | (0.02 – 0.11) |        |        |        |        |
|                                               |                                 | -0150-1000-CS          | ★      | 1.50            | 10°      | 0     | 100       | 6.3       | 0.04                                        | (0.02 – 0.10) |        |        |        |        |
|                                               |                                 | -0150-1500-CS          | ★      | 1.50            | 15°      | 0     | 100       | 6.3       | 0.04                                        | (0.02 – 0.08) |        |        |        |        |
|                                               |                                 | N123T3 -0200-0000-CS   | ★      | 2.00            | 0°       | 0     | 100       | 6.4       | 0.05                                        | (0.03 – 0.15) | GC1125 | GC1125 | GC1125 | GC1125 |
|                                               |                                 | R/L123T3 -0200-0500-CS | ★      | 2.00            | 5°       | 0     | 100       | 6.3       | 0.05                                        | (0.02 – 0.14) |        |        |        |        |
|                                               |                                 | R/L123T3 -0200-1000-CS | ★      | 2.00            | 10°      | 0     | 100       | 6.3       | 0.04                                        | (0.02 – 0.12) |        |        |        |        |
|                                               |                                 | R/L123T3 -0200-1500-CS | ★      | 2.00            | 15°      | 0     | 100       | 6.3       | 0.04                                        | (0.02 – 0.11) |        |        |        |        |
|                                               | U                               | N123U3 -0100-0000-CS   | ★      | 1.00            | 0°       | 0     | 50        | 4.3       | 0.05                                        | (0.03 – 0.10) | 140    | 125    | 1500   | 25     |
|                                               |                                 | R/L123U3 -0100-0500-CS | ★      | 1.00            | 5°       | 0     | 50        | 4.2       | 0.05                                        | (0.02 – 0.09) |        |        |        |        |
|                                               |                                 | R/L123U3 -0100-1000-CS | ★      | 1.00            | 10°      | 0     | 50        | 4.2       | 0.04                                        | (0.02 – 0.08) |        |        |        |        |
|                                               |                                 | R/L123U3 -0100-1500-CS | ★      | 1.00            | 15°      | 0     | 50        | 4.2       | 0.04                                        | (0.02 – 0.07) |        |        |        |        |
|                                               |                                 | N123U3 -0150-0000-CS   | ★      | 1.50            | 0°       | 0     | 100       | 6.4       | 0.05                                        | (0.03 – 0.12) | GC1125 | GC1125 | GC1125 | GC1125 |
|                                               |                                 | R/L123U3 -0150-0500-CS | ★      | 1.50            | 5°       | 0     | 100       | 6.3       | 0.05                                        | (0.02 – 0.11) |        |        |        |        |
|                                               |                                 | -0150-1000-CS          | ★      | 1.50            | 10°      | 0     | 100       | 6.3       | 0.04                                        | (0.02 – 0.10) |        |        |        |        |
|                                               |                                 | -0150-1500-CS          | ★      | 1.50            | 15°      | 0     | 100       | 6.3       | 0.04                                        | (0.02 – 0.08) |        |        |        |        |
|                                               |                                 | N123U3 -0200-0000-CS   | ★      | 2.00            | 0°       | 0     | 100       | 6.4       | 0.05                                        | (0.03 – 0.15) | GC1125 | GC1125 | GC1125 | GC1125 |
|                                               |                                 | -0200-0500-CS          | ★      | 2.00            | 5°       | 0     | 100       | 6.3       | 0.05                                        | (0.02 – 0.14) |        |        |        |        |
|                                               |                                 | -0200-1000-CS          | ★      | 2.00            | 10°      | 0     | 100       | 6.3       | 0.04                                        | (0.02 – 0.12) |        |        |        |        |
|                                               |                                 | -0200-1500-CS          | ★      | 2.00            | 15°      | 0     | 100       | 6.3       | 0.04                                        | (0.02 – 0.11) |        |        |        |        |
| Avance medio<br>Condiciones de corte normales | T                               | N123T3 -0100-0001-CM   | ★      | 1.00            | 0°       | 0.10  | 50        | 4.3       | 0.05                                        | (0.02 – 0.10) | GC1125 | GC1125 | GC1125 | GC1125 |
|                                               |                                 | -0150-0001-CM          | ★      | 1.50            | 0°       | 0.10  | 100       | 6.4       | 0.05                                        | (0.02 – 0.13) |        |        |        |        |
|                                               |                                 | -0200-0001-CM          | ★      | 2.00            | 0°       | 0.10  | 100       | 6.4       | 0.05                                        | (0.02 – 0.15) |        |        |        |        |
|                                               | U                               | N123U3 -0100-0001-CM   | ★      | 1.00            | 0°       | 0.10  | 50        | 4.3       | 0.05                                        | (0.02 – 0.10) | GC1125 | GC1125 | GC1125 | GC1125 |
|                                               |                                 | -0150-0001-CM          | ★      | 1.50            | 0°       | 0.10  | 100       | 6.4       | 0.05                                        | (0.02 – 0.13) |        |        |        |        |
|                                               |                                 | -0200-0001-CM          | ★      | 2.00            | 0°       | 0.10  | 100       | 6.4       | 0.05                                        | (0.02 – 0.15) |        |        |        |        |
|                                               |                                 |                        |        |                 |          |       |           |           |                                             |               |        |        |        |        |
|                                               |                                 |                        |        |                 |          |       |           |           |                                             |               |        |        |        |        |
|                                               |                                 |                        |        |                 |          |       |           |           |                                             |               |        |        |        |        |
|                                               |                                 |                        |        |                 |          |       |           |           |                                             |               |        |        |        |        |
|                                               |                                 |                        |        |                 |          |       |           |           |                                             |               |        |        |        |        |
|                                               |                                 |                        |        |                 |          |       |           |           |                                             |               |        |        |        |        |

<sup>1)</sup> Para adaptarse al tamaño del asiento en el mango.

T= Plaquita de corte a derecha,  
U = Plaquita de corte a izquierda

Ejemplo de pedido: N123T3-0100-0000-CS 1125  
R= A derecha, N = Neutra, L = A izquierda



# Tronzado

Tronzado medio  $\varnothing \leq 40 \text{ mm}$

CoroCut® 1-2

ISO/ANSI



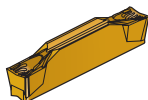
## CONDICIONES BUENAS



La elección para avance bajo

Para tronzado de tubos

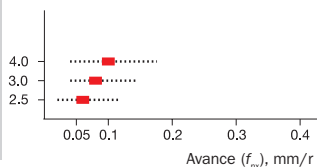
**-CF**



- Buen control de viruta con avance reducido.
- La geometría positiva elimina el riesgo de formación de fillos de aportación.
- Acción de corte suave.
- Genera un buen acabado superficial por el diseño "Wiper" del lateral.

### Avance radial

Ancho de plaquita ( $l_p$ ), mm



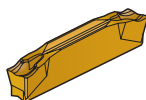
## CONDICIONES NORMALES



La elección para avance medio

Para tronzado de tubos y barras

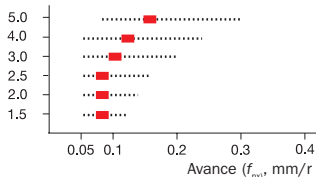
**-CM**



- Recomendada para tubos con paredes finas y piezas de diámetro pequeño.
- La geometría positiva elimina el riesgo de formación de filo de aportación.
- Bajas fuerzas de corte, produciendo menos vibraciones.

### Avance radial

Ancho de plaquita ( $l_p$ ), mm



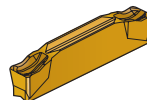
## CONDICIONES DIFÍCILES



La elección para avance elevado

Para tronzado de barras

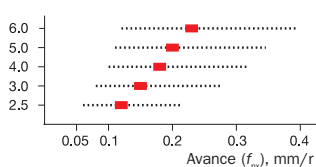
**-CR**



- Fillos de corte robustos, menos riesgo de fracturas de filo.
- Adecuada para barras para tronzar y cortes intermitentes.

### Avance radial

Ancho de plaquita ( $l_p$ ), mm



**P**

-CF / GC1125

**-CM / GC1125**

-CR / GC2135

**M**

-CF / GC1125

**-CM / GC2135**

-CR / GC1145

**K**

-CF / GC1125

**-CM / GC4225**

-CR / GC4225

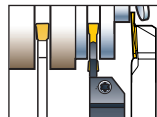
**S**

-CF / GC1125

**-CM / GC1145**

-CR / GC1145

## Tronzado



CoroCut® 1-2

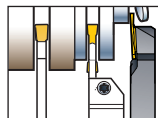
|                                            | Tamaño de asiento <sup>1)</sup> | Código de pedido      | Dimensiones, mm <sup>2</sup> |        |                   |                           | Recomendaciones de calidades y datos de corte |                  | Calidades |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|--------------------------------------------|---------------------------------|-----------------------|------------------------------|--------|-------------------|---------------------------|-----------------------------------------------|------------------|-----------|----------|--------|-----|---------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                            |                                 |                       | GC425                        | GC1125 | GC1145            | GC2135                    |                                               |                  | $l_a$     | $\Psi_r$ | $r_e$  | $a$ | $f_{rx}$ mm/r |  |  |  |  |
|                                            |                                 |                       |                              |        |                   |                           |                                               |                  |           |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| Avance bajo<br>Tronzado de tubos           | F                               | N123F2-0250-0001-CF   | ★                            | ★      | ★                 | 2.50 0° 0.10 18.4         | <b>0.04</b> (0.02 – 0.12)                     | Primera elección |           |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|                                            |                                 | R/L123F2-0250-0501-CF | ★                            | ★      | ★                 | 2.50 5° 0.15 18.4         | <b>0.04</b> (0.02 – 0.11)                     | GC1125           | GC2135    | GC1125   | GC1125 |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|                                            | G                               | N123G2-0300-0001-CF   | ★                            | ★      | ★                 | 3.00 0° 0.10 18.4         | <b>0.08</b> (0.04 – 0.15)                     |                  |           |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|                                            |                                 | R/L123G2-0300-0501-CF | ★                            | ★      | ★                 | 3.00 5° 0.15 18.3         | <b>0.07</b> (0.04 – 0.13)                     |                  |           |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|                                            | H                               | N123H2-0400-0001-CF   | ★                            | ★      | ★                 | 4.00 0° 0.15 23.3         | <b>0.10</b> (0.04 – 0.18)                     | $v_c$ m/min      |           |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| R/L123H2-0400-0501-CF                      |                                 | ★                     | ★                            | ★      | 4.00 5° 0.15 25.3 | <b>0.09</b> (0.04 – 0.16) | 140                                           | 90               | 95        | 25       |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| Avance medio<br>Tronzado de tubos y barras | D                               | N123D2-0150-0002-CM   | ★                            | ★      | ★                 | 1.50 0° 0.20 12.9         | <b>0.06</b> (0.03 – 0.17)                     | Primera elección |           |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|                                            |                                 | N123E2-0200-0002-CM   | ★                            | ★      | ★                 | 2.00 0° 0.20 19.0         | <b>0.06</b> (0.03 – 0.17)                     | GC1125           | GC2135    | GC4225   | GC1145 |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|                                            | R/L123E2-0200-0502-CM           | ★                     | ★                            | ★      | 2.00 5° 0.20 19.0 | <b>0.05</b> (0.03 – 0.15) |                                               |                  |           |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|                                            | F                               | N123F2-0250-0002-CM   | ★                            | ★      | ★                 | 2.50 0° 0.20 18.9         | <b>0.08</b> (0.03 – 0.15)                     |                  |           |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|                                            |                                 | R/L123F2-0250-0502-CM | ★                            | ★      | ★                 | 2.50 5° 0.20 18.9         | <b>0.07</b> (0.03 – 0.13)                     |                  |           |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|                                            | G                               | N123G2-0300-0002-CM   | ★                            | ★      | ★                 | 3.00 0° 0.20 18.9         | <b>0.13</b> (0.04 – 0.25)                     |                  |           |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|                                            |                                 | R/L123G2-0300-0502-CM | ★                            | ★      | ★                 | 3.00 5° 0.20 18.8         | <b>0.11</b> (0.03 – 0.23)                     |                  |           |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|                                            | H                               | N123H2-0400-0002-CM   | ★                            | ★      | ★                 | 4.00 0° 0.20 24.1         | <b>0.12</b> (0.05 – 0.24)                     | $v_c$ m/min      |           |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|                                            |                                 | R/L123H2-0400-0502-CM | ★                            | ★      | ★                 | 4.00 5° 0.20 24.1         | <b>0.11</b> (0.05 – 0.22)                     | 140              | 90        | 125      | 25     |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|                                            | J                               | N123J2-0500-0002-CM   | ★                            | ★      | ★                 | 5.00 0° 0.20 24.1         | <b>0.15</b> (0.07 – 0.30)                     |                  |           |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| R/L123J2-0500-0502-CM                      |                                 | ★                     | ★                            | ★      | 5.00 5° 0.20 24.1 | <b>0.14</b> (0.06 – 0.27) |                                               |                  |           |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| Avance elevado<br>Tronzado de barras       | F                               | N123F2-0250-0003-CR   | ★                            | ★      | ★                 | 2.50 0° 0.30 18.9         | <b>0.12</b> (0.04 – 0.19)                     | Primera elección |           |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|                                            |                                 | R/L123F2-0250-0503-CR | ★                            | ★      | ★                 | 2.50 5° 0.30 18.9         | <b>0.11</b> (0.03 – 0.17)                     | GC2135           | GC1145    | GC4225   | GC1145 |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|                                            | G                               | N123G2-0300-0003-CR   | ★                            | ★      | ★                 | 3.00 0° 0.30 18.9         | <b>0.15</b> (0.05 – 0.28)                     |                  |           |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|                                            |                                 | R/L123G2-0300-0503-CR | ★                            | ★      | ★                 | 3.00 5° 0.30 18.8         | <b>0.14</b> (0.05 – 0.25)                     |                  |           |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|                                            | H                               | N123H2-0400-0003-CR   | ★                            | ★      | ★                 | 4.00 0° 0.30 23.7         | <b>0.18</b> (0.10 – 0.32)                     |                  |           |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|                                            |                                 | R/L123H2-0400-0503-CR | ★                            | ★      | ★                 | 4.00 5° 0.30 23.7         | <b>0.16</b> (0.09 – 0.28)                     |                  |           |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|                                            | J                               | N123J2-0500-0004-CR   | ★                            | ★      | ★                 | 5.00 0° 0.40 23.7         | <b>0.20</b> (0.11 – 0.35)                     | $v_c$ m/min      |           |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|                                            |                                 | R/L123J2-0500-0504-CR | ★                            | ★      | ★                 | 5.00 5° 0.40 23.6         | <b>0.18</b> (0.10 – 0.32)                     | 140              | 90        | 125      | 20     |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|                                            | K                               | N123K2-0600-0004-CR   | ★                            | ★      | ★                 | 6.00 0° 0.40 23.5         | <b>0.23</b> (0.12 – 0.40)                     |                  |           |          |        |     |               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |

<sup>1)</sup> Para adaptarse al tamaño del asiento en el portaplaquitas.

Ejemplo de pedido: 10 piezas N123F2-0250-0001-CF 1125

<sup>2)</sup> Encontrará ilustraciones acotadas en la página 107.

(R=A derecha, L=A izquierda)

**Tronzado****Tronzado profundo  $\varnothing 40 - 110$  mm**

T-Max Q-Cut®

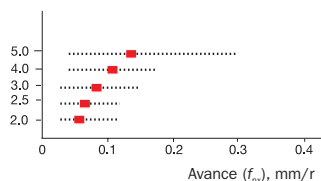
ISO/ANSI

**CONDICIONES BUENAS****La elección para avance bajo**

Para tronzado sin tetones ni rebabas

**-5F**

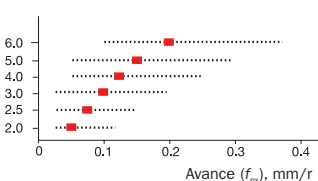
- Filo de corte agudizado.
- Amplia elección de ángulos frontales.

**Avance radial**Ancho de plaquita ( $l_a$ ), mm**CONDICIONES NORMALES****La elección para avance medio**

Para tronzado de tubos y barras

**-5E**

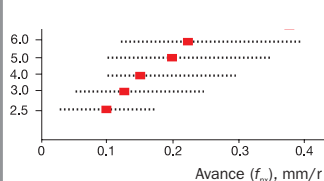
- Fuerzas de corte bajas.
- Recomendada para tubos y piezas de diámetro pequeño.

**Avance radial**Ancho de plaquita ( $l_a$ ), mm**CONDICIONES DIFÍCILES****La elección para avance elevado**

Para tronzado de tubos y barras

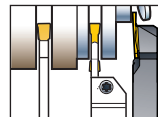
**-4E**

- Filo de corte robusto.
- Excelente para cortes intermitentes y operaciones que demandan tenacidad.

**Avance radial**Ancho de plaquita ( $l_a$ ), mm

|          |                     |                     |                     |
|----------|---------------------|---------------------|---------------------|
| <b>P</b> | <b>-5F / GC1125</b> | <b>-5E / GC1125</b> | <b>-4E / GC2135</b> |
| <b>M</b> | <b>-5F / GC1125</b> | <b>-5E / GC2135</b> | <b>-4E / GC1145</b> |
| <b>K</b> | <b>-5F / GC1125</b> | <b>-5E / GC4225</b> | <b>-4E / GC4225</b> |
| <b>N</b> |                     | <b>-5E / H13A</b>   | <b>-4E / H13A</b>   |
| <b>S</b> | <b>-5F / GC1125</b> | <b>-5E / GC1145</b> | <b>-4E / GC1145</b> |

## Tronzado



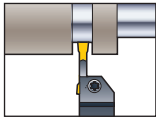
T-Max O-Cut®

|                                                | Tamaño de asiento <sup>1)</sup>          | Código de pedido   |               |      |        |        | Dimensiones, mm <sup>2</sup> |        |                | Recomendaciones de calidades y datos de corte |                           |                           |           |   |   |   |   |
|------------------------------------------------|------------------------------------------|--------------------|---------------|------|--------|--------|------------------------------|--------|----------------|-----------------------------------------------|---------------------------|---------------------------|-----------|---|---|---|---|
|                                                |                                          |                    |               | H13A | GC4225 | GC1125 | GC2135                       | GC1145 | l <sub>a</sub> | Ψ <sub>r</sub>                                | r <sub>ε</sub>            | f <sub>m</sub> mm/r       | Calidades |   |   |   |   |
|                                                |                                          |                    |               |      |        |        |                              |        |                |                                               |                           |                           | P         | M | K | N | S |
| Avance bajo<br><br>Sin tetones ni rebabas      | 20                                       | N151.2-200-5F      |               |      | ★      |        |                              |        | 2.00           | 0°                                            | 0.20                      | <b>0.04</b> (0.03 – 0.12) |           |   |   |   |   |
|                                                |                                          | R/L151.2-200 05-5F |               |      | ★      |        |                              |        | 2.00           | 5°                                            | 0.10                      | <b>0.04</b> (0.03 – 0.11) |           |   |   |   |   |
|                                                |                                          | -200 08-5F         |               |      | ★      |        |                              |        | 2.00           | 8°                                            | 0.10                      | <b>0.03</b> (0.03 – 0.10) |           |   |   |   |   |
|                                                |                                          | -200 12-5F         |               |      | ★      |        |                              |        | 2.00           | 12°                                           | 0.10                      | <b>0.03</b> (0.02 – 0.09) |           |   |   |   |   |
|                                                |                                          | -200 15-5F         |               |      | ★      |        |                              |        | 2.00           | 15°                                           | 0.10                      | <b>0.03</b> (0.02 – 0.09) |           |   |   |   |   |
|                                                |                                          | -200 20-5F         |               |      | ★      |        |                              |        | 2.00           | 20°                                           | 0.10                      | <b>0.02</b> (0.02 – 0.07) |           |   |   |   |   |
|                                                | 25                                       | N151.2 -250-5F     |               |      | ★      |        |                              |        | 2.50           | 0°                                            | 0.20                      | <b>0.06</b> (0.03 – 0.15) |           |   |   |   |   |
|                                                |                                          | R/L151.2-250 05-5F |               |      | ★      |        |                              |        | 2.50           | 5°                                            | 0.10                      | <b>0.05</b> (0.03 – 0.14) |           |   |   |   |   |
|                                                |                                          | -250 08-5F         |               |      | ★      |        |                              |        | 2.50           | 8°                                            | 0.10                      | <b>0.05</b> (0.02 – 0.13) |           |   |   |   |   |
|                                                |                                          | -250 12-5F         |               |      | ★      |        |                              |        | 2.50           | 12°                                           | 0.10                      | <b>0.05</b> (0.02 – 0.11) |           |   |   |   |   |
|                                                |                                          | -250 15-5F         |               |      | ★      |        |                              |        | 2.50           | 15°                                           | 0.10                      | <b>0.04</b> (0.02 – 0.11) |           |   |   |   |   |
|                                                |                                          |                    |               |      |        |        |                              |        |                |                                               |                           |                           |           |   |   |   |   |
|                                                | 30                                       | N151.2 -300-5F     |               |      | ★      |        |                              |        | 3.00           | 0°                                            | 0.20                      | <b>0.08</b> (0.03 – 0.20) |           |   |   |   |   |
|                                                |                                          | R/L151.2-300 05-5F |               |      | ★      |        |                              |        | 3.00           | 5°                                            | 0.10                      | <b>0.07</b> (0.03 – 0.18) |           |   |   |   |   |
|                                                |                                          | -300 08-5F         |               |      | ★      |        |                              |        | 3.00           | 8°                                            | 0.10                      | <b>0.07</b> (0.03 – 0.17) |           |   |   |   |   |
|                                                |                                          | -300 12-5F         |               |      | ★      |        |                              |        | 3.00           | 12°                                           | 0.10                      | <b>0.06</b> (0.02 – 0.15) |           |   |   |   |   |
|                                                | 40                                       | N151.2 -400-5F     |               |      | ★      |        |                              |        | 4.00           | 0°                                            | 0.20                      | <b>0.10</b> (0.05 – 0.25) |           |   |   |   |   |
|                                                |                                          | R/L151.2-400 05-5F |               |      | ★      |        |                              |        | 4.00           | 5°                                            | 0.10                      | <b>0.09</b> (0.04 – 0.22) |           |   |   |   |   |
| -400 08-5F                                     |                                          |                    |               | ★    |        |        |                              | 4.00   | 8°             | 0.10                                          | <b>0.08</b> (0.04 – 0.21) |                           |           |   |   |   |   |
| 50                                             | N151.2 -500-5F                           |                    |               | ★    |        |        |                              | 5.00   | 0°             | 0.20                                          | <b>0.12</b> (0.05 – 0.30) |                           |           |   |   |   |   |
|                                                | R/L151.2-500 05-5F                       |                    |               | ★    |        |        |                              | 5.00   | 5°             | 0.10                                          | <b>0.11</b> (0.05 – 0.27) |                           |           |   |   |   |   |
| Avance medio<br><br>Tronzado de tubos y barras | 20                                       | N151.2-200-5E      | ★             | ★    | ★      | ★      | ★                            | 2.00   | 0°             | 0.20                                          | <b>0.06</b> (0.03 – 0.17) |                           |           |   |   |   |   |
|                                                |                                          |                    |               |      |        |        |                              |        |                |                                               |                           |                           |           |   |   |   |   |
|                                                | 25                                       | N151.2-250-5E      | ★             | ★    | ★      | ★      | ★                            | 2.50   | 0°             | 0.20                                          | <b>0.08</b> (0.03 – 0.15) |                           |           |   |   |   |   |
|                                                |                                          |                    |               |      |        |        |                              |        |                |                                               |                           |                           |           |   |   |   |   |
|                                                | 30                                       | N151.2-300-5E      | ★             | ★    | ★      | ★      | ★                            | 3.00   | 0°             | 0.20                                          | <b>0.13</b> (0.04 – 0.25) |                           |           |   |   |   |   |
|                                                |                                          | R/L151.2-300 05-5E | ★             | ★    | ★      | ★      | ★                            | 3.00   | 5°             | 0.20                                          | <b>0.11</b> (0.03 – 0.23) |                           |           |   |   |   |   |
|                                                | 40                                       | N151.2-400-5E      | ★             | ★    | ★      | ★      | ★                            | 4.00   | 0°             | 0.20                                          | <b>0.12</b> (0.05 – 0.24) |                           |           |   |   |   |   |
|                                                |                                          | R/L151.2-400 05-5E | ★             | ★    | ★      | ★      | ★                            | 4.00   | 5°             | 0.20                                          | <b>0.11</b> (0.04 – 0.22) |                           |           |   |   |   |   |
|                                                | 50                                       | N151.2-500-5E      | ★             | ★    | ★      | ★      | ★                            | 5.00   | 0°             | 0.20                                          | <b>0.15</b> (0.04 – 0.24) |                           |           |   |   |   |   |
|                                                |                                          | R151.2-500 05-5E   | ★             | ★    | ★      | ★      | ★                            | 5.00   | 5°             | 0.20                                          | <b>0.14</b> (0.04 – 0.22) |                           |           |   |   |   |   |
|                                                |                                          | L151.2-500 05-5E   | ★             | ★    | ★      | ★      | ★                            | 5.00   | 5°             | 0.20                                          | <b>0.14</b> (0.04 – 0.22) |                           |           |   |   |   |   |
|                                                |                                          |                    |               |      |        |        |                              |        |                |                                               |                           |                           |           |   |   |   |   |
|                                                | 60                                       | N151.2-600-5E      | ★             | ★    | ★      | ★      | ★                            | 6.00   | 0°             | 0.20                                          | <b>0.20</b> (0.09 – 0.36) |                           |           |   |   |   |   |
|                                                |                                          | R/L151.2-600 05-5E | ★             | ★    | ★      | ★      | ★                            | 6.00   | 5°             | 0.20                                          | <b>0.18</b> (0.08 – 0.33) |                           |           |   |   |   |   |
|                                                |                                          |                    |               |      |        |        |                              |        |                |                                               |                           |                           |           |   |   |   |   |
|                                                | Avance elevado<br><br>Tronzado de barras | 25                 | N151.2-250-4E | ★    | ★      | ★      | ★                            | ★      | 2.50           | 0°                                            | 0.30                      | <b>0.10</b> (0.03 – 0.17) |           |   |   |   |   |
|                                                |                                          |                    |               |      |        |        |                              |        |                |                                               |                           |                           |           |   |   |   |   |
|                                                |                                          | 30                 | N151.2-300-4E | ★    | ★      | ★      | ★                            | ★      | 3.00           | 0°                                            | 0.30                      | <b>0.12</b> (0.05 – 0.24) |           |   |   |   |   |
| R/L151.2-300 05-4E                             |                                          |                    | ★             | ★    | ★      | ★      | ★                            | 3.00   | 5°             | 0.30                                          | <b>0.11</b> (0.04 – 0.22) |                           |           |   |   |   |   |
| 40                                             |                                          | N151.2-400-4E      | ★             | ★    | ★      | ★      | ★                            | 4.00   | 0°             | 0.30                                          | <b>0.15</b> (0.10 – 0.30) |                           |           |   |   |   |   |
|                                                |                                          | R/L151.2-400 05-4E | ★             | ★    | ★      | ★      | ★                            | 4.00   | 5°             | 0.30                                          | <b>0.14</b> (0.09 – 0.27) |                           |           |   |   |   |   |
| 50                                             |                                          | N151.2-500-4E      | ★             | ★    | ★      | ★      | ★                            | 5.00   | 0°             | 0.40                                          | <b>0.18</b> (0.10 – 0.35) |                           |           |   |   |   |   |
|                                                |                                          | R/L151.2-500 05-4E | ★             | ★    | ★      | ★      | ★                            | 5.00   | 5°             | 0.30                                          | <b>0.16</b> (0.09 – 0.31) |                           |           |   |   |   |   |
| 60                                             |                                          | N151.2-600-4E      | ★             | ★    | ★      | ★      | ★                            | 6.00   | 0°             | 0.40                                          | <b>0.22</b> (0.13 – 0.39) |                           |           |   |   |   |   |
|                                                |                                          | R/L151.2-600 05-4E | ★             | ★    | ★      | ★      | ★                            | 6.00   | 5°             | 0.30                                          | <b>0.20</b> (0.11 – 0.35) |                           |           |   |   |   |   |
|                                                |                                          |                    |               |      |        |        |                              |        |                |                                               |                           |                           |           |   |   |   |   |

<sup>1)</sup> Para adaptarse al tamaño del asiento en el portaplaquitas.

<sup>2)</sup> Encontrará ilustraciones acotadas en la página 107.

**Ejemplo de pedido: 10 piezas N151.2-200-5F 1125**  
(R=A derecha, N=Neutro, L=A izquierda)



Ranurado

CoroCut® 1-2



CONDICIONES BUENAS

○

La elección para avance bajo

-GF

- Filo de corte agudizado.
- Fuerzas de corte bajas y buen acabado superficial.
- Tolerancias estrechas.

Avance radial

Ancho de plaquita ( $l_g$ ), mm

|   |                 |
|---|-----------------|
| P | -GF / GC1125    |
| M | -GF / GC1125    |
| K | -GF / GC1125    |
| N | -GF / H13A      |
| S | -GF / GC1105    |
| H | S01025 / CB7015 |

¡Primera elección!

◐

La elección para avance medio

-GM

- Excelente control de viruta.
- Reduce el ancho de las virutas y permite un buen acabado superficial en la pieza.

Avance radial

Ancho de plaquita ( $l_g$ ), mm

|              |  |
|--------------|--|
| -GM / GC4225 |  |
| -GM / GC1125 |  |
| -GM / GC3115 |  |
| -GM / H13A   |  |

Para materiales endurecidos

- Plaquita con punta de CBN
- Tolerancias estrechas y excelente acabado superficial de la pieza.

Avance radial

Ancho de plaquita ( $l_g$ ), mm

CONDICIONES DIFÍCILES

●

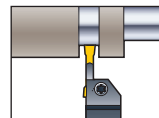
-GM

Avance radial

Ancho de plaquita ( $l_g$ ), mm



## Ranurado



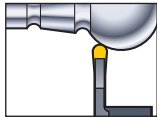
## CoroCut® 1-2

|              | Tamaño de asiento <sup>1)</sup> | Código de pedido                                                                                                                                                                                                                                                                          | Dimensiones, mm |      |        |        |        | Recomendaciones de calidades y datos de corte |               |
|--------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------|--------|--------|--------|-----------------------------------------------|---------------|
|              |                                 |                                                                                                                                                                                                                                                                                           | GC1105          | H13A | GC3115 | GC4225 | GC1125 |                                               |               |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        | Calidades                                     |               |
| Avance bajo  | D<br>E<br>G<br>H<br>K<br>L      | CoroCut de 2 filos<br>N123D2 -0150-0001-GF<br>N123E2 -0200-0002-GF<br>-0200-0004-GF<br>N123G2 -0300-0002-GF<br>-0300-0004-GF<br>N123H2 -0400-0002-GF<br>-0400-0004-GF<br>-0475-0004-GF<br>-0475-0008-GF<br>-0500-0002-GF<br>-0500-0004-GF<br>N123K2 -0600-0002-GF<br>N123L2 -0800-0002-GF | GC1105          | H13A | GC3115 | GC4225 | GC1125 | CB7015                                        | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              | E<br>F<br>G<br>H<br>J           | Para ranuras circlip <sup>2)</sup><br>N123E2 -0185-0001-GF<br>-0215-0001-GF<br>N123F2 -0265-0002-GF<br>N123G2 -0315-0002-GF<br>N123H2 -0415-0002-GF<br>N123J2 -0515-0002-GF                                                                                                               | GC1105          | H13A | GC3115 | GC4225 | GC1125 | CB7015                                        | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              | G<br>H<br>J<br>L                | CoroCut 1-edge para materiales endurecidos<br>N123G1 -030004S01025<br>N123H1 -040004S01025<br>-050004S01025<br>N123J1 -060004S01025<br>N123L1 -080008S01025                                                                                                                               | GC1105          | H13A | GC3115 | GC4225 | GC1125 | CB7015                                        | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
| Avance medio | E<br>G<br>H<br>J<br>K<br>L      | CoroCut de 2 filos<br>N123E2 -0200-0002-GM<br>N123G2 -0300-0003-GM<br>N123H2 -0400-0003-GM<br>N123J2 -0500-0004-GM<br>N123K2 -0600-0004-GM<br>N123L2 -0800-0005-GM                                                                                                                        | GC1105          | H13A | GC3115 | GC4225 | GC1125 | CB7015                                        | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |
|              |                                 |                                                                                                                                                                                                                                                                                           |                 |      |        |        |        |                                               | $f_{nx}$ mm/r |

<sup>1)</sup> Para adaptarse al tamaño del asiento en el portaplaquitas.<sup>2)</sup> Tolerancias, mm  $I_a = +0,09 / +0,13$ .

Ejemplo de pedido: 10 piezas N123D2-0150-0001-GF N125

N=Neutro



Perfilado

CoroCut® 1-2

ISO/ANSI

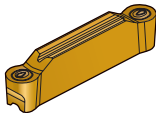


CONDICIONES BUENAS



La elección para avance bajo

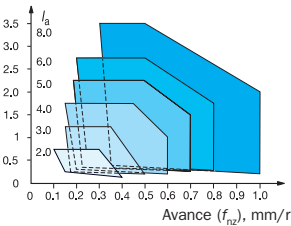
-RO



- Excelente control de viruta a avances bajos y a pequeñas profundidades de corte.
- Buen acabado superficial.

Avance axial

Profundidad de corte ( $a_p$ ) mm

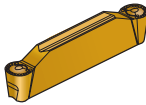


CONDICIONES NORMALES



La elección para avance medio

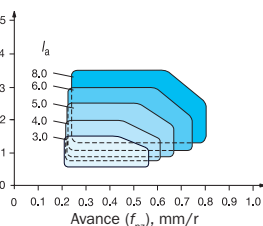
-RM



- Ideal para perfilado en todo tipo de materiales
- Excelente control de viruta.
- Buen acabado superficial.

Avance axial

Profundidad de corte ( $a_p$ ) mm

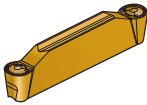


CONDICIONES DIFÍCILES



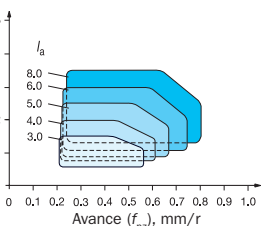
Perfilado de materiales templados

-RM

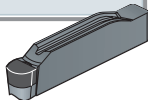


Avance axial

Profundidad de corte ( $a_p$ ) mm



|          |                 |                     |                     |
|----------|-----------------|---------------------|---------------------|
| <b>P</b> | -RO / GC1125    | <b>-RM / GC4225</b> | <b>-RM / GC2135</b> |
| <b>M</b> | -RO / GC1125    | <b>-RM / GC1125</b> | <b>-RM / GC2135</b> |
| <b>K</b> | -RO / GC1125    | <b>-RM / GC4225</b> | <b>-RM / GC4225</b> |
| <b>S</b> | -RO / GC1105    |                     |                     |
| <b>H</b> | S01025 / CB7015 |                     |                     |

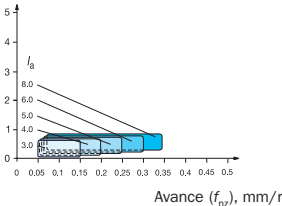


Para materiales endurecidos

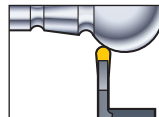
- Plaquita con punta de CBN
- Extraordinaria productividad y excepcional acabado superficial
- Plaquita de 1 filo

Avance axial

Profundidad de corte ( $a_p$ ) mm



# Perfilado



## CoroCut® 1-2

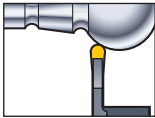
|                 | Tamaño de asiento <sup>1)</sup> | Código de pedido   |       |        |        |        | Dimensiones, mm      |                      |                      | Recomendaciones de calidades y datos de corte <sup>2)</sup> |                            |        |                            |     |        |        |  |
|-----------------|---------------------------------|--------------------|-------|--------|--------|--------|----------------------|----------------------|----------------------|-------------------------------------------------------------|----------------------------|--------|----------------------------|-----|--------|--------|--|
|                 |                                 |                    | GC105 | GC4225 | GC1125 | CB7015 | <i>l<sub>a</sub></i> | <i>r<sub>ε</sub></i> | <i>a<sub>r</sub></i> | <i>f<sub>rx</sub></i> mm/r                                  | Calidades                  |        |                            |     |        |        |  |
|                 |                                 |                    |       |        |        |        |                      |                      |                      |                                                             | P M K N S H                |        |                            |     |        |        |  |
| Avance bajo     | E<br>F<br>H<br><br>J<br>L       | CoroCut de 2 filos |       |        |        |        |                      |                      |                      |                                                             | Primera elección           |        |                            |     |        |        |  |
|                 |                                 | N123E2 -0200-RO    | ★     | ★      |        |        | 2.00                 | 1.00                 | 19.3                 | 0.25 (0.14 – 0.36)                                          | GC1125                     | GC1125 | GC1125                     |     | GC1105 |        |  |
|                 |                                 | N123F2 -0300-RO    | ★     | ★      |        |        | 3.00                 | 1.50                 | 18.7                 | 0.30 (0.18 – 0.43)                                          |                            |        |                            |     |        |        |  |
|                 |                                 | N123H2 -0400-RO    | ★     | ★      |        |        | 4.00                 | 2.00                 | 23.4                 | 0.45 (0.30 – 0.60)                                          |                            |        |                            |     |        |        |  |
|                 |                                 | -0450-RO           |       | ★      |        |        | 4.50                 | 2.25                 | 23.1                 | 0.50 (0.23 – 0.70)                                          |                            |        |                            |     |        |        |  |
|                 |                                 | -0500-RO           | ★     | ★      |        |        | 5.00                 | 2.50                 | 22.8                 | 0.50 (0.23 – 0.70)                                          |                            |        |                            |     |        |        |  |
|                 |                                 | N123J2 -0600-RO    | ★     | ★      |        |        | 6.00                 | 3.00                 | 22.3                 | 0.60 (0.28 – 0.80)                                          |                            |        |                            |     |        |        |  |
| N123L2 -0800-RO | ★                               | ★                  |       |        | 8.00   | 4.00   | 27.4                 | 0.70 (0.43 – 1.00)   |                      |                                                             |                            |        |                            |     |        |        |  |
|                 |                                 |                    |       |        |        |        |                      |                      |                      |                                                             | <i>v<sub>c</sub></i> m/min | 140    | 125                        | 95  |        | 35     |  |
| Avance medio    | F<br>G<br>H<br><br>J<br>L       | CoroCut de 2 filos |       |        |        |        |                      |                      |                      |                                                             | Primera elección           |        |                            |     |        |        |  |
|                 |                                 | N123F2 -0300-RM    | ★     | ★      |        |        | 3.00                 | 1.50                 | 18.6                 | 0.40 (0.23 – 0.57)                                          | GC4225                     | GC1125 | GC4225                     |     |        |        |  |
|                 |                                 | N123G2 -0400-RM    | ★     | ★      |        |        | 4.00                 | 2.00                 | 18.1                 | 0.40 (0.21 – 0.61)                                          |                            |        |                            |     |        |        |  |
|                 |                                 | N123H2 -0400-RM    | ★     | ★      |        |        | 4.00                 | 2.00                 | 23.2                 | 0.40 (0.21 – 0.61)                                          |                            |        |                            |     |        |        |  |
|                 |                                 | -0500-RM           | ★     | ★      |        |        | 5.00                 | 2.50                 | 22.7                 | 0.44 (0.22 – 0.68)                                          |                            |        |                            |     |        |        |  |
|                 |                                 | N123J2 -0600-RM    | ★     | ★      |        |        | 6.00                 | 3.00                 | 22.2                 | 0.49 (0.24 – 0.68)                                          |                            |        |                            |     |        |        |  |
|                 |                                 | N123L2 -0800-RM    | ★     | ★      |        |        | 8.00                 | 4.00                 | 27.0                 | 0.52 (0.24 – 0.80)                                          |                            |        |                            |     |        |        |  |
|                 |                                 |                    |       |        |        |        |                      |                      |                      |                                                             | <i>v<sub>c</sub></i> m/min | 160    | 125                        | 125 |        |        |  |
| Avance medio    | F<br>H<br><br>J                 | CoroCut de 1 filo  |       |        |        |        |                      |                      | <i>iW</i>            |                                                             | Primera elección           |        |                            |     |        |        |  |
|                 |                                 | N123F1 -0300S01025 |       |        |        | ★      | 3.00                 | 1.50                 | 2.5                  | 0.10 (0.05 – 0.15)                                          |                            |        |                            |     |        | CB7015 |  |
|                 |                                 | N123H1 -0400S01025 |       |        |        | ★      | 4.00                 | 2.00                 | 3.0                  | 0.17 (0.05 – 0.34)                                          |                            |        |                            |     |        |        |  |
|                 |                                 | -0500S01025        |       |        |        | ★      | 5.00                 | 2.50                 | 3.5                  | 0.17 (0.05 – 0.25)                                          |                            |        |                            |     |        |        |  |
|                 |                                 | N123J1 -0600S01025 |       |        |        | ★      | 6.00                 | 3.00                 | 4.0                  | 0.20 (0.06 – 0.30)                                          |                            |        |                            |     |        |        |  |
|                 |                                 |                    |       |        |        |        |                      |                      |                      |                                                             |                            |        | <i>v<sub>c</sub></i> m/min |     |        |        |  |

<sup>1)</sup> Para adaptarse al tamaño del asiento en el portaplaquitas.

<sup>2)</sup> Valor de partida recomendado para  $f_{rx} = 0.4 \times f_{nz}$ .

Ejemplo de pedido: 10 piezas N123E2-0200-R0 N125

N=Neutro



Perfilado

CoroCut® 1-2



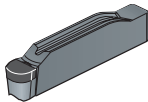
CONDICIONES BUENAS



La elección para avance bajo

Perfilado de materiales  
no férricos

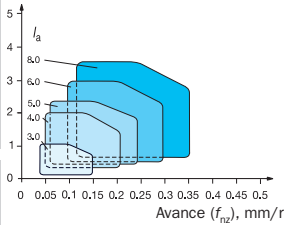
-RS



- Plaquita con punta de diamante
- Extraordinaria productividad y excepcional acabado superficial
- Para uso en condiciones estables.
- Plaquita de 1 filo

Avance axial

Profundidad de corte ( $a_p$ ) mm



N

-RS / CD10

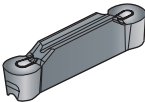
CONDICIONES NORMALES



La elección para avance medio

Perfilado de materiales  
no férricos

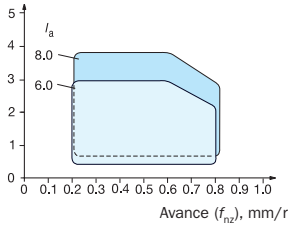
-AM



- Buen control del flujo de virutas, ofreciendo un buen acabado superficial.
- Filo de corte agudizado

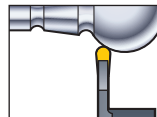
Avance axial

Profundidad de corte ( $a_p$ ) mm



-AM / GC1005

## Perfilado



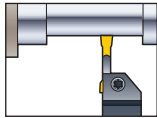
CoroCut® 1-2

|              | Tamaño de asiento <sup>1)</sup> | Código de pedido            |                  |        | Dimensiones, mm |              |       |      | Recomendaciones de calidades y datos de corte <sup>2)</sup>                                                |                      |  |  |  |  |
|--------------|---------------------------------|-----------------------------|------------------|--------|-----------------|--------------|-------|------|------------------------------------------------------------------------------------------------------------|----------------------|--|--|--|--|
|              |                                 |                             | CD10             | GC1005 | $l_a$           | $r_\epsilon$ | $a_r$ | $iW$ | $f_{rx}$ mm/r                                                                                              | Calidades            |  |  |  |  |
| Avance bajo  | F<br>H<br>J<br>L                | CoroCut de 1 filo           | ★<br>★<br>★<br>★ |        | 3.00            | 1.50         | ∞     | 2.5  | 0.10 (0.04 – 0.15)<br>0.12 (0.05 – 0.21)<br>0.15 (0.06 – 0.24)<br>0.20 (0.10 – 0.30)<br>0.24 (0.11 – 0.35) | Primera elección     |  |  |  |  |
|              |                                 | N123F1 -0300-RS             |                  |        |                 |              |       |      |                                                                                                            | CD10                 |  |  |  |  |
|              |                                 | N123H1 -0400-RS<br>-0500-RS |                  |        |                 |              |       |      |                                                                                                            |                      |  |  |  |  |
|              |                                 | N123J1 -0600-RS             |                  |        |                 |              |       |      |                                                                                                            | v <sub>c</sub> m/min |  |  |  |  |
|              |                                 | N123L1 -0800-RS             |                  |        |                 |              |       |      |                                                                                                            | 2100                 |  |  |  |  |
|              |                                 |                             |                  |        |                 |              |       |      |                                                                                                            |                      |  |  |  |  |
| Avance medio | J<br>L                          | CoroCut de 2 filos          | ★<br>★           |        | 6.00            | 3.00         | 22.2  | –    | 0.50 (0.25 – 0.90)<br>0.50 (0.25 – 0.90)                                                                   | Primera elección     |  |  |  |  |
|              |                                 | N123J2 -0600-AM             |                  |        |                 |              |       |      |                                                                                                            | GC1005               |  |  |  |  |
|              |                                 | N123L2 -0800-AM             |                  |        |                 |              |       |      |                                                                                                            |                      |  |  |  |  |
|              |                                 |                             |                  |        |                 |              |       |      |                                                                                                            | v <sub>c</sub> m/min |  |  |  |  |
|              |                                 |                             |                  |        |                 |              |       |      |                                                                                                            | 1900                 |  |  |  |  |
|              |                                 |                             |                  |        |                 |              |       |      |                                                                                                            |                      |  |  |  |  |

<sup>1)</sup> Para adaptarse al tamaño del asiento en el portaplaquitas.<sup>2)</sup> Valor de partida recomendado para  $f_{rx} = 0.4 \times f_{nz}$ .

Ejemplo de pedido: 10 piezas N123F1-0300-RS CD10

N=Neutro



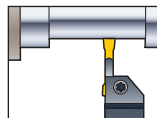
Cilindrado

CoroCut® 1-2



| ¡Primera elección!                                                                                                                                                                                                                  |                                                                                                                                                                |                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| CONDICIONES BUENAS                                                                                                                                                                                                                  | CONDICIONES NORMALES                                                                                                                                           | CONDICIONES DIFÍCILES                            |
|                                                                                                                                                                                                                                     |                                                                                                                                                                |                                                  |
| La elección para avance bajo                                                                                                                                                                                                        | La elección para avance medio                                                                                                                                  | La elección para avance medio                    |
| Para ensanchado de ranuras                                                                                                                                                                                                          | Para torneado en general                                                                                                                                       | Para torneado en general                         |
| -TF                                                                                                                                                                                                                                 | -TM                                                                                                                                                            | -TM                                              |
| <ul style="list-style-type: none"><li>La geometría positiva elimina el riesgo de formación de filos de aportación.</li><li>Buen control de la viruta y excelente acabado superficial.</li><li>Diseño rascador en el filo.</li></ul> | <ul style="list-style-type: none"><li>Un mecanizado productivo.</li><li>La geometría positiva elimina el riesgo de formación de filos de aportación.</li></ul> |                                                  |
| Avance axial<br>Profundidad de corte ( $a_p$ ), mm                                                                                                                                                                                  | Avance axial<br>Profundidad de corte ( $a_p$ ), mm                                                                                                             | Avance radial<br>Ancho de plaqueta ( $l_a$ ), mm |
|                                                                                                                                                                                                                                     |                                                                                                                                                                |                                                  |
| <b>P</b> -TF / GC1125                                                                                                                                                                                                               | -TM / GC4225                                                                                                                                                   | -TM / GC2135                                     |
| <b>M</b> -TF / GC1125                                                                                                                                                                                                               | -TM / GC2135                                                                                                                                                   | -TM / GC1145                                     |
| <b>K</b> -TF / GC4225                                                                                                                                                                                                               | -TM / GC4225                                                                                                                                                   | -TM / GC4225                                     |
| <b>N</b> -TF / H13A                                                                                                                                                                                                                 | -TM / H13A                                                                                                                                                     |                                                  |
| <b>S</b> -TF / GC1105                                                                                                                                                                                                               | -TM / H13A                                                                                                                                                     |                                                  |

## Cilindrado



CoroCut® 1-2

|              | Tamaño de asiento <sup>1)</sup> | Código de pedido     | Dimensiones, mm |        |      |        |        |        | Recomendaciones de calidades |                                         |
|--------------|---------------------------------|----------------------|-----------------|--------|------|--------|--------|--------|------------------------------|-----------------------------------------|
|              |                                 |                      | GC1145          | GC1105 | H13A | GC4225 | GC1125 | GC2135 | Máx.<br>$f_{nz}$ mm/r        | Dados de corte<br>CoroKey <sup>2)</sup> |
|              |                                 |                      |                 |        |      |        |        |        |                              |                                         |
| Avance bajo  | G<br>H<br>J<br>K<br>L           | CoroCut de 2 filos   |                 |        |      |        |        |        |                              |                                         |
|              |                                 | N123G2 -0300-0003-TF | ★               | ★      |      | ★      | ★      |        | 3.00 0.30 18.5 2.6           | 0.13 (0.04 – 0.23)                      |
|              |                                 | N123H2 -0400-0004-TF | ★               | ★      | ★    | ★      | ★      |        | 4.00 0.40 23.3 3.5           | 0.15 (0.05 – 0.22)                      |
|              |                                 | N123J2 -0500-0004-TF | ★               | ★      | ★    | ★      | ★      |        | 5.00 0.40 23.3 3.5           | 0.183 (0.08 – 0.30)                     |
|              |                                 | N123K2 -0600-0004-TF | ★               | ★      | ★    | ★      | ★      |        | 6.00 0.40 23.3 3.8           | 0.19 (0.08 – 0.30)                      |
|              |                                 | N123L2 -0800-0008-TF | ★               | ★      | ★    | ★      | ★      |        | 8.00 0.80 28.0 4.0           | 0.22 (0.09 – 0.35)                      |
| Avance medio | G<br>H<br>J<br>K<br>L           | CoroCut de 2 filos   |                 |        |      |        |        |        |                              |                                         |
|              |                                 | N123G2 -0300-0004-TM | ★               | ★      |      | ★      | ★      |        | 3.00 0.40 18.4 3.5           | 0.20 (0.10 – 0.25)                      |
|              |                                 | N123H2 -0400-0004-TM | ★               | ★      |      | ★      | ★      |        | 4.00 0.40 23.4 4.6           | 0.20 (0.10 – 0.27)                      |
|              |                                 | -0400-0008-TM        | ★               | ★      |      | ★      | ★      |        | 4.00 0.80 23.4 4.6           | 0.20 (0.10 – 0.27)                      |
|              |                                 | N123J2 -0500-0004-TM | ★               | ★      |      | ★      | ★      |        | 5.00 0.40 23.4 4.6           | 0.22 (0.14 – 0.30)                      |
|              |                                 | -0500-0008-TM        | ★               | ★      |      | ★      | ★      |        | 5.00 0.80 23.0 4.6           | 0.22 (0.14 – 0.30)                      |
|              |                                 | N123K2 -0600-0004-TM | ★               | ★      |      | ★      | ★      |        | 6.00 0.40 23.4 4.5           | 0.23 (0.15 – 0.37)                      |
|              |                                 | -0600-0008-TM        | ★               | ★      |      | ★      | ★      |        | 6.00 0.80 23.0 4.5           | 0.23 (0.15 – 0.37)                      |
|              |                                 | N123L2 -0800-0008-TM | ★               | ★      |      | ★      | ★      |        | 8.00 0.80 28.0 7.0           | 0.25 (0.16 – 0.40)                      |
|              |                                 | -0800-0012-TM        | ★               | ★      |      | ★      | ★      |        | 8.00 1.20 27.6 7.0           | 0.25 (0.16 – 0.40)                      |

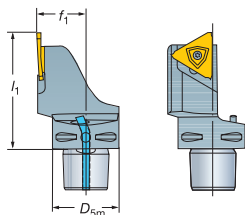
<sup>1)</sup> Para adaptarse al asiento de la plaquita en el portaplaquitas.<sup>2)</sup> Valores de partida recomendados para  $f_{nx} = 0.4 \times f_{nz}$ .

Ejemplo de pedido: 10 piezas N123G2-0300-0003-TF 1125

N=Neutro

## CoroCut® 3

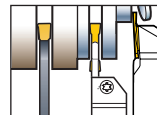
**Nota!** Si se utiliza una plaquita CoroCut 3, el valor  $a_r$  de la plaquita da la profundidad máxima de corte.

[illegible]

T= Unidad de corte a derecha,  
U = Unidad de corte a izquierda  
R = A derecha, L = A izquierda

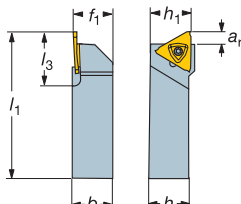


## Herramientas con mango para tronzado superficial



CoroCut® 3

**Nota!** se utiliza una plaquita CoroCut 3, el valor  $a_r$  de la plaquita da la profundidad máxima de corte.



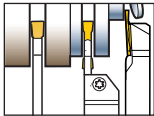
| Tamaño de asiento <sup>2)</sup> | Código de pedido<br>Herramientas tipo vástago | $a_r$<br>máx. | $b$ | $f_1$ | $h$ | $h_1$ | $l_1$ | $l_3$ | Plaquita c<br>alibradora |  | Nm  |
|---------------------------------|-----------------------------------------------|---------------|-----|-------|-----|-------|-------|-------|--------------------------|------------------------------------------------------------------------------------|-----|
| <b>T</b>                        | <b>RF123T06 -1010BM</b>                       | 6.4           | 10  | 10    | 10  | 10    | 125   | 23    | N123T3-0150-CM           | 15IP                                                                               | 3.0 |
|                                 | <b>-1212BM</b>                                | 6.4           | 12  | 12    | 12  | 12    | 125   | 23    |                          |                                                                                    |     |
|                                 | <b>-1616BM</b>                                | 6.4           | 16  | 16    | 16  | 16    | 125   | 23    |                          |                                                                                    |     |
|                                 | <b>-2020BM</b>                                | 6.4           | 20  | 20    | 20  | 20    | 125   | 23    |                          |                                                                                    |     |
|                                 | <b>-2525BM</b>                                | 6.4           | 25  | 25    | 25  | 25    | 150   | 23    |                          |                                                                                    |     |
|                                 | <b>-3232BM</b>                                | 6.4           | 32  | 32    | 32  | 32    | 170   | 23    |                          |                                                                                    |     |
| <b>U</b>                        | <b>LF123U06 -1010BM</b>                       | 6.4           | 10  | 10    | 10  | 10    | 125   | 23    | N123U3-0150-CM           | 15IP                                                                               | 3.0 |
|                                 | <b>-1212BM</b>                                | 6.4           | 12  | 12    | 12  | 12    | 125   | 23    |                          |                                                                                    |     |
|                                 | <b>-1616BM</b>                                | 6.4           | 16  | 16    | 16  | 16    | 125   | 23    |                          |                                                                                    |     |
|                                 | <b>-2020BM</b>                                | 6.4           | 20  | 20    | 20  | 20    | 125   | 23    |                          |                                                                                    |     |
|                                 | <b>-2525BM</b>                                | 6.4           | 25  | 25    | 25  | 25    | 150   | 23    |                          |                                                                                    |     |
|                                 | <b>-3232BM</b>                                | 6.4           | 32  | 32    | 32  | 32    | 170   | 23    |                          |                                                                                    |     |
|                                 |                                               |               |     |       |     |       |       |       |                          |                                                                                    |     |

<sup>1)</sup> Para máx. estabilidad elegir un mango con el valor de  $a_r$  más corto posible.

<sup>2)</sup> Para adaptarse al tamaño del asiento en la plaquita.

**Ejemplo de pedido: 2 piezas RF123T06-1010BM**

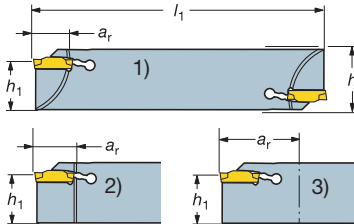
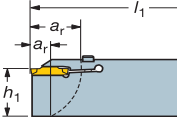
R = A derecha, L = A izquierda



Tronzado

Lamas de doble asiento de tronzar para montar sobre bloque herramienta

CoroCut® 1-2 and T-MAX Q-Cut®

|                                                                                                                                                                                                                                                                                                                                                                                                                                   |                  |                    |      |       |       |                    |                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------|------|-------|-------|--------------------|----------------------|
| <div>CoroCut® 1-2<div>¡Atención! Cuando se utiliza una plaquita CoroCut de 2 filos, el valor <math>a_r</math> de la plaquita proporciona la máxima profundidad de corte.</div><div></div><div></div><div>Sujeción por tornillo</div><div>T-Max Q-Cut</div></div> |                  |                    |      |       |       |                    |                      |
| Lama para tronzar                                                                                                                                                                                                                                                                                                                                                                                                                 | Código de pedido |                    |      |       |       |                    | Plaquita calibradora |
| Tamaño de asiento                                                                                                                                                                                                                                                                                                                                                                                                                 |                  | $a_r$ máx.         | $h$  | $h_1$ | $l_1$ | Llave              |                      |
| D                                                                                                                                                                                                                                                                                                                                                                                                                                 | CoroCut® 1-2     |                    |      |       |       |                    |                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                   | N123D15-21A2     | 5-15 <sup>1)</sup> | 25.9 | 21.4  | 110   | 5680 058-01        | N123D2-0150-CM       |
| E                                                                                                                                                                                                                                                                                                                                                                                                                                 | N123E15-21A2     | 15 <sup>2)</sup>   | 31.9 | 25.0  | 150   | 5680 058-01        | N123E2-0200-CM       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                   | N123E20-25A2     | 5-15 <sup>1)</sup> | 25.9 | 21.4  | 110   | 5680 058-01        | N123E2-0200-CM       |
| F                                                                                                                                                                                                                                                                                                                                                                                                                                 | N123F30-21A2     | 20 <sup>2)</sup>   | 31.9 | 25.0  | 150   | 5680 058-01        | N123F2-0250-CM       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                   | N123F55-25A2     | 30 <sup>3)</sup>   | 25.9 | 21.4  | 110   | 5680 058-01        | N123F2-0250-CM       |
| G                                                                                                                                                                                                                                                                                                                                                                                                                                 | N123G30-21A2     | 55 <sup>3)</sup>   | 31.9 | 25.0  | 150   | 5680 058-01        | N123G2-0300-CM       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                   | N123G55-25A2     | 30 <sup>3)</sup>   | 25.9 | 21.4  | 110   | 5680 058-01        | N123G2-0300-CM       |
| H                                                                                                                                                                                                                                                                                                                                                                                                                                 | N123H55-25A2     | 55 <sup>3)</sup>   | 31.9 | 25.0  | 150   | 5680 058-01        | N123H2-0400-CM       |
| J                                                                                                                                                                                                                                                                                                                                                                                                                                 | N123J55-25A2     | 55 <sup>3)</sup>   | 31.9 | 25.0  | 150   | 5680 058-01        | N123J2-0500-CM       |
| K                                                                                                                                                                                                                                                                                                                                                                                                                                 | N123K55-25A2     | 55 <sup>3)</sup>   | 31.9 | 25.0  | 150   | 5680 058-01        | N123K2-0600-CM       |
| CoroCut® 1-2 sujeción por tornillo                                                                                                                                                                                                                                                                                                                                                                                                |                  |                    |      |       |       |                    |                      |
| E                                                                                                                                                                                                                                                                                                                                                                                                                                 | R/LF123E25-25B1  | 25                 | 31.9 | 25.0  | 150   | 5680 043-14 (20IP) | N123E2-0200-CM       |
| F                                                                                                                                                                                                                                                                                                                                                                                                                                 | R/LF123F25-25B1  | 25                 | 31.9 | 25.0  | 150   | 5680 043-14 (20IP) | N123F2-0250-CM       |
| G                                                                                                                                                                                                                                                                                                                                                                                                                                 | R/LF123G25-25B1  | 25                 | 31.9 | 25.0  | 150   | 5680 043-14 (20IP) | N123G2-0300-CM       |
| H                                                                                                                                                                                                                                                                                                                                                                                                                                 | R/LF123H32-25B1  | 32                 | 31.9 | 25.0  | 150   | 5680 043-14 (20IP) | N123H2-0400-CM       |
| T-MAX Q-Cut®                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                    |      |       |       |                    |                      |
| 20                                                                                                                                                                                                                                                                                                                                                                                                                                | 151.2 -21-20     | 35                 | 25.9 | 21.4  | 110   | 5680 057-021       | N151.2-200-5E        |
| 25                                                                                                                                                                                                                                                                                                                                                                                                                                | 151.2 -21-25     | 35                 | 25.9 | 21.4  | 110   | 5680 057-021       | N151.2-250-5E        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                   | -25-25           | 60                 | 31.9 | 25.0  | 150   |                    |                      |
| 30                                                                                                                                                                                                                                                                                                                                                                                                                                | 151.2 -21-30     | 35                 | 25.9 | 21.4  | 110   | 5680 057-021       | N151.2-300-5E        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                   | -25-30           | 60                 | 31.9 | 25.0  | 150   |                    |                      |
| 40                                                                                                                                                                                                                                                                                                                                                                                                                                | 151.2 -21-40     | 35                 | 25.9 | 21.4  | 110   | 5680 057-011       | N151.2-400-5E        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                   | -25-40           | 60                 | 31.9 | 25.0  | 150   |                    |                      |
| 50                                                                                                                                                                                                                                                                                                                                                                                                                                | 151.2 -25-50     | 60                 | 31.9 | 25.0  | 150   | 5680 057-011       | N151.2-500-5E        |
| 60                                                                                                                                                                                                                                                                                                                                                                                                                                | 151.2 -25-60     | 60                 | 31.9 | 25.0  | 150   | 5680 057-011       | N151.2-600-5E        |

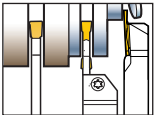
<sup>1)</sup> Lama con refuerzo curvo.

<sup>2)</sup> Lama con refuerzo recto.

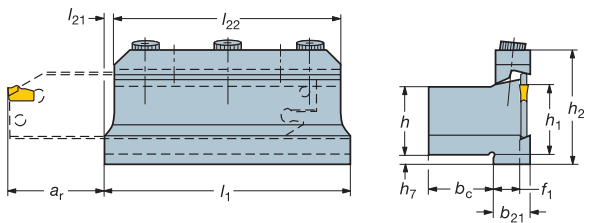
<sup>3)</sup> Lama sin refuerzo.

Ejemplo de pedido: 2 piezas N123D15-21A2  
R= A derecha, N = Neutra, L = A izquierda

Bloque herramienta para lamas de tronzar

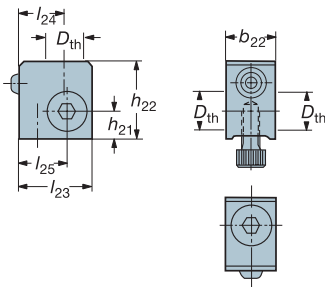


Bloque herramienta

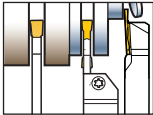


| Bloque herramienta                   |                 | Para lamas<br>T-Max<br>Q-Cut | $a_{\text{máx.}}$ | Código de pedido                                                      |       |       |      |       |       |       |       |          |          |     |  |
|--------------------------------------|-----------------|------------------------------|-------------------|-----------------------------------------------------------------------|-------|-------|------|-------|-------|-------|-------|----------|----------|-----|--|
| Para lamas CoroCut                   |                 |                              |                   | $b_{21}$                                                              | $b_c$ | $f_1$ | $h$  | $h_1$ | $h_2$ | $h_7$ | $l_1$ | $l_{21}$ | $l_{22}$ |     |  |
| N123D15-21A2                         |                 | 151.2-21-20                  | 35                | 151.2-2020-21M                                                        | 18    | 20    | 13.4 | 20    | 20    | 45.5  | 10    | 80       | 5        | 70  |  |
| N123E15-21A2                         |                 | 151.2-21-25                  |                   | 151.2-2520-21                                                         | 18    | 20    | 13.4 | 25    | 25    | 45.5  | 10    | 80       | 5        | 70  |  |
| N123F30-21A2                         |                 | 151.2-21-30                  |                   |                                                                       |       |       |      |       |       |       |       |          |          |     |  |
| N123G30-21A2                         |                 | 151.2-21-40                  |                   |                                                                       |       |       |      |       |       |       |       |          |          |     |  |
| N123D15-25A2                         | R/LF123E25-25B1 | 151.2-25-25                  | 60                | 151.2-2020-25                                                         | 18    | 20    | 13.4 | 20    | 25    | 52.5  | 10    | 120      | 5        | 110 |  |
| N123E20-25A2                         | R/LF123F25-25B1 | 151.2-25-30                  |                   | 151.2-2520-25                                                         | 18    | 20    | 13.4 | 25    | 25    | 52.5  | 10    | 120      | 5        | 110 |  |
| N123F55-25A2                         | R/LF123G25-25B1 | 151.2-25-40                  |                   | 151.2-3232-25                                                         | 18    | 32    | 13.4 | 32    | 32    | 54.5  | 5     | 120      | 5        | 110 |  |
| N123G55-25A2                         | R/LF123H25-25B1 | 151.2-25-50                  |                   |                                                                       |       |       |      |       |       |       |       |          |          |     |  |
| N123H55-25A2                         |                 | 151.2-25-60                  |                   |                                                                       |       |       |      |       |       |       |       |          |          |     |  |
| N123J55-25A2                         |                 |                              |                   |                                                                       |       |       |      |       |       |       |       |          |          |     |  |
| N123K55-25A2                         |                 |                              |                   |                                                                       |       |       |      |       |       |       |       |          |          |     |  |
| Adaptador de refrigerante (opcional) |                 |                              |                   | $b_{22}$ $h_{21}$ $h_{22}$ $l_{23}$ $l_{24}$ $l_{25}$ $D_{\text{th}}$ |       |       |      |       |       |       |       |          |          |     |  |
|                                      |                 |                              |                   | 5691 050-011                                                          | 17    | 10    | 28   | 26    | 16.2  | 17.2  | G1/4" |          |          |     |  |

Technical drawings of the refrigerant adapter. The side view shows dimensions  $l_{24}$ ,  $D_{\text{th}}$ ,  $h_{22}$ ,  $h_{21}$ ,  $l_{25}$ , and  $l_{23}$ . The top view shows dimensions  $b_{22}$ ,  $D_{\text{th}}$ , and  $D_{\text{th}}$ . The bottom view shows the adapter's profile.



Ejemplo de pedido: 2 piezas 151.2-2020-21M

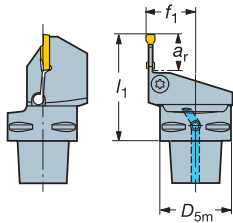


Unidades de corte de exterior para tronchado, ranurado, perfilado y cilindrado

CoroCut® 1-2

Coromant Capto®

¡Atención! Cuando se utiliza una plaquita CoroCut de 2 filos, el valor  $a_r$  de la plaquita proporciona la profundidad de corte máxima.



| Tamaño de asiento <sup>1)</sup> | Código de pedido     | $a_r$<br>máx. | $D_{5m}$ | $f_1$ | $l_1$ | Plaquita<br>calibradora |  Nm |
|---------------------------------|----------------------|---------------|----------|-------|-------|-------------------------|--------------------------------------------------------------------------------------|
| D                               | C4-R/LF123D15-27055B | 15            | 40       | 27    | 55    | N123D2-0150-CM          | 20IP 3.5                                                                             |
|                                 | C5-R/LF123D15-35055B | 15            | 50       | 35    | 55    |                         |                                                                                      |
| E                               | C4-R/LF123E15-27055B | 15            | 40       | 27    | 55    | N123E2-0200-CM          | 20IP 4.0                                                                             |
|                                 | C5-R/LF123E15-35060B | 15            | 50       | 35    | 60    |                         |                                                                                      |
| F                               | C4-R/LF123F20-27060B | 20            | 40       | 27    | 60    | N123F2-0250-CM          | 20IP 4.0                                                                             |
|                                 | C5-R/LF123F20-35060B | 20            | 50       | 35    | 60    |                         |                                                                                      |
| G                               | C4-R/LF123G20-27060B | 20            | 40       | 27    | 60    | N123G2-0300-GM          | 25IP 5.0                                                                             |
|                                 | C5-R/LF123G20-35060B | 20            | 50       | 35    | 60    |                         |                                                                                      |
|                                 | C6-R/LF123G20-45065B | 20            | 63       | 45    | 65    |                         |                                                                                      |
| H                               | C4-R/LF123H25-27067B | 25            | 40       | 27    | 67    | N123H2-0400-GM          | 30IP 7.0                                                                             |
|                                 | C5-R/LF123H25-35067B | 25            | 50       | 35    | 67    |                         |                                                                                      |
|                                 | C6-R/LF123H25-45070B | 25            | 63       | 45    | 70    |                         |                                                                                      |
| J                               | C4-R/LF123J25-27067B | 25            | 40       | 27    | 67    | N123J2-0500-GM          | 30IP 6.0                                                                             |
|                                 | C5-R/LF123J25-35067B | 25            | 50       | 35    | 67    |                         |                                                                                      |
|                                 | C6-R/LF123J25-45070B | 25            | 63       | 45    | 70    |                         |                                                                                      |
| K                               | C4-R/LF123K25-27070B | 25            | 40       | 27    | 70    | N123K2-0600-CR          | 30IP 6.0                                                                             |
|                                 | C5-R/LF123K25-35070B | 25            | 50       | 35    | 70    |                         |                                                                                      |
|                                 | C6-R/LF123K25-45075B | 25            | 63       | 45    | 75    |                         |                                                                                      |
| L                               | C5-R/LF123L25-35070B | 25            | 50       | 35    | 70    | N123L2-0800-GM          | 30IP 7.0                                                                             |
|                                 | C6-R/LF123L25-45075B | 25            | 63       | 45    | 75    |                         |                                                                                      |

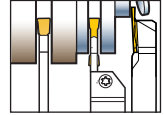
<sup>1)</sup> Para adaptarse al tamaño del asiento en la plaquita.

Ejemplo de pedido: 2 piezas C4-RF123D15-27055B

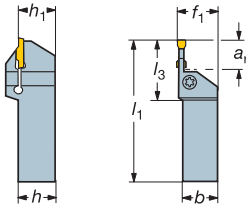
R =A derecha, L = A izquierda

# Herramientas con mango de exterior, para tronchado, ranurado, perfilado y cilindrado

CoroCut® 1-2



¡Atención! Cuando se utiliza una plaquita CoroCut de 2 filos, el valor  $a_r$  de la plaquita proporciona la profundidad de corte máxima.

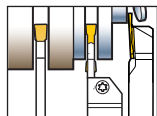


| Tamaño de asiento <sup>1)</sup> | Código de pedido<br>Herramientas con mango | $a_r$<br>máx. | $b$ | $f_1$ | $h$ | $h_1$ | $l_1$ | $l_3$ | Plaquita<br>calibradora |  | Nm   |
|---------------------------------|--------------------------------------------|---------------|-----|-------|-----|-------|-------|-------|-------------------------|------------------------------------------------------------------------------------|------|
| D                               | R/LF123D08 -1212B                          | 8             | 12  | 13    | 12  | 12    | 125   | 25.5  | N123D2-0150-CM          | 20IP                                                                               | 12.5 |
|                                 | -1616B                                     | 8             | 16  | 17    | 16  | 16    | 100   | 25.5  |                         |                                                                                    |      |
|                                 | -2020B                                     | 8             | 20  | 21    | 20  | 20    | 125   | 25.5  |                         |                                                                                    |      |
|                                 | -2525B                                     | 8             | 25  | 26    | 25  | 25    | 150   | 25.5  |                         |                                                                                    |      |
|                                 | R/LF123D15 -1616B                          | 15            | 16  | 17    | 16  | 16    | 100   | 33.5  | N123D2-0150-CM          | 20IP                                                                               | 3.5  |
|                                 | -2020B                                     | 15            | 20  | 21    | 20  | 20    | 125   | 33.5  |                         |                                                                                    |      |
|                                 | -2525B                                     | 15            | 25  | 26    | 25  | 25    | 150   | 33.5  |                         |                                                                                    |      |
|                                 |                                            |               |     |       |     |       |       |       |                         |                                                                                    |      |
| E                               | R/LF123E08 -1212B                          | 8             | 12  | 13    | 12  | 12    | 125   | 25.5  | N123E2-0200-CM          | 20IP                                                                               | 2.5  |
|                                 | -1616B                                     | 8             | 16  | 17    | 16  | 16    | 125   | 25.5  |                         |                                                                                    |      |
|                                 | -2020B                                     | 8             | 20  | 21    | 20  | 20    | 125   | 25.5  |                         |                                                                                    |      |
|                                 | -2525B                                     | 8             | 25  | 26    | 25  | 25    | 150   | 25.5  |                         |                                                                                    |      |
|                                 | R/LF123E12 -1212B                          | 12            | 12  | 13    | 12  | 12    | 125   | 30.5  | N123E2-0200-CM          | 20IP                                                                               | 3.5  |
|                                 | R/LF123E15 -1616B                          | 15            | 16  | 17    | 16  | 16    | 125   | 33.5  | N123E2-0200-CM          | 20IP                                                                               | 4.0  |
|                                 | -2020B                                     | 15            | 20  | 21    | 20  | 20    | 125   | 33.5  |                         |                                                                                    |      |
|                                 | -2525B                                     | 15            | 25  | 26    | 25  | 25    | 150   | 33.5  |                         |                                                                                    |      |
| F                               | R/LF123F10 -1212B                          | 10            | 12  | 13    | 12  | 12    | 125   | 29    | N123F2-0250-CM          | 20IP                                                                               | 3.0  |
|                                 | -1616B                                     | 10            | 16  | 17    | 16  | 16    | 125   | 29    |                         |                                                                                    |      |
|                                 | -2020B                                     | 10            | 20  | 21    | 20  | 20    | 125   | 29    |                         |                                                                                    |      |
|                                 | -2525B                                     | 10            | 25  | 26    | 25  | 25    | 150   | 29    |                         |                                                                                    |      |
|                                 | R/LF123F20 -1616B                          | 20            | 16  | 17    | 16  | 16    | 125   | 40    | N123F2-0250-CM          | 20IP                                                                               | 4.0  |
|                                 | -2020B                                     | 20            | 20  | 21    | 20  | 20    | 125   | 40    |                         |                                                                                    |      |
|                                 | -2525B                                     | 20            | 25  | 26    | 25  | 25    | 150   | 40    |                         |                                                                                    |      |
|                                 | -3225B                                     | 20            | 25  | 26    | 32  | 32    | 170   | 40    |                         |                                                                                    |      |
| G                               | R/LF123G10 -1616B                          | 10            | 16  | 17    | 16  | 16    | 125   | 30    | N123G2-0300-GM          | 25IP                                                                               | 3.5  |
|                                 | -2020B                                     | 10            | 20  | 21    | 20  | 20    | 125   | 30    |                         |                                                                                    |      |
|                                 | -2525B                                     | 10            | 25  | 26    | 25  | 25    | 150   | 30    |                         |                                                                                    |      |
|                                 | -3225B                                     | 10            | 25  | 26    | 32  | 32    | 170   | 30    |                         |                                                                                    |      |
|                                 | R/LF123G12 -1212B                          | 12            | 12  | 13    | 12  | 12    | 125   | 32    | N123G2-0300-GM          | 20IP                                                                               | 3.5  |
|                                 | R/LF123G20 -1616B                          | 20            | 16  | 17    | 16  | 16    | 125   | 41    | N123G2-0300-GM          | 25IP                                                                               | 5.0  |
|                                 | -2020B                                     | 20            | 20  | 21    | 20  | 20    | 125   | 41    |                         |                                                                                    |      |
|                                 | -2525B                                     | 20            | 25  | 26    | 25  | 25    | 150   | 41    |                         |                                                                                    |      |
|                                 | -3225B                                     | 20            | 25  | 26    | 32  | 32    | 170   | 41    |                         |                                                                                    |      |

<sup>1)</sup> Para adaptarse al tamaño del asiento en la plaquita.

Ejemplo de pedido: 2 piezas RF123D08-1212B

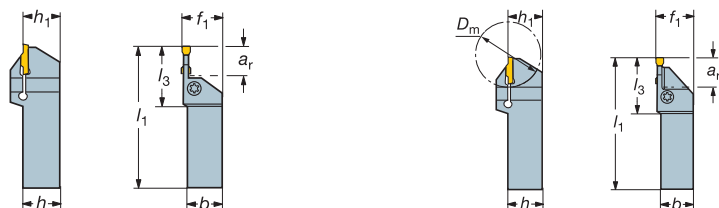
R = A Derecha, L = A Izquierda



# Herramientas con mango de exterior, para tronchado, ranurado, perfilado y cilindrado

CoroCut® 1-2

¡Atención! Cuando se utiliza una plaquita CoroCut de 2 filos, el valor  $a_r$  de la plaquita proporciona la profundidad de corte máxima.



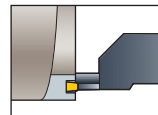
| Tamaño de asiento <sup>1)</sup>           | Código de pedido<br>Herramientas con mango | $D_{\text{máx}}$ | $a_r$<br>máx. | $b$ | $f_1$ | $h$ | $h_1$ | $l_1$ | $l_3$ | Plaquita<br>calibradora |  | Nm  |
|-------------------------------------------|--------------------------------------------|------------------|---------------|-----|-------|-----|-------|-------|-------|-------------------------|-----------------------------------------------------------------------------------|-----|
| H                                         | R/LF123H13 -1616B                          | 13               | 16            | 17  | 16    | 16  | 125   | 34    |       | N123H2-0400-CM          | 30IP                                                                              | 4.5 |
|                                           | -2020BM                                    | 13               | 20            | 21  | 20    | 20  | 125   | 34    |       |                         |                                                                                   |     |
|                                           | -2525BM                                    | 13               | 25            | 26  | 25    | 25  | 150   | 34    |       |                         |                                                                                   |     |
|                                           | -3225BM                                    | 13               | 25            | 26  | 32    | 32  | 170   | 34    |       |                         |                                                                                   |     |
|                                           | R/LF123H25 -1616B                          | 25               | 16            | 17  | 16    | 16  | 125   | 47    |       | N123H2-0400-CM          | 30IP                                                                              | 7.0 |
|                                           | -2020BM                                    | 25               | 20            | 21  | 20    | 20  | 125   | 47    |       |                         |                                                                                   |     |
|                                           | -2525BM                                    | 25               | 25            | 26  | 25    | 25  | 150   | 47    |       |                         |                                                                                   |     |
|                                           | -3225BM                                    | 25               | 25            | 26  | 32    | 32  | 170   | 47    |       |                         |                                                                                   |     |
| J                                         | R/LF123J13 -2020BM                         | 13               | 20            | 21  | 20    | 20  | 125   | 34    |       | N123J2-0500-CM          | 30IP                                                                              | 5.0 |
|                                           | -2525BM                                    | 13               | 25            | 26  | 25    | 25  | 150   | 34    |       |                         |                                                                                   |     |
|                                           | -3225BM                                    | 13               | 25            | 26  | 32    | 32  | 170   | 34    |       |                         |                                                                                   |     |
|                                           | R/LF123J32 -2525BM                         | 32               | 25            | 26  | 25    | 25  | 150   | 57    |       | N123J2-0500-CM          | 30IP                                                                              | 7.5 |
|                                           | -3225BM                                    | 32               | 25            | 26  | 32    | 32  | 170   | 57    |       |                         |                                                                                   |     |
|                                           |                                            |                  |               |     |       |     |       |       |       |                         |                                                                                   |     |
| K                                         | R/LF123K16 -2525BM                         | 16               | 25            | 26  | 25    | 25  | 150   | 39    |       | N123K2-0600-CR          | 30IP                                                                              | 5.5 |
|                                           | -3225BM                                    | 16               | 25            | 26  | 32    | 32  | 170   | 39    |       |                         |                                                                                   |     |
|                                           | R/LF123K32 -2525BM                         | 32               | 25            | 26  | 25    | 25  | 150   | 58    |       | N123K2-0600-CR          | 30IP                                                                              | 7.5 |
|                                           | -3225BM                                    | 32               | 25            | 26  | 32    | 32  | 170   | 58    |       |                         |                                                                                   |     |
| L                                         | R/LF123L16 -2525BM                         | 16               | 25            | 26  | 25    | 25  | 150   | 41    |       | N123L2-0800-GM          | 30IP                                                                              | 6.5 |
|                                           | R/LF123L25 -2525BM                         | 25               | 25            | 26  | 25    | 25  | 150   | 52    |       | N123L2-0800-GM          | 30IP                                                                              | 7.0 |
|                                           | -3225BM                                    | 25               | 25            | 26  | 32    | 32  | 170   | 52    |       |                         |                                                                                   |     |
|                                           | R/LF123L32 -3225BM                         | 32               | 25            | 26  | 32    | 32  | 170   | 60    |       | N123L2-0800-GM          | 30IP                                                                              | 7.5 |
|                                           | R/LF123L25 -2525BM                         | 25               | 25            | 26  | 25    | 25  | 150   | 52    |       | N123L2-0800-GM          | 30IP                                                                              | 7.0 |
| <b>CoroCut® 1-2 sujeción por tornillo</b> |                                            |                  |               |     |       |     |       |       |       |                         |                                                                                   |     |
| E                                         | R/LF123E17 -2020D                          | 42               | 17            | 20  | 20.5  | 20  | 125   | 35.5  |       | N123E2-0200-CM          | 20IP                                                                              | 4.0 |
| F                                         | R/LF123F17 -2020D                          | 42               | 17            | 20  | 20.5  | 20  | 125   | 37    |       | N123F2-0250-CM          | 20IP                                                                              | 4.0 |
|                                           | R/LF123F17 -2525D                          | 42               | 17            | 25  | 20.5  | 25  | 150   | 37    |       |                         |                                                                                   |     |
| G                                         | R/LF123G22 -2020D                          | 44               | 22            | 20  | 20.6  | 20  | 125   | 43    |       | N123G2-0300-CM          | 25IP                                                                              | 5.0 |
|                                           | R/LF123G22 -2525D                          | 44               | 22            | 25  | 25.6  | 25  | 150   | 43    |       |                         |                                                                                   |     |
| H                                         | R/LF123H22 -2020D                          | 52               | 22            | 20  | 20.6  | 20  | 125   | 44    |       | N123H2-0400-CM          | 25IP                                                                              | 6.0 |
|                                           | R/LF123H22 -2525D                          | 52               | 22            | 25  | 25.6  | 25  | 150   | 44    |       | N123H2-0400-CM          | 30IP                                                                              | 6.0 |

<sup>1)</sup> Para adaptarse al tamaño del asiento en la plaquita.

Ejemplo de pedido: 2 piezas RF123H13-1616B

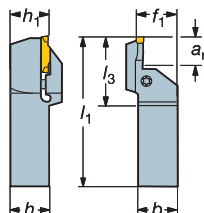
R = A Derecha, L = A Izquierda

## Herramientas con mango de exterior, para ranurado frontal

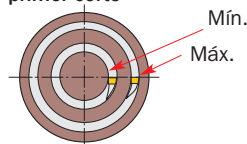


CoroCut® 1-2

¡Atención! Cuando se utiliza una plaquita CoroCut de 2 filos, el valor  $a_r$  de la plaquita proporciona la profundidad de corte máxima.



Diámetros del primer corte

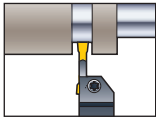


| Diámetro del primer corte                                              | Tamaño de asiento <sup>1)</sup> | Código de pedido                                                                                                                                                                                                                                              | $a_r$ máx.                                                                             | $b$                                                                              | $f_1$                                                                            | $h$                                                                              | $h_1$                                                                            | $l_1$                                                                                          | $l_3$                                                                                  | Plaquita calibradora                               |  Nm                    |
|------------------------------------------------------------------------|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| 34– 44<br>38– 48<br>42– 60<br>54– 75<br>67–100<br>90–160<br>130–300    | <b>G</b>                        | R/LF123G12 -2525B-034B<br>-2525B-038B<br>R/LF123G19 -2525B-042B<br>-2525B-054B<br>R/LF123G22 -2525B-067B<br>-2525B-090B<br>-2525B-130B                                                                                                                        | 12<br>12<br>19<br>19<br>22<br>22<br>22                                                 | 25<br>25<br>25<br>25<br>25<br>25<br>25                                           | 26<br>26<br>26<br>26<br>26<br>26<br>26                                           | 25<br>25<br>25<br>25<br>25<br>25<br>25                                           | 25<br>25<br>25<br>25<br>25<br>25<br>25                                           | 150<br>150<br>150<br>150<br>150<br>150<br>150                                                  | 32<br>32<br>40<br>40<br>43<br>43<br>43                                                 | N123G2-0300-TF<br>N123G2-0300-TF<br>N123G2-0300-TF | 25IP 3.5<br>25IP 3.5<br>25IP 3.5                                                                         |
| 40– 60<br>52– 72<br>64–100<br>92–140<br>132–230<br>220–500<br>300–1100 | <b>H</b>                        | R/LF123H13 -2525B-040BM<br>-2525B-052BM<br>-2525B-064BM<br>-2525B-092BM<br>-2525B-132BM<br>-2525B-220BM<br>-2525B-300BM<br>R/LF123H20 -2525B-040BM<br>-2525B-052BM<br>R/LF123H25 -2525B-064BM<br>-2525B-092BM<br>-2525B-132BM<br>-2525B-220BM<br>-2525B-300BM | 13<br>13<br>13<br>13<br>13<br>13<br>13<br>20<br>20<br>25<br>25<br>25<br>25<br>25<br>25 | 25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25 | 26<br>26<br>26<br>26<br>26<br>26<br>26<br>26<br>26<br>26<br>26<br>26<br>26<br>26 | 25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25 | 25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25 | 150<br>150<br>150<br>150<br>150<br>150<br>150<br>150<br>150<br>150<br>150<br>150<br>150<br>150 | 34<br>34<br>34<br>34<br>34<br>34<br>34<br>42<br>42<br>47<br>47<br>47<br>47<br>47<br>47 | N123H2-0400-TF<br>N123H2-0400-TF<br>N123H2-0400-TF | 30IP 2.8<br>30IP 3.0<br>30IP 3.2<br>30IP 3.7<br>30IP 4.0<br>30IP 4.3<br>30IP 4.3<br>30IP 3.5<br>30IP 3.5 |
| 40– 70<br>60– 95<br>85–130<br>120–180<br>175–500<br>180–980            | <b>J</b>                        | R/LF123J20 -2525B-040BM<br>R/LF123J25 -2525B-060BM<br>-2525B-085BM<br>-2525B-120BM<br>-2525B-175BM<br>R/LF123J20 -2525B-180BM                                                                                                                                 | 20<br>25<br>25<br>25<br>25<br>20                                                       | 25<br>25<br>25<br>25<br>25<br>25                                                 | 26<br>26<br>26<br>26<br>26<br>26                                                 | 25<br>25<br>25<br>25<br>25<br>25                                                 | 25<br>25<br>25<br>25<br>25<br>25                                                 | 150<br>150<br>150<br>150<br>150<br>150                                                         | 43<br>48<br>48<br>48<br>48<br>43                                                       | N123J2-0500-TF<br>N123J2-0500-TF<br>N123J2-0500-TF | 30IP 4.0<br>30IP 4.0<br>30IP 4.0                                                                         |
| 40– 70<br>58–100<br>88–180<br>168–400<br>220–1000                      | <b>K</b>                        | R/LF123K20 -2525B-040BM<br>R/LF123K25 -2525B-058BM<br>-2525B-088BM<br>-2525B-168BM<br>-2525B-220BM                                                                                                                                                            | 20<br>25<br>25<br>25<br>25                                                             | 25<br>25<br>25<br>25<br>25                                                       | 26<br>26<br>26<br>26<br>26                                                       | 25<br>25<br>25<br>25<br>25                                                       | 25<br>25<br>25<br>25<br>25                                                       | 150<br>150<br>150<br>150<br>150                                                                | 44<br>49<br>49<br>49<br>49                                                             | N123K2-0600-TF<br>N123K2-0600-TF                   | 30IP 4.5<br>30IP 4.5                                                                                     |
| 50– 80<br>75–150<br>140–400                                            | <b>L</b>                        | R/LF123L25 -2525B-050BM<br>R/LF123L28 -2525B-075BM<br>-2525B-140BM                                                                                                                                                                                            | 25<br>28<br>28                                                                         | 25<br>25<br>25                                                                   | 26<br>26<br>26                                                                   | 25<br>25<br>25                                                                   | 25<br>25<br>25                                                                   | 150<br>150<br>150                                                                              | 55<br>56<br>56                                                                         | N123L2-0800-TF<br>N123L2-0800-TF                   | 30IP 4.5<br>30IP 4.5                                                                                     |

<sup>1)</sup> Para adaptarse al tamaño del asiento en la plaquita.

Ejemplo de pedido: 2 piezas RF123G12-2525B-034B

R = A Derecha, L = A Izquierda



Herramientas con mango de interior, para ranurado

CoroCut® 1-2

| Cilíndrico                 |                                        |                                       | Con planos de apriete          |       |       |       |       |       |          |    |                         |        |
|----------------------------|----------------------------------------|---------------------------------------|--------------------------------|-------|-------|-------|-------|-------|----------|----|-------------------------|--------|
|                            |                                        |                                       |                                |       |       |       |       |       |          |    |                         |        |
| $D_m$<br>min <sup>2)</sup> | $a$ , máx.<br>para porta-<br>plaquetas | Tamaño<br>de<br>asiento <sup>1)</sup> | Código de pedido               |       |       |       |       |       |          |    | Plaquita<br>calibradora | <br>Nm |
|                            |                                        |                                       | $d_m$                          | $f_1$ | $h$   | $h_1$ | $l_1$ | $l_3$ | $d_{ch}$ |    |                         |        |
| Cilíndrico                 |                                        |                                       |                                |       |       |       |       |       |          |    |                         |        |
| 25                         | 4.5                                    | D                                     | R/LAG123D 04-16B               | 16    | 12.5  | —     | —     | 150   | 25       | 6  | N123D2-0150-CM          | 3.0    |
| 32                         | 5                                      |                                       | 05-20B                         | 20    | 15.25 | —     | —     | 180   | 30       | 6  | 3.0                     |        |
| 32                         | 5                                      | E                                     | R/LAG123E 05-20B <sup>2)</sup> | 20    | 15.25 | —     | —     | 180   | 30       | 6  | N123E2-0200-GM          | 3.5    |
| 32                         | 7                                      |                                       | 07-25B                         | 25    | 19.75 | —     | —     | 200   | 35       | 9  | 3.5                     |        |
| 32                         | 6                                      | G                                     | R/LAG123G 06-20B <sup>2)</sup> | 20    | 15.25 | —     | —     | 180   | 30       | 6  | N123G2-0300-GM          | 4.0    |
| 32                         | 7                                      |                                       | 07-25B                         | 25    | 19.75 | —     | —     | 200   | 35       | 9  | 4.0                     |        |
| 32                         | 7                                      | H                                     | R/LAG123H 07-25B               | 25    | 19.25 | —     | —     | 200   | 35       | 9  | N123H2-0400-GM          | 4.5    |
| 32                         | 8                                      | J                                     | R/LAG123J 08-25B               | 25    | 19.75 | —     | —     | 200   | 35       | 9  | N123J2-0500-GM          | 5.0    |
| Con planos de apriete      |                                        |                                       |                                |       |       |       |       |       |          |    |                         |        |
| 40                         | 9.5                                    | E                                     | R/LAG123E 09-32B               | 32    | 25.5  | 30    | 15    | 250   | 45       | 9  | N123E2-0200-GM          | 4.0    |
| 40                         | 9                                      | G                                     | R/LAG123G 09-32B               | 32    | 25.25 | 30    | 15    | 250   | 45       | 9  | N123G2-0300-GM          | 4.5    |
| 50                         | 11                                     |                                       | 11-40B                         | 40    | 31    | 37    | 18.5  | 300   | 55       | 12 | 4.5                     |        |
| 40                         | 10                                     | H                                     | R/LAG123H 10-32B               | 32    | 26.5  | 30    | 15    | 250   | 45       | 9  | N123H2-0400-GM          | 4.5    |
| 50                         | 11                                     |                                       | 11-40B                         | 40    | 31    | 37    | 18.5  | 300   | 55       | 12 | 5.0                     |        |
| 60                         | 13                                     |                                       | 13-50B                         | 50    | 38.25 | 47    | 23.5  | 350   | 65       | 12 | 5.0                     |        |
| 40                         | 11                                     | J                                     | R/LAG123J 11-32B               | 32    | 27    | 30    | 15    | 250   | 45       | 9  | N123J2-0500-GM          | 5.0    |
| 50                         | 11                                     |                                       | 11-40B                         | 40    | 31    | 37    | 18.5  | 300   | 55       | 12 | 5.5                     |        |
| 60                         | 13                                     |                                       | 13-50B                         | 50    | 38.25 | 47    | 23.5  | 350   | 65       | 12 | 5.5                     |        |
| 50                         | 11                                     | K                                     | R/LAG123K 11-40B               | 40    | 31    | 37    | 18.5  | 300   | 55       | 12 | N123K2-0600-GM          | 5.5    |
| 60                         | 13                                     |                                       | 13-50B                         | 50    | 38.25 | 47    | 23.5  | 350   | 65       | 12 | 5.5                     |        |

<sup>1)</sup> Para adaptarse al tamaño del asiento en la plaquita.

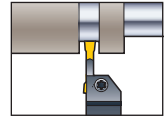
<sup>2)</sup> Cuando se utiliza una plaquita con una geometría GF, el diámetro mín. del agujero ( $D_m$ ) es de 25 mm.

Ejemplo de pedido: 2 piezas RAG123D04-16B

R = A Derecha, L = A izquierda



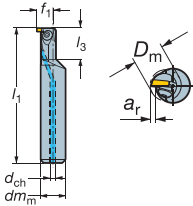
## Herramientas con mango de interior, para ranurado



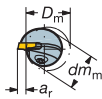
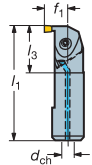
T-MAX Q-Cut®

**R/LAG151.32**

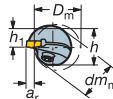
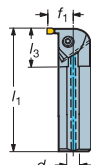
Cilíndrico  
Diseño excéntrico  
 $D_m = 16-20$  mm

**R/LAG151.32**

Cilíndrico  
 $D_m = 20-25$  mm

**R/LAG151.32**

Con planos de apriete  
 $D_m = 32-40$  mm



| $D_m$<br>Min | $a_r$ máx.<br>para portada<br>de plaquitas | Tamaño<br>de asiento <sup>1)</sup> | Código de pedido                   | $dm_m$ | $h$ | $h_1$ | $f_1$ | $l_1$ | $l_3$ | $d_{ch}$ | Plaquita<br>calibradora | <br>Nm |
|--------------|--------------------------------------------|------------------------------------|------------------------------------|--------|-----|-------|-------|-------|-------|----------|-------------------------|-------------------------------------------------------------------------------------------|
| 12           | 2                                          | 20                                 | R/LAG151.32-16M12-20 <sup>2)</sup> | 16     | -   | -     | 10    | 150   | 20    | 6        | N151.3-200-20-4G        | 8IP 2.5                                                                                   |
| 20           | 3.5                                        |                                    | R/LAG151.32-16M-20                 | 16     | -   | -     | 11.5  | 150   | 24    | 6        | N151.3-200-20-4G        | 15IP 2.5                                                                                  |
| 25           | 4.5                                        |                                    | R/LAG151.32-20Q-20                 | 20     | -   | -     | 14.5  | 180   | 30    | 6        | N151.3-200-20-4G        |                                                                                           |
| 15           | 4                                          | 25                                 | R/LAG151.32-16M15-25 <sup>2)</sup> | 16     | -   | -     | 12    | 150   | 20    | 6        | N151.3-300-25-4G        | 8IP 2.5                                                                                   |
| 20           | 3.5                                        |                                    | R/LAG151.32-16M-25                 | 16     | -   | -     | 11.6  | 150   | 24.2  | 6        | N151.3-265-25-4G        | 15IP 3                                                                                    |
| 25           | 4.6                                        |                                    | R/LAG151.32-20Q-25                 | 20     | -   | -     | 14.6  | 180   | 30    | 6        | N151.3-265-25-4G        |                                                                                           |
| 32           | 6.1                                        |                                    | R/LAG151.32-25R-25                 | 25     | -   | -     | 18.6  | 200   | 32.2  | 8.5      | N151.3-265-25-4G        |                                                                                           |
| 40           | 7.1                                        |                                    | R/LAG151.32-32S-25 <sup>3)</sup>   | 32     | 30  | 15    | 23.1  | 250   | 36.3  | 8.5      | N151.3-265-25-4G        |                                                                                           |
| 16           | 4.5                                        | 30                                 | R/LAG151.32-20Q16-30 <sup>2)</sup> | 20     | -   | -     | 14.2  | 180   | 21.5  | 6        | N151.3-400-30-4G        | 8IP 2.5                                                                                   |
| 25           | 4.5                                        |                                    | R/LAG151.32-20Q-30                 | 20     | -   | -     | 14.5  | 180   | 30    | 6        | N151.3-300-30-4G        | 15IP 3.5                                                                                  |
| 32           | 6                                          |                                    | R/LAG151.32-25R-30                 | 25     | -   | -     | 18.5  | 200   | 32.2  | 8.5      | N151.3-300-30-4G        |                                                                                           |
| 40           | 7                                          |                                    | R/LAG151.32-32S-30 <sup>3)</sup>   | 32     | 30  | 15    | 23    | 250   | 36.2  | 8.5      | N151.3-300-30-4G        |                                                                                           |
| 18           | 5                                          | 40                                 | R/LAG151.32-20Q18-40 <sup>2)</sup> | 20     | -   | -     | 14.7  | 180   | 23    | 6        | N151.3-500-40-4G        | 8IP 3.5                                                                                   |
| 32           | 6.1                                        |                                    | R/LAG151.32-25R-40                 | 25     | -   | -     | 18.5  | 200   | 32.2  | 8.5      | N151.3-400-40-4G        | 15IP 4.5                                                                                  |
| 40           | 7.1                                        |                                    | R/LAG151.32-32S-40 <sup>3)</sup>   | 32     | 30  | 15    | 23.1  | 250   | 36.3  | 8.5      | N151.3-400-40-4G        | 30IP 4.5                                                                                  |
| 50           | 8.1                                        |                                    | R/LAG151.32-40T-40 <sup>3)</sup>   | 40     | 37  | 18.5  | 28.1  | 300   | 42.3  | 11.5     | N151.3-400-40-4G        |                                                                                           |

<sup>1)</sup> Para adaptarse al tamaño del asiento de la plaquita.<sup>2)</sup> Diseño excéntrico.<sup>3)</sup> Con planos de apriete.

Ejemplo de pedido: 2 piezas R/LAG151.32-16M12-20

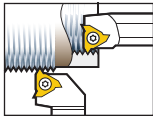
R= A Derecha, L= A Izquierda

## Plaquitas para ranurado interior

| <br>-4G | Tamaño<br>de<br>asiento <sup>1)</sup> | Código de pedido |        |        |      | Dimensiones, mm |       |            |                    | Recomendaciones de<br>calidades y datos de corte<br>CoroKey |        | Calidades |      |        |   |  |
|-------------------------------------------------------------------------------------------|---------------------------------------|------------------|--------|--------|------|-----------------|-------|------------|--------------------|-------------------------------------------------------------|--------|-----------|------|--------|---|--|
|                                                                                           |                                       |                  | GC1125 | GC1145 | H13A | $l_a$           | $r_e$ | $\alpha_n$ | $\alpha_f$         | $f_{rx}$ mm/r                                               |        |           |      |        |   |  |
|                                                                                           |                                       |                  |        |        |      |                 |       |            |                    |                                                             | P      | M         | K    | N      | S |  |
|                                                                                           |                                       |                  |        |        |      |                 |       |            |                    |                                                             |        |           |      |        |   |  |
| 20                                                                                        | N151.3-200-20-4G                      | ★                | ★      | ★      | 2.00 | 0.2             | 11°   | 3°         | 0.05 (0.03 – 0.12) | Primera elección                                            |        |           |      |        |   |  |
| 25                                                                                        | N151.3-265-25-4G                      | ★                | ★      | ★      | 2.65 | 0.15            | 11°   | 3°         | 0.07 (0.03 – 0.15) | GC1125                                                      | GC2135 | GC1145    | H13A | GC1125 |   |  |
| 30                                                                                        | N151.3-300-30-4G                      | ★                | ★      | ★      | 3.00 | 0.2             | 11°   | 3°         | 0.04 (0.02 – 0.11) |                                                             |        |           |      |        |   |  |
| 40                                                                                        | N151.3-400-40-4G                      | ★                | ★      | ★      | 4.00 | 0.2             | 11°   | 3°         | 0.08 (0.04 – 0.15) | $v_c$ m/min                                                 |        |           |      |        |   |  |
|                                                                                           |                                       |                  |        |        |      |                 |       |            |                    | 140                                                         | 90     | 95        | 1500 | 25     |   |  |

Para otras geometrías y calidades de plaquita, consulte el catálogo principal, páginas B58-B59.

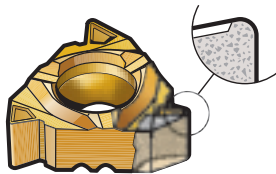
Encontrará ilustraciones acotadas en la página 107.



# Aplicaciones generales

CoroThread® 266

ISO/ANSI

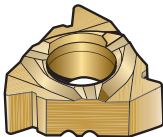


**Geometría de uso general**  
Plaquetas de perfil completo y perfil en V.  
Excelente rendimiento en cualquier tipo de operación.  
Vida de la herramienta larga y uniforme.

## PRIMERA ELECCIÓN

### Geometría de uso general

Arista de corte redondeada  
(con tratamiento ER)



### Calidades

|          | Primera elección | Segunda elección |
|----------|------------------|------------------|
| <b>P</b> | <b>GC1125</b>    | <b>GC1135</b>    |
| <b>M</b> | <b>GC1135</b>    | <b>GC1125</b>    |
| <b>K</b> | <b>GC1125</b>    | <b>GC1135</b>    |
| <b>N</b> | <b>GC1125</b>    | <b>GC1135</b>    |
| <b>S</b> | <b>GC1135</b>    | <b>GC1125</b>    |

## Geometrías complementarias

### Geometría aguda F\*

Filo de corte agudizado



Adecuada para materiales  
pegajosos y materiales  
que se endurecen al ser  
mecanizados.

### Geometría rompevirutas C\*

Geometría rompevirutas

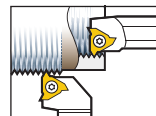


Máximo control de virutas y  
supervisión mínima.  
Optimiza el mecanizado de  
aceros de baja aleación o de  
bajo contenido en carbono.  
Disponible segunda mitad de 2010

\*  
Información sobre pedidos, con-  
sultar el último suplemento o el  
catálogo principal.

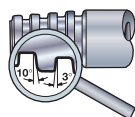
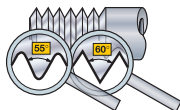
# Reglas prácticas generales

CoroThread® 266



## Tipos de rosca

El sistema de roscado de CoroThread 266 ofrece una completa gama de estilos de rosca y pasos (consultar el último suplemento o el catálogo principal):



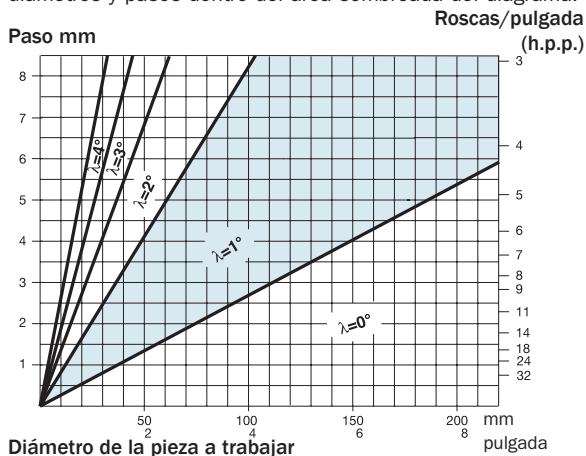
- Para todas las normas de la industria. (ISO MM, UN)
- Acoplamientos de tuberías para gas, agua y alcantarillado. (Whitworth, NPT)
- Acoplamiento de tuberías para la industria alimentaria y de protección contra incendios. (Redonda DIN 405)
- Roscas de tuberías para líneas de vapor, gas y agua. (BSPT, NPTF)
- Roscas para la industria aeroespacial. (MJ, UNJ)
- Petróleo y gas. (API 60°, API redonda, API Buttress, VAM)
- Roscas trapecoidales para transmisión de movimientos. (DIN 103, ACME, STUB-ACME)

## Placas de apoyo para plaquitas

Las placas de apoyo se utilizan para obtener diferentes inclinaciones en la plaquita y están disponibles en pasos de 1°, desde -2° a +4°.

### Ángulos de inclinación

Los portaplaquitas para roscar se suministran como estándar con una placa de apoyo que proporciona un ángulo de inclinación de +1° lo cual permite utilizar la combinación de diámetros y pasos dentro del área sombreada del diagrama.



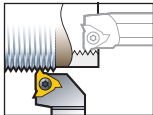
Se suministra como estándar  
 $\lambda$  = Ángulo de inclinación

Herramienta exterior a derecha  
 Herramienta interior a izquierda

|     |             |
|-----|-------------|
| -2° | 5322 389-22 |
| -1° | 5322 389-21 |
| 0°  | 5322 389-10 |
| 1°  | 5322 389-11 |
| 2°  | 5322 389-12 |
| 3°  | 5322 389-13 |
| 4°  | 5322 389-14 |

Herramienta exterior a izquierda  
 Herramienta interior a derecha

|     |             |
|-----|-------------|
| -2° | 5322 390-22 |
| -1° | 5322 390-21 |
| 0°  | 5322 390-10 |
| 1°  | 5322 390-11 |
| 2°  | 5322 390-12 |
| 3°  | 5322 390-13 |
| 4°  | 5322 390-14 |

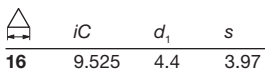
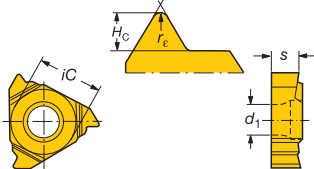
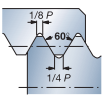
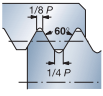
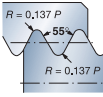
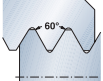
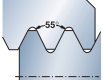


Roscado exterior

Plaquitas CoroThread® 266 con geometría universal

ISO/ANSI



| <div></div> <div><table><tr><td></td><td>iC</td><td>d<sub>1</sub></td><td>s</td></tr><tr><td>16</td><td>9.525</td><td>4.4</td><td>3.97</td></tr></table></div> |                                                                                                               |                |                                                                                                                                                                                                                                 |                 |                                    |                        |                |       |                      |        |        |        |        | iC     | d <sub>1</sub> | s | 16               | 9.525  | 4.4    | 3.97   |        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------------------|------------------------|----------------|-------|----------------------|--------|--------|--------|--------|--------|----------------|---|------------------|--------|--------|--------|--------|
|                                                                                                                                                                                                                                                                                                                                 | iC                                                                                                            | d <sub>1</sub> | s                                                                                                                                                                                                                               |                 |                                    |                        |                |       |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
| 16                                                                                                                                                                                                                                                                                                                              | 9.525                                                                                                         | 4.4            | 3.97                                                                                                                                                                                                                            |                 |                                    |                        |                |       |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
| nap = Número de penetraciones                                                                                                                                                                                                                                                                                                   |                                                                                                               |                |                                                                                                                                                                                                                                 |                 |                                    |                        |                |       |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
| Perfil de rosca                                                                                                                                                                                                                                                                                                                 | Paso                                                                                                          |                | Código de pedido                                                                                                                                                                                                                | Dimensiones, mm |                                    | Datos de corte CoroKey |                |       |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 | Mm                                                                                                            | (h.p.p.)       |                                                                                                                                                                                                                                 | GC1125          | GC1135 <sup>2)</sup>               | r <sub>e</sub>         | H <sub>c</sub> | nap   | P                    | M      | K      | N      | S      | H      |                |   |                  |        |        |        |        |
| Perfil completo<br>Métrica 60°<br>                                                                                                                                                                                                              | 0.50                                                                                                          |                | 266R/LG -16MM01A050<br>-16MM01A075<br>-16MM01A100<br>-16MM01A125<br>-16MM01A150<br>-16MM01A175<br>-16MM01A200<br>-16MM01A250<br>-16MM01A300                                                                                     | ★               | ★                                  | -                      | 0.29           | 4/5   | Primera elección     | GC1125 | GC1135 | GC1125 | GC1125 | GC1135 |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 | 0.75                                                                                                          |                |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 0.45           | 4/5   |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 | 1.00                                                                                                          |                |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 0.60           | 5/6   |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 | 1.25                                                                                                          |                |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 0.74           | 6     |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 | 1.50                                                                                                          |                |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 0.90           | 6/7   |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 | 1.75                                                                                                          |                |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 1.06           | 8/9   |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 | 2.00                                                                                                          |                |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 1.21           | 8/9   |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 | 2.50                                                                                                          |                |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 1.51           | 10/11 |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 | 3.00                                                                                                          |                |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 1.83           | 12/13 |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               |                |                                                                                                                                                                                                                                 |                 |                                    |                        |                |       |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
| Perfil completo<br>UN 60°<br>                                                                                                                                                                                                                   |                                                                                                               | 32             | 266R/LG -16UN01A320<br>-16UN01A280<br>-16UN01A240<br>-16UN01A200<br>-16UN01A180<br>-16UN01A160<br>-16UN01A140<br>-16UN01A130<br>-16UN01A120 <sup>1)</sup><br>-16UN01A110<br>-16UN01A100<br>-16UN01A090<br>-16UN01A080           | ★               | ★                                  | -                      | 0.49           | 4/5   | Primera elección     | GC1125 | GC1135 | GC1125 | GC1125 | GC1135 |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 28             |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 0.55           | 5/6   |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 24             |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 0.65           | 5/6   |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 20             |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 0.79           | 6/7   |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 18             |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 0.87           | 6/7   |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 16             |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 0.99           | 7/8   |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 14             |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 1.12           | 8/9   |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 13             |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 1.21           | 8/9   |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 12             |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 1.30           | 8/9   |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 11             |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 1.42           | 9/10  |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 10             |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 1.57           | 10/11 |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 9              |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 1.74           | 11/12 |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 8              |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 1.97           | 12    |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               |                |                                                                                                                                                                                                                                 |                 |                                    |                        |                |       |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               |                |                                                                                                                                                                                                                                 |                 |                                    |                        |                |       |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
| Perfil completo<br>Whitworth 55°<br>                                                                                                                                                                                                          |                                                                                                               | 28             | 266RG -16WH01A280<br>-16WH01A200<br>-16WH01A190<br>-16WH01A180 <sup>1)</sup><br>-16WH01A160 <sup>1)</sup><br>-16WH01A140<br>-16WH01A120<br>-16WH01A110 <sup>1)</sup><br>-16WH01A100<br>-16WH01A090 <sup>1)</sup><br>-16WH01A080 | ★               | ★                                  | -                      | 0.59           | 5/6   | v <sub>c</sub> m/min | 155    | 130    | 160    | 500    | 15     |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 20             |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 0.83           | 6/7   |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 19             |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 0.87           | 6/7   |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 18             |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 0.92           | 7/8   |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 16             |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 1.03           | 7/8   |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 14             |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 1.18           | 8/9   |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 12             |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 1.37           | 8/9   |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 11             |                                                                                                                                                                                                                                 | *               | ★                                  | ★                      | -              | 1.49  |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 10             |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 1.65           | 10/11 |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 9              |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 1.82           | 11/12 |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 8              |                                                                                                                                                                                                                                 | ★               | ★                                  | -                      | 2.05           | 12/13 |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               |                |                                                                                                                                                                                                                                 |                 |                                    |                        |                |       |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               |                |                                                                                                                                                                                                                                 |                 |                                    |                        |                |       |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               |                |                                                                                                                                                                                                                                 |                 |                                    |                        |                |       |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 | Perfil en V<br>VM = 60°<br> | 1.0–2.0        |                                                                                                                                                                                                                                 | 24–12           | 266R/LG -16VM01A001<br>-16VM01A002 | ★                      | ★              | 0.13  |                      |        |        |        |        |        | 1.54           | - | Primera elección | GC1125 | GC1135 | GC1125 | GC1125 |
| 1.5–3.0                                                                                                                                                                                                                                                                                                                         |                                                                                                               | 16–8           | ★                                                                                                                                                                                                                               | ★               |                                    | 0.20                   | 2.44           | -     |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               |                |                                                                                                                                                                                                                                 |                 |                                    |                        |                |       |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               |                |                                                                                                                                                                                                                                 |                 |                                    |                        |                |       |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               |                |                                                                                                                                                                                                                                 |                 |                                    |                        |                |       |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
| VW = 55°<br>                                                                                                                                                                                                                                  |                                                                                                               | 28–14          | 266R/LG -16VW01A001<br>-16VW01A002                                                                                                                                                                                              | ★               | ★                                  | 0.11                   | 1.55           | -     | v <sub>c</sub> m/min | 155    | 130    | 160    | 500    | 15     |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               | 14–8           |                                                                                                                                                                                                                                 | ★               | ★                                  | 0.23                   | 2.53           | -     |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               |                |                                                                                                                                                                                                                                 |                 |                                    |                        |                |       |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               |                |                                                                                                                                                                                                                                 |                 |                                    |                        |                |       |                      |        |        |        |        |        |                |   |                  |        |        |        |        |
|                                                                                                                                                                                                                                                                                                                                 |                                                                                                               |                |                                                                                                                                                                                                                                 |                 |                                    |                        |                |       |                      |        |        |        |        |        |                |   |                  |        |        |        |        |

<sup>1)</sup> Disponible segunda mitad de 2010

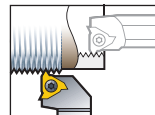
<sup>2)</sup> GC 1135 sólo disponible a derecha

Ejemplo de pedido: 10 piezas 266R/LG-16MM01A050 1125

R = A derecha, L = A izquierda

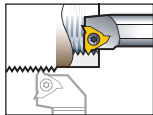
# Roscado exterior

Unidades de corte y herramientas con mango CoroThread® 266



| <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p><b>266R/LFG</b></p> </div> <div style="text-align: center;"> <p><b>Cx-266R/LFG</b></p> </div> </div> |                              |                       |                      |                      |                |                |                |          |          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------------------|----------------------|----------------------|----------------|----------------|----------------|----------|----------|
| <p>Para las dimensiones x y z, consulte las tablas de penetración en el catálogo principal.</p> <p style="text-align: right;">Ilustración a derecha</p>                                                                    |                              |                       |                      |                      |                |                |                |          |          |
|                                                                                                                                                                                                                            | Código de pedido             | Dimensiones, mm       |                      |                      |                |                |                | Plaquita | <br>Nm   |
|                                                                                                                                                                                                                            |                              | b                     | f <sub>1</sub>       | h                    | h <sub>1</sub> | l <sub>1</sub> | l <sub>3</sub> | iC       |          |
|                                                                                                                                                                                                                            | <b>266R/LFG -1616-16</b>     | 16                    | 20                   | 16                   | 16             | 100            | 21.4           | 16       | 15IP 3.0 |
|                                                                                                                                                                                                                            | <b>-2020-16</b>              | 20                    | 25                   | 20                   | 20             | 125            | 21.6           |          |          |
|                                                                                                                                                                                                                            | <b>-2525-16</b>              | 25                    | 32                   | 25                   | 25             | 150            | 22.2           |          |          |
|                                                                                                                                                                                                                            | <b>-3225-16</b>              | 25                    | 32                   | 32                   | 32             | 150            | 22.2           |          |          |
|                                                                                                                                                                                                                            |                              |                       |                      |                      |                |                |                |          |          |
|                                                                                                                                                                                                                            | <b>Coromant Capto®</b>       | <i>D<sub>5m</sub></i> | <i>l<sub>1</sub></i> | <i>f<sub>1</sub></i> |                |                |                | 16       | 15IP 3.0 |
|                                                                                                                                                                                                                            | <b>C3-266R/LFG -22040-16</b> | 32                    | 40                   | 22                   |                |                |                |          |          |
|                                                                                                                                                                                                                            | <b>C4-266R/LFG -27050-16</b> | 40                    | 50                   | 27                   |                |                |                |          |          |
|                                                                                                                                                                                                                            | <b>C5-266R/LFG -35060-16</b> | 50                    | 60                   | 35                   |                |                |                |          |          |
|                                                                                                                                                                                                                            | <b>C6-266R/LFG -45065-16</b> | 63                    | 65                   | 45                   |                |                |                |          |          |
|                                                                                                                                                                                                                            | <b>C8-266R/LFG -55080-16</b> | 80                    | 80                   | 55                   |                |                |                |          |          |

Ejemplo de pedido: 2 piezas C4-266R/LFG-22040-16  
R = A derecha, L = A izquierda



Roscado interior

Plaquetas CoroThread® 266 con geometría universal

ISO/ANSI



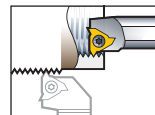
| <div><table><tr><td></td><td>iC</td><td>d<sub>1</sub></td><td>s</td></tr><tr><td>16</td><td>9.525</td><td>4.4</td><td>3.97</td></tr></table></div> |                                                                      |                                                  |                                                                                                                                                                                     |                                           |                                           |                                           |                                                                      |                                                                 |                                                        |  | iC | d <sub>1</sub> | s | 16 | 9.525 | 4.4 | 3.97 |
|----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------|--|----|----------------|---|----|-------|-----|------|
|                                                                                                                                                    | iC                                                                   | d <sub>1</sub>                                   | s                                                                                                                                                                                   |                                           |                                           |                                           |                                                                      |                                                                 |                                                        |  |    |                |   |    |       |     |      |
| 16                                                                                                                                                 | 9.525                                                                | 4.4                                              | 3.97                                                                                                                                                                                |                                           |                                           |                                           |                                                                      |                                                                 |                                                        |  |    |                |   |    |       |     |      |
| nap = Número de penetraciones                                                                                                                      |                                                                      |                                                  |                                                                                                                                                                                     |                                           |                                           |                                           |                                                                      |                                                                 |                                                        |  |    |                |   |    |       |     |      |
| Perfil de rosca                                                                                                                                    | Paso                                                                 |                                                  | Código de pedido                                                                                                                                                                    | GC1125                                    | GC1135 2)                                 | Dimensiones, mm                           |                                                                      |                                                                 | Datos de corte CoroKey                                 |  |    |                |   |    |       |     |      |
|                                                                                                                                                    | mm                                                                   | h.p.p.                                           |                                                                                                                                                                                     |                                           |                                           | r <sub>e</sub>                            | H <sub>C</sub>                                                       | nap                                                             |                                                        |  |    |                |   |    |       |     |      |
| Perfil completo<br>Métrica 60°<br>                                                                                                                 | 0.50<br>0.75<br>1.00<br>1.25<br>1.50<br>1.75<br>2.00<br>2.50<br>3.00 |                                                  | 266R/LL -16MM01A050<br>-16MM01A075<br>-16MM01A100<br>-16MM01A125<br>-16MM01A150<br>-16MM01A175<br>-16MM01A200<br>-16MM01A250<br>-16MM01A300                                         | ★<br>★<br>★<br>★<br>★<br>★<br>★<br>★<br>★ | ★<br>★<br>★<br>★<br>★<br>★<br>★<br>★<br>★ | -<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>- | 0.29<br>0.43<br>0.58<br>0.72<br>0.87<br>1.00<br>1.15<br>1.43<br>1.73 | 4/5<br>4/5<br>5/6<br>6/7<br>6/7<br>8/9<br>8/9<br>10/11<br>12    | Primera elección<br>GC1125 GC1135 GC1125 GC1125 GC1135 |  |    |                |   |    |       |     |      |
| Perfil completo<br>UN 60°<br>                                                                                                                      |                                                                      | 20<br>18<br>16<br>14<br>12<br>11<br>10<br>9<br>8 | 266R/LL -16UN01A200<br>-16UN01A180<br>-16UN01A160<br>-16UN01A140<br>-16UN01A120<br>-16UN01A110<br>-16UN01A100<br>-16UN01A090<br>-16UN01A080                                         | ★<br>★<br>★<br>★<br>★<br>★<br>★<br>★<br>★ | ★<br>★<br>★<br>★<br>★<br>★<br>★<br>★<br>★ | -<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>- | 0.73<br>0.81<br>0.91<br>1.02<br>1.20<br>1.31<br>1.43<br>1.59<br>1.80 | 6/7<br>6/7<br>7/8<br>8/9<br>8/9<br>9/10<br>10/11<br>11/12<br>12 |                                                        |  |    |                |   |    |       |     |      |
| Perfil completo<br>Whitworth 55°<br>                                                                                                               |                                                                      | 20<br>19<br>16<br>14<br>12<br>11<br>10<br>9<br>8 | 266RL -16WH01A200<br>-16WH01A190<br>-16WH01A160 <sup>1)</sup><br>-16WH01A140<br>-16WH01A120<br>-16WH01A110<br>-16WH01A100 <sup>1)</sup><br>-16WH01A090 <sup>1)</sup><br>-16WH01A080 | ★<br>★<br>★<br>★<br>★<br>★<br>★<br>★<br>★ | ★<br>★<br>-<br>-<br>-<br>-<br>-<br>-<br>- | -<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>- | 0.82<br>0.87<br>1.03<br>1.18<br>1.37<br>1.50<br>1.65<br>1.83<br>2.06 | 6/7<br>6/7<br>7/8<br>8<br>8<br>9/10<br>10/11<br>11/12<br>12/13  | v <sub>c</sub> m/min<br>155 130 160 500 15             |  |    |                |   |    |       |     |      |
| Perfil en V<br>VM = 60°<br>                                                                                                                        | 1.0-2.0<br>1.5-3.0                                                   | 24-12<br>16-8                                    | 266R/LL -16VM01-001<br>-16VM01-002                                                                                                                                                  | ★<br>★                                    | ★<br>★                                    | 0.06<br>0.09                              | 1.39<br>2.45                                                         | -<br>-                                                          | Primera elección<br>GC1125 GC1135 GC1125 GC1125 GC1135 |  |    |                |   |    |       |     |      |
| Perfil en V<br>VW = 55°<br>                                                                                                                        |                                                                      | 28-14<br>14-8                                    | 266R/LL -16VW01-001<br>-16VW01-002                                                                                                                                                  | ★<br>★                                    | ★<br>★                                    | 0.11<br>0.23                              | 1.48<br>2.55                                                         | -<br>-                                                          | v <sub>c</sub> m/min<br>155 130 160 500 15             |  |    |                |   |    |       |     |      |

<sup>1)</sup> Disponible segunda mitad de 2010      Ejemplo de pedido: 10 piezas 266R/LL-16MM01A050 1125  
<sup>2)</sup> GC 1135 sólo disponible a derecha      R = A derecha, L = A izquierda



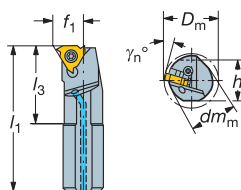
# Roscado interior

Unidades de corte y herramientas con mango CoroThread® 266



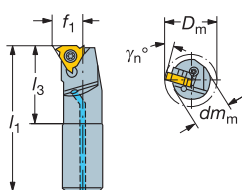
Cilíndrico con plano de apriete

266R/LKF -R

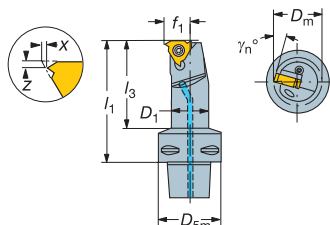


Cilíndrico con ranuras para manguitos EasyFix

266R/LKF

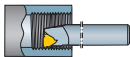
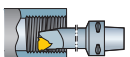


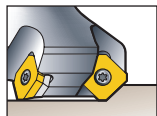
266R/LKF-R



Para las dimensiones x y z, consulte las tablas de penetración en el catálogo principal.

Ilustración a derecha

|                                                                                  | Código de pedido                                     | Dimensiones, mm |                   |          |       |       |       |            | Plaquita |                                                                                    |     |
|----------------------------------------------------------------------------------|------------------------------------------------------|-----------------|-------------------|----------|-------|-------|-------|------------|----------|------------------------------------------------------------------------------------|-----|
|                                                                                  |                                                      | $dm_m$          | $D_m \text{ min}$ | $f_1$    | $h$   | $l_1$ | $l_3$ | $\gamma_n$ | iC       |  | Nm  |
|  | <b>Cilíndrico con plano de apriete</b>               |                 |                   |          |       |       |       |            |          |                                                                                    |     |
|                                                                                  | 266R/LKF -20-16                                      | 20              | 25                | 14       | 18    | 250   | 29.0  | 15°        | 16       | 15IP                                                                               | 3.0 |
|                                                                                  | -25-16                                               | 25              | 32                | 17       | 23    | 300   | 29.0  | 15°        |          |                                                                                    |     |
|                                                                                  | -32-16                                               | 32              | 40                | 22       | 30    | 250   | 30.9  | 15°        |          |                                                                                    |     |
|                                                                                  | -40-16                                               | 40              | 50                | 27       | 37    | 300   | 31.5  | 15°        |          |                                                                                    |     |
|                                                                                  | -50-16                                               | 50              | 63                | 35       | 49    | 350   | 40.2  | 15°        |          |                                                                                    |     |
|  | <b>Cilíndrico con ranuras para manguitos EasyFix</b> |                 |                   |          |       |       |       |            |          |                                                                                    |     |
|                                                                                  | 266R/LKF -20-16-R                                    | 20              | 25                | 14       | -     | 140   | 28.7  | 15°        | 16       | 15IP                                                                               | 3.0 |
|                                                                                  | -25-16-R                                             | 25              | 32                | 17       | -     | 180   | 28.8  | 15°        |          |                                                                                    |     |
|                                                                                  | <b>Coromant Capto®</b>                               |                 |                   |          |       |       |       |            |          |                                                                                    |     |
|                                                                                  | C4-266R/LKF -14060-16                                | $D_1$           | $D_m \text{ min}$ | $D_{5m}$ | $f_1$ | $l_1$ | $l_3$ | $\gamma_n$ | 16       | 15IP                                                                               | 3.0 |
|                                                                                  | -17070-16                                            | 18.5            | 25                | 40       | 14    | 60    | 38    | 15°        |          |                                                                                    |     |
|                                                                                  | C4-266RKF -22090-16                                  | 24.5            | 32                | 40       | 17    | 70    | 48    | 15°        |          |                                                                                    |     |
|                                                                                  | C5-266R/LKF -17070-16                                | 32              | 40                | 40       | 22    | 90    | 69    | 15°        | 16       | 15IP                                                                               | 3.0 |
|                                                                                  | -22090-16                                            | 24.5            | 32                | 50       | 17    | 70    | 47    | 15°        |          |                                                                                    |     |
|                                                                                  | C5-266RKF -27105-16                                  | 32              | 40                | 50       | 22    | 90    | 68    | 15°        |          |                                                                                    |     |
|                                                                                  | C6-266R/LKF -14070-16                                | 40              | 50                | 50       | 27    | 105   | 84    | 15°        | 16       | 15IP                                                                               | 3.0 |
|                                                                                  | -17075-16                                            | 18.5            | 25                | 63       | 14    | 70    | 42    | 15°        |          |                                                                                    |     |
|                                                                                  | -22090-16                                            | 24.5            | 32                | 63       | 17    | 75    | 48    | 15°        |          |                                                                                    |     |
|                                                                                  | -27105-16                                            | 32              | 40                | 63       | 22    | 90    | 64    | 15°        |          |                                                                                    |     |
|                                                                                  |                                                      | 40              | 50                | 63       | 27    | 105   | 80    | 15°        |          |                                                                                    |     |



# CoroMill® para todas las aplicaciones

Instrucciones

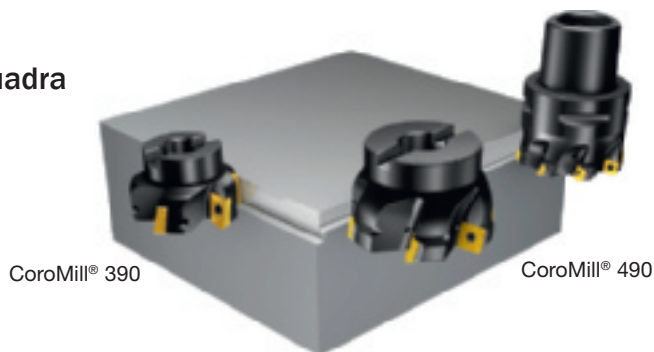
ISO/ANSI

|   |   |
|---|---|
| P | N |
| M | S |
| K | H |

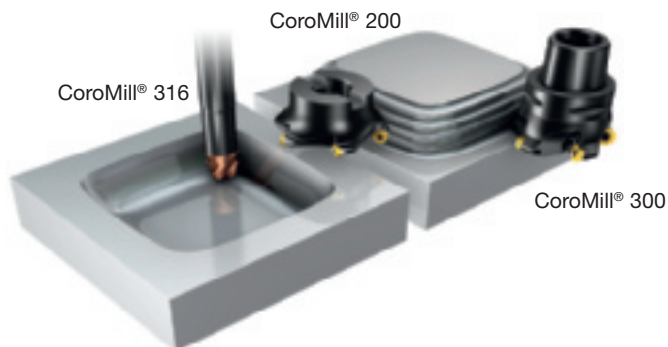
## Planeado



## Fresado en escuadra

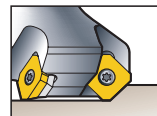


## Fresado del perfilado



Para información sobre nuestro programa completo de fresado, consulte el Catálogo principal.





## Planeado general



CoroMill® 345  
Ø 40 – 250 mm



Páginas 145-147

## Planeado general



CoroMill® 245  
Ø 50 – 250 mm

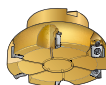


Páginas 148-150

## Planeado de materiales no féreos

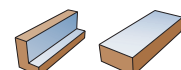


CoroMill® Century  
Ø 40 – 200 mm



Páginas 169-170

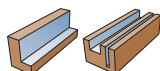
## Fresado en escuadra



CoroMill® 490  
Ø 20 – 250 mm



Páginas 151-155

Fresado de ranuras/fresado en escuadra/  
ranurado

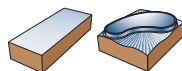
CoroMill® 390  
Ø 12 – 200 mm



Páginas 156-162

## Planeado/perfilado

## Desbaste/desbaste pesado



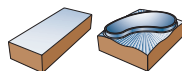
CoroMill® 200  
Ø 50 – 100 mm



Páginas 163-165

## Planeado/perfilado

## Desbaste ligero/semi-acabado



CoroMill® 300  
Ø 25 – 80 mm



Páginas 166-168

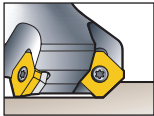
## Fresado de ranuras/Achaflanado/perfilado



CoroMill® 316  
Ø 10 – 25 mm



Páginas 171-177



# Cómo utilizar la guía para fresado

La elección de la herramienta adecuada

ISO/ANSI

|   |   |
|---|---|
| P | N |
| M | S |
| K | H |

Defina el material, el tipo de operación y el tipo de fresa

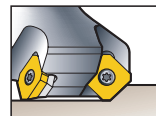
|   |   |   |   |   |   |
|---|---|---|---|---|---|
| P | M | K | N | S | H |
|---|---|---|---|---|---|

|                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div>1</div> <div></div> <div>1</div>                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                      |
| <div>Baja</div> <div></div> <div>2</div> <div><b>Paso grande</b><br/>Número reducido de plaquitas, fuerzas de corte bajas. Máquinas pequeñas. La mejor productividad cuando la estabilidad y la potencia son limitadas. Voladizo grande.</div>                              | <div><b>Primera elección</b><br/><b>Estabilidad de la operación</b><br/><b>Paso de la fresa</b></div> <div></div> <div><b>Paso normal</b><br/>Fresado en general y producción mixta. Siempre la primera elección.</div>                                                            | <div>Alta</div> <div></div> <div>2</div> <div><b>Paso reducido</b><br/>Máxima cantidad de plaquitas. La mejor productividad en condiciones estables. Materiales de viruta corta o termorresistentes.</div>                                                           |
| <div>3</div> <div></div> <div><b>Ligero</b><br/>Extra positiva. Mecanizado ligero. Fuerzas de corte bajas. Avances bajos.</div>                                                                                                                                             | <div><b>Geometría de plaquita</b></div> <div></div> <div><b>Mecanizado medio</b><br/>Para uso general en la mayoría de los materiales.</div>                                                                                                                                       | <div>3</div> <div></div> <div><b>Pesado</b><br/>Arista de corte reforzada. Mecanizado pesado. Máxima seguridad del filo. Avances elevados.</div>                                                                                                                     |
| <div>Resistencia al desgaste</div> <div></div> <div>4</div> <div><b>Condiciones buenas</b><br/>Profundidad de corte un 25% o menos de <math>a_p</math>. Voladizo menos de dos veces el diámetro de la fresa. Cortes continuos. Mecanizado con refrigerante o en seco.</div> | <div><b>Condiciones de mecanizado/Calidades</b></div> <div></div> <div><b>Condiciones normales</b><br/>Profundidad de corte un 50% o más de <math>a_p</math>. Voladizo dos o tres veces el diámetro de la fresa. Cortes discontinuos. Mecanizado con refrigerante o en seco.</div> | <div>Tenacidad</div> <div></div> <div>4</div> <div><b>Condiciones difíciles</b><br/>Profundidad de corte superior al 75% de <math>a_p</math>. Voladizo más de tres veces el diámetro de la fresa. Cortes interrumpidos. Mecanizado con refrigerante o en seco.</div> |

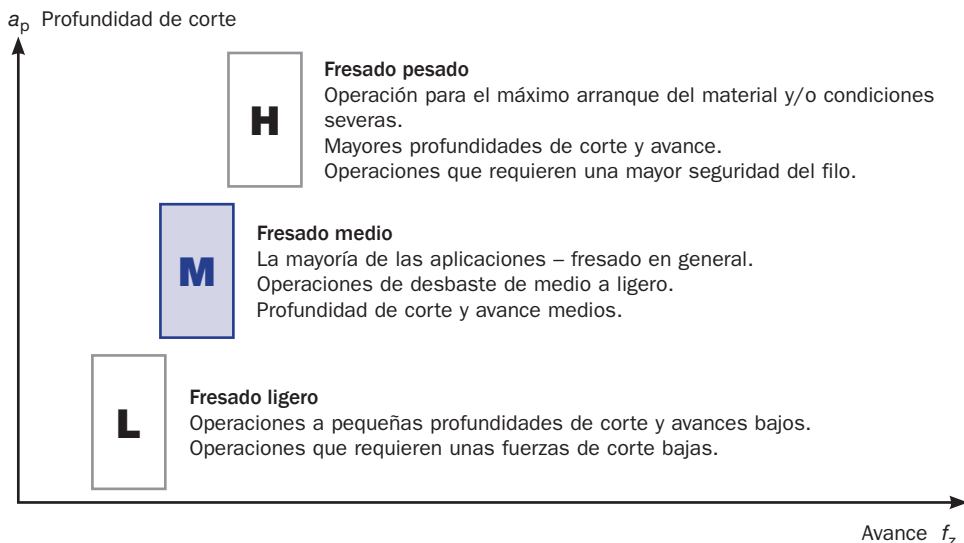


# Cómo utilizar la guía para fresado

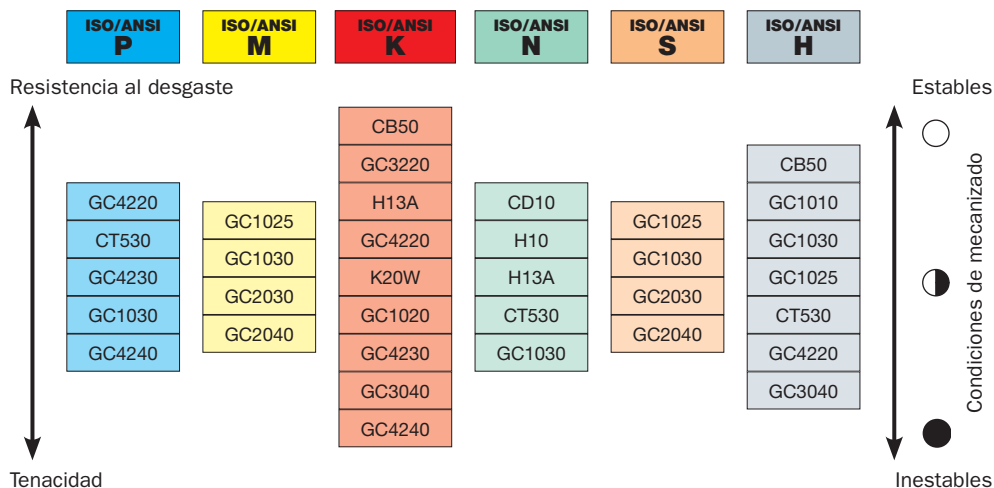
FRESADO

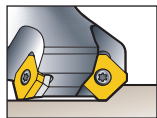


## Tipo de aplicación



## Calidades para fresado





## Reglas prácticas generales

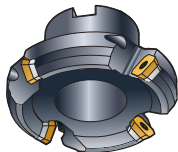
La elección de la herramienta adecuada

ISO/ANSI

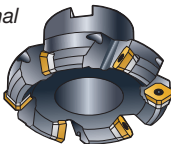
|   |   |
|---|---|
| P | N |
| M | S |
| K | H |

### Cuerpos de fresa

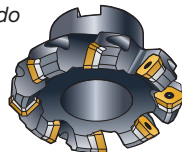
Paso grande (-L)



Paso normal (-M)



Paso reducido (-H)



Número reducido de plaquetas con paso diferencial, para una mayor productividad cuando la estabilidad y la potencia están limitadas.

Herramientas con voladizo.

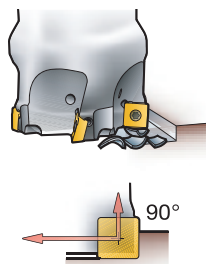
Máquinas pequeñas, p.ej. cono 40.

Fresado en general y producción mixta.

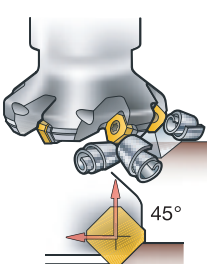
Máximo número de plaquetas para una óptima productividad en condiciones estables. Materiales de viruta corta. Materiales termorresistentes.

### Ángulo de posición

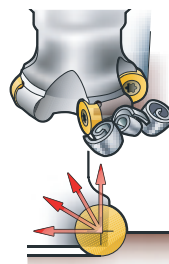
Ángulo de posición de 90°



Ángulo de posición de 45°



Fresas de plaqueta redonda



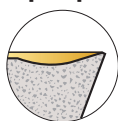
- Componentes de paredes finas
- Componentes de fijación débil
- Donde se requiere una forma de 90°

- Primera elección para uso universal
- Reduce las vibraciones con voladizos largos
- Producción de virutas más finas, permitiendo una mayor productividad

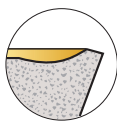
- Filo de corte robusto con múltiples posiciones
- Fresa para uso universal
- Producción de virutas más finas para las aleaciones termorresistentes

### Geometrías de plaqueta

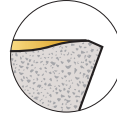
Geometría de corte ligero -L



Geometría para uso general -M



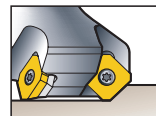
Geometría robusta -H



Filo de corte agudizado y positivo. Cortes suaves. Avances bajos. Baja potencia de la máquina. Menos requisitos de fuerza de corte.

**Geometría para uso general -M**  
Geometría positiva para producción mixta. Avances medios.

Para los máximos requisitos de seguridad. Avances elevados.



## Sugerencias para la elección de fresas, plaquitas y calidades

### Acabado

Elija fresas de paso reducido y geometría L.

Elija la calidad CT530 o la GC1030.

Para obtener el mejor acabado superficial, utilice  $f_z = 0,08$  mm/diente y  $a_p = 0,7 - 0,8$  mm (valor de partida).

Obtendrá siempre el mejor acabado si se mantiene el avance por revoluciones entre un 70% del ancho de la faceta paralela. Se logrará el mejor acabado superficial a velocidades de corte altas, 300 - 400 m/min.

No se necesita refrigerante.

### Componentes duros

Elija un radio de plaquita grande.

Elija la plaquita más grande posible.

### Componentes débiles/utillaje

Elija plaquitas periféricas rectificadas.

### Cortes intermitentes o aplastamiento de la viruta

Elija la geometría -H y una calidad más tenaz.

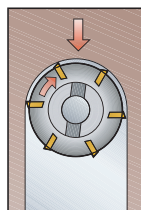
### Condiciones inestables

Elija fresas de paso grande.

## Sugerencias para su aplicación

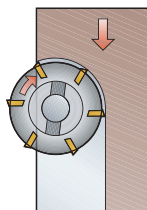
Diámetro y posición de la fresa

100 % en corte del diámetro de fresa  $D_C$ .



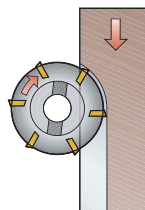
$v_c = 240$  m/min  
 $f_z = 0,14$  mm/diente

70 % en corte del diámetro de fresa  $D_C$ .



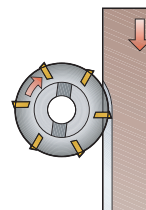
$v_c = 255$  m/min  
 $f_z = 0,14$  mm/diente

25 % en corte del diámetro de fresa  $D_C$ .



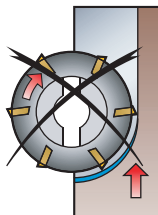
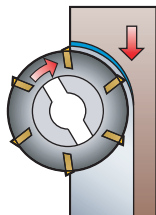
$v_c = 285$  m/min  
 $f_z = 0,16$  mm/diente

10 % en corte del diámetro de fresa  $D_C$ .



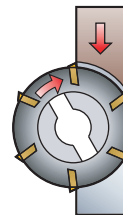
$v_c = 295$  m/min  
 $f_z = 0,20$  mm/diente

Dirección de fresado

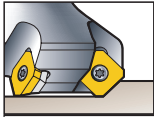


*Es preferible el fresado en concordancia siempre que lo permitan la máquina herramienta, el utillaje y la pieza.*

Posición de la fresa



*Si puede, elija una fresa de mayor diámetro que el ancho de la pieza*

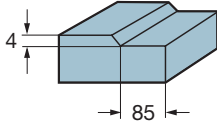


# Reglas prácticas generales



## Cálculo de los datos de corte

### Planeado



Fresa ( $D_c = 125$  mm)  
 Plaquita  
 Material de la pieza  
 Empaño ( $a_e$ )  
 Profundidad de corte ( $a_p$ )  
 Ángulo de posición ( $\kappa_r$ )  
 Avance/diente ( $f_z$ )  
 Velocidad de corte ( $v_c$ )

R245-125Q40-12M  $z_n = 5$   
 R245-12 T3 M-PM GC4230  
 SS 1672-08 (HB =180) CMC 02.1  
 85 mm  
 4 mm  
 45°  
 0.21 mm  
 250 m/min

### Cálculo de la velocidad del husillo ( $n$ )

$$n = \frac{v_c \times 1000}{\pi \times D_c}$$

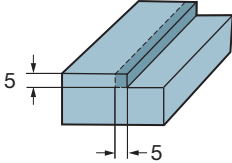
$$n = \frac{250 \times 1000}{\pi \times 125} \sim 635 \text{ rpm}$$

### Cálculo del avance de la mesa ( $v_f$ )

$$v_f = z_n \times n \times f_z$$

$$v_f = 5 \times 635 \times 0.21 \sim 665 \text{ mm/min}$$

### Fresado en escuadra con ángulo de posición de 90°



Fresa ( $D_c = 63$  mm)  
 Plaquita  
 Material de la pieza  
 Empaño ( $a_e$ )  
 Profundidad de corte ( $a_p$ )  
 Avance/diente de corte ( $f_z$ )  
 Velocidad de corte ( $v_c$ )

R390-063Q22-17M  $z_n = 5$   
 R390-17 04 08M-PM GC1030  
 SS 1672-08 (HB =180) CMC 02.1  
 5 mm  
 5 mm  
 0.15 mm  
 265 m/min

### Cálculo de la velocidad del husillo ( $n$ )

$$n = \frac{v_c \times 1000}{\pi \times D_c}$$

$$n = \frac{265 \times 1000}{\pi \times 63} \sim 1300 \text{ rpm}$$

### Cálculo del avance de la mesa ( $v_f$ )

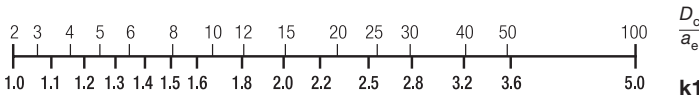
Para el fresado periférico, el avance se puede incrementar con un factor de compensación.

$$v_f = k_1 \times z_n \times n \times f_z$$

$$v_f = 1.82 \times 5 \times 1300 \times 0.15 \sim 1775 \text{ mm/min}$$

Determine el factor de compensación,  $k_1$ , en la tabla más abajo, calculando  $D_c/a_e$ .

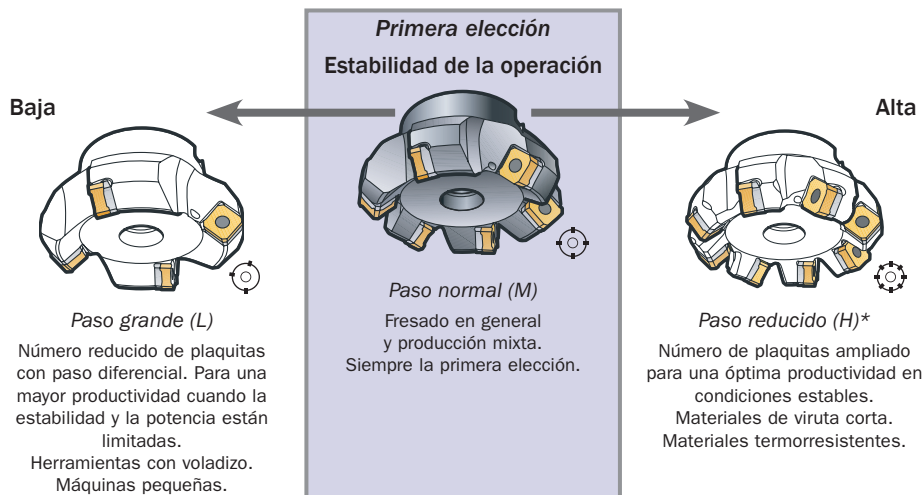
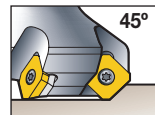
$$\frac{D_c}{a_e} = 12.6 \rightarrow k_1 = 1,82$$



# Planeado – CoroMill® 345

Fresa de alto rendimiento – para fresado medio y ligero

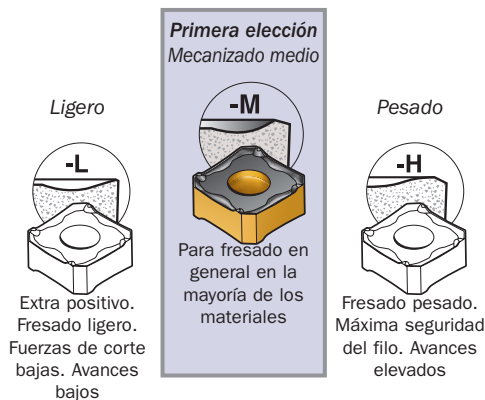
FRESADO



\*Para número máximo de plaquitas. Paso extra-reducido (HX), consultar el último suplemento o el catálogo principal.

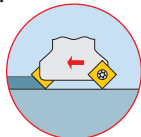
## Geometría de plaquita

## Material de la pieza/Geometría

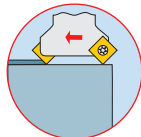


| ISO/ANSI          | L        | M | H | Wiper |
|-------------------|----------|---|---|-------|
| Acero             | <b>P</b> |   |   |       |
| Acero inoxidable  | <b>M</b> |   |   |       |
| Fundición         | <b>K</b> |   |   |       |
| Material templado | <b>H</b> |   |   |       |

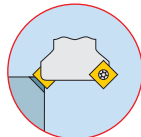
## Operaciones:



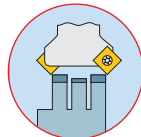
Planeado en general



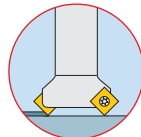
Planeado y acabado espejo



Achaflanado (ángulo efectivo de 45°)

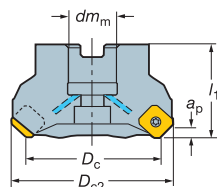
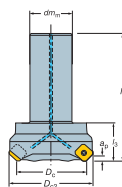


Mecanizado interrumpido



Grandes voladizos

Diámetro – 40–250 mm



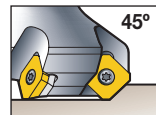
|       | Código de pedido               |                                                                                   | Código de pedido            |                                                                                   | Código de pedido              |                                                                                   |                                                                                   | Dimensiones, mm |          |       |       |       |       |
|-------|--------------------------------|-----------------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------|-------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------|----------|-------|-------|-------|-------|
| $D_c$ | Paso grande (L)<br>Diferencial |  | Paso normal (M)<br>Uniforme |  | Paso reducido (H)<br>Uniforme |  |  | $D_{5m}$        | $D_{c2}$ | $l_1$ |       |       |       |
|       | Coromant Capto                 |                                                                                   |                             |                                                                                   |                               |                                                                                   |                                                                                   |                 |          |       |       |       |       |
| 40    | 345-040C4-13L                  | 3                                                                                 | 345-040C4-13M               | 4                                                                                 | —                             | —                                                                                 | —                                                                                 | 40              | 54.08    | 60    | 19600 |       |       |
| 50    | 050C5-13L                      | 3                                                                                 | 050C5-13M                   | 4                                                                                 | 345-050C5-13H                 | 5                                                                                 | —                                                                                 | 50              | 64.08    | 60    | 17500 |       |       |
|       | 050C6-13L                      | 3                                                                                 | 050C6-13M                   | 4                                                                                 | 050C6-13H                     | 5                                                                                 | —                                                                                 | 63              | 64.08    | 60    | 17500 |       |       |
| 63    | 063C5-13L                      | 4                                                                                 | 063C5-13M                   | 5                                                                                 | 063C5-13H                     | 6                                                                                 | —                                                                                 | 50              | 78.08    | 60    | 15500 |       |       |
|       | 063C5-13L                      | 4                                                                                 | 063C6-13M                   | 5                                                                                 | 063C6-13H                     | 6                                                                                 | —                                                                                 | 63              | 77.08    | 60    | 15500 |       |       |
| 80    | 080C6-13L                      | 4                                                                                 | 080C6-13M                   | 6                                                                                 | 080C6-13H                     | 8                                                                                 | —                                                                                 | 63              | 94.08    | 70    | 13700 |       |       |
|       | —                              | —                                                                                 | 080C8-13M                   | 6                                                                                 | 080C8-13H                     | 8                                                                                 | —                                                                                 | 80              | 94.08    | 70    | 13700 |       |       |
| 100   | —                              | —                                                                                 | 100C8-13M                   | 7                                                                                 | 100C8-13H                     | 10                                                                                | —                                                                                 | 80              | 114.08   | 80    | 12200 |       |       |
|       | Mango cilíndrico               |                                                                                   |                             |                                                                                   |                               |                                                                                   |                                                                                   | $D_{m\text{m}}$ | $D_{c2}$ | $l_1$ | $l_2$ | $l_3$ | $n$   |
| 40    | 345-040A32-13L                 | 3                                                                                 | 345-040A32-13M              | 4                                                                                 | —                             | —                                                                                 | —                                                                                 | 32              | 54.08    |       | 120   | 40    | 19600 |
| 50    | 050A32-13L                     | 3                                                                                 | 050A32-13M                  | 4                                                                                 | —                             | —                                                                                 | —                                                                                 | 32              | 64.08    |       | 120   | 40    | 17500 |
|       | Eje                            |                                                                                   |                             |                                                                                   |                               |                                                                                   |                                                                                   |                 |          |       |       |       |       |
| 40    | 345-040Q22-13L                 | 3                                                                                 | 345-040Q22-13M              | 4                                                                                 | —                             | —                                                                                 | —                                                                                 | 22              | 54.08    | 45    | 19600 |       |       |
| 50    | 050Q22-13L                     | 3                                                                                 | 050Q22-13M                  | 4                                                                                 | 345-050Q22-13H                | 5                                                                                 | —                                                                                 | 22              | 64.08    | 45    | 17500 |       |       |
| 63    | 063Q22-13L                     | 4                                                                                 | 063Q22-13M                  | 5                                                                                 | 063Q22-13H                    | 6                                                                                 | —                                                                                 | 22              | 77.08    | 45    | 15500 |       |       |
| 80    | 080Q27-13L                     | 4                                                                                 | 080Q27-13M                  | 5                                                                                 | 080Q27-13H                    | 8                                                                                 | —                                                                                 | 27              | 94.08    | 50    | 13700 |       |       |
| 100   | 100Q32-13L                     | 5                                                                                 | 100Q32-13M                  | 6                                                                                 | 100Q32-13H                    | 10                                                                                | —                                                                                 | 32              | 114.08   | 50    | 12200 |       |       |
| 125   | 125Q40-13L                     | 6                                                                                 | 125Q32-13M                  | 8                                                                                 | 125Q32-13H                    | 12                                                                                | —                                                                                 | 40              | 139.08   | 63    | 10900 |       |       |
| 160   | 160Q40-13L                     | 7                                                                                 | 160Q40-13M                  | 10                                                                                | 160Q40-13H                    | —                                                                                 | 12                                                                                | 40              | 174.08   | 63    | 9600  |       |       |
| 200   | 200Q60-13L                     | 8                                                                                 | 200Q60-13M                  | 12                                                                                | 200Q60-13H                    | —                                                                                 | 16                                                                                | 60              | 214.08   | 63    | 8600  |       |       |
| 250   | 250Q60-13L                     | 10                                                                                | 250Q60-13M                  | 14                                                                                | 250Q60-13H                    | —                                                                                 | 18                                                                                | 60              | 264.08   | 63    | 7700  |       |       |
|       | CIS En eje                     |                                                                                   |                             |                                                                                   |                               |                                                                                   |                                                                                   |                 |          |       |       |       |       |
| 80    | A345-080J25-13L                | 4                                                                                 | A345-080J25-13M             | 6                                                                                 | A345-080J25-13H               | 8                                                                                 | —                                                                                 | 25.4            | 94.08    | 50    | 13700 |       |       |
| 100   | 100J31-13L                     | 5                                                                                 | 100J31-13M                  | 7                                                                                 | 100J31-13H                    | 10                                                                                | —                                                                                 | 31.75           | 114.08   | 50    | 12200 |       |       |
| 125   | 125J38-13L                     | 6                                                                                 | 125J38-13M                  | 8                                                                                 | 125J38-13H                    | 12                                                                                | —                                                                                 | 38.1            | 139.08   | 63    | 10900 |       |       |
| 160   | 160J51-13L                     | 7                                                                                 | 160J51-13M                  | 10                                                                                | 160J51-13H                    | —                                                                                 | 12                                                                                | 50.8            | 174.08   | 63    | 9600  |       |       |
| 200   | 200J47-13L                     | 8                                                                                 | 200J47-13M                  | 12                                                                                | 200J47-13H                    | —                                                                                 | 16                                                                                | 47.625          | 214.08   | 63    | 8600  |       |       |
| 250   | 250J47-13L                     | 10                                                                                | 250J47-13M                  | 14                                                                                | 250J47-13H                    | —                                                                                 | 18                                                                                | 47.645          | 264.08   | 63    | 7700  |       |       |

 = Paso diferencial



# Planeado – CoroMill® 345

Plaquitas y calidades –  
recomendaciones de datos de corte – valores de partida



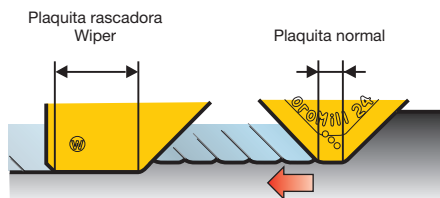
| ISO/ANSI | L = Ligero<br>M = Medio<br>H = Pesado | CONDICIONES BUENAS |       |       | Primera elección<br>CONDICIONES NORMALES |       |       | CONDICIONES DIFÍCILES |       |       |
|----------|---------------------------------------|--------------------|-------|-------|------------------------------------------|-------|-------|-----------------------|-------|-------|
|          |                                       |                    |       |       |                                          |       |       |                       |       |       |
|          |                                       | Código de pedido   | $v_c$ | $f_z$ | Código de pedido                         | $v_c$ | $f_z$ | Código de pedido      | $v_c$ | $f_z$ |
| <b>P</b> | L                                     | 345R-1305E-PL 1030 | 300   | 0.12  | 345R-1305E-PL 1030                       | 275   | 0.15  | 345R-1305E-PL 4240    | 200   | 0.15  |
|          | M                                     | 345R-1305M-PM 4220 | 290   | 0.30  | 345R-1305M-PM 4230                       | 250   | 0.30  | 345R-1305M-PM 4240    | 225   | 0.30  |
|          | H                                     | 345R-1305M-PH 4220 | 250   | 0.45  | 345R-1305M-PH 4230                       | 205   | 0.45  | 345R-1305M-PH 4240    | 175   | 0.45  |
| <b>M</b> | L                                     | 345R-1305E-PL 2030 | 250   | 0.08  | 345R-1305E-PL 2030                       | 240   | 0.18  | 345R-1305E-PL 2040    | 150   | 0.15  |
|          | M                                     | 345R-1305E-PL 2030 | 240   | 0.18  | 345R-1305M-PL 2030                       | 180   | 0.18  | 345R-1305E-PL 2040    | 150   | 0.15  |
| <b>K</b> | L                                     | 345R-1305M-KL 1020 | 285   | 0.12  | 345R-130M-KL 1020                        | 230   | 0.12  | 345R-1305M-KL 3040    | 195   | 0.15  |
|          | M                                     | 345R-1305M-KM 3220 | 225   | 0.30  | 345R-130M-KM 3040                        | 210   | 0.30  | 345R-1305M-KM 3040    | 175   | 0.30  |
|          | H                                     | 345R-1305M-KH 3220 | 190   | 0.35  | 345R-1305M-KH 3040                       | 150   | 0.35  | 345R-1305M-KH 3040    | 150   | 0.35  |
| <b>H</b> | L                                     | 345R-1305E-PL 530  | 70    | 0.12  | 345R-1305E-PL 1030                       | 40    | 0.12  | 345R-1305M-PH 1030    | 40    | 0.25  |
|          | M                                     | 345R-1305M-PM 530  | 70    | 0.12  | 345R-1305M-PM 4220                       | 40    | 0.30  | 345R-1305M-PH 1030    | 30    | 0.25  |
|          | H                                     | 345R-1305M-PM 530  | 70    | 0.12  | 345R-1305M-PH 4220                       | 40    | 0.45  | 345R-1305M-PH 1030    | 30    | 0.30  |



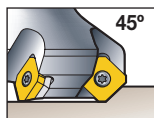
## Plaqueta rascadora Wiper

La gran faceta de la plaqueta rascadora permite incrementar el avance por revolución hasta cuatro veces el avance normal - manteniendo la calidad superficial, especialmente cuando se utiliza el diámetro de fresa más grande. Normalmente, sólo es necesario utilizar una plaqueta rascadora.

Para más información, consulte el catálogo principal..



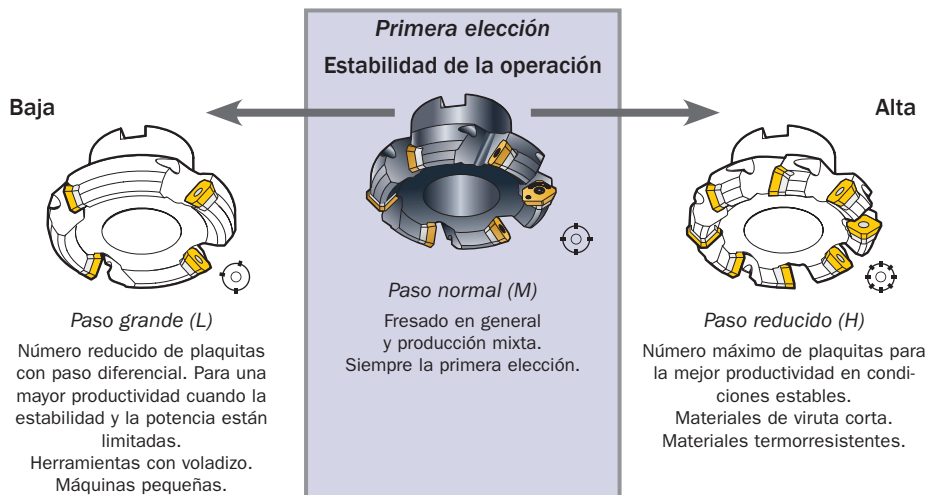
|                    |                    |
|--------------------|--------------------|
| <b>P</b> GC1030    | <b>K</b> GC1020    |
| 345N-1305EPW8 1030 | 345N-1305EPW8 1020 |



## Planeado – CoroMill® 245

La fresa universal – de fresado pesado a fresado ligero

ISO/ANSI

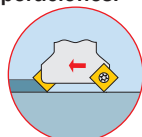


### Geometría de plaquita

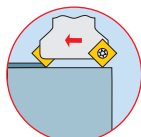
### Material de la pieza/Geometría

|                           |   | Primera elección<br>Mecanizado medio                                  |                                                         |                                                             |       |  |
|---------------------------|---|-----------------------------------------------------------------------|---------------------------------------------------------|-------------------------------------------------------------|-------|--|
|                           |   | Ligero<br>-L                                                          | -M                                                      | Pesado<br>-H                                                |       |  |
|                           |   | Extra positivo. Fresado ligero. Fuerzas de corte bajas. Avances bajos | Para fresado en general en la mayoría de los materiales | Fresado pesado. Máxima seguridad del filo. Avances elevados |       |  |
| ISO/ANSI                  |   | L                                                                     | M                                                       | H                                                           | Wiper |  |
| Acero                     | P |                                                                       |                                                         |                                                             |       |  |
| Acero inoxidable          | M |                                                                       |                                                         |                                                             |       |  |
| Fundición                 | K |                                                                       |                                                         |                                                             |       |  |
| Material no férreo        | N |                                                                       |                                                         |                                                             |       |  |
| Material termorresistente | S |                                                                       |                                                         |                                                             |       |  |
| Material templado         | H |                                                                       |                                                         |                                                             |       |  |

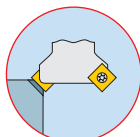
### Operaciones:



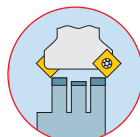
Planeado en general



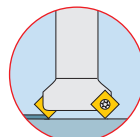
Planeado y acabado espejo



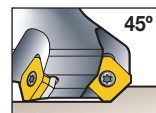
Achaflanado (ángulo efectivo de 45°)



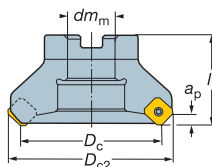
Mecanizado interrumpido



Voladizos largos

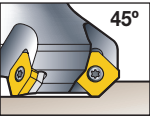


Profundidad de corte máx. ( $a_p$ )  
 tamaño de plaquita 12 = 6 mm  
 tamaño de plaquita 18 = 10 mm



| $D_c$ | Código de pedido               |    | Código de pedido               |    | Código de pedido               |    | Dimensiones, mm |          |       |            |    |
|-------|--------------------------------|----|--------------------------------|----|--------------------------------|----|-----------------|----------|-------|------------|----|
|       | Paso grande (L)<br>Diferencial |    | Paso normal (M)<br>Uniforme    |    | Paso reducido (H)<br>Uniforme  |    | $dm_m$          | $D_{c2}$ | $l_1$ | $n_{máx.}$ |    |
|       | Eje                            |    |                                |    |                                |    |                 |          |       |            |    |
| 50    | R245-050Q22-12L                | 3  | R245-050Q22-12M                | 4  | R245-050Q22-12H                | 5  | 22              | 62.5     | 40    | 16250      | 12 |
| 63    | 063Q22-12L                     | 4  | 063Q22-12M                     | 5  | 063Q22-12H                     | 6  | 22              | 75.5     | 40    | 14400      |    |
| 80    | 080Q27-12L                     | 4  | 080Q27-12M                     | 6  | 080Q27-12H                     | 8  | 27              | 92.5     | 50    | 12700      |    |
| 100   | 100Q32-12L                     | 5  | 100Q32-12M                     | 7  | 100Q32-12H                     | 10 | 32              | 112.5    | 50    | 11300      |    |
| 125   | 125Q40-12L                     | 6  | 125Q40-12M                     | 8  | 125Q40-12H                     | 12 | 40              | 137.5    | 63    | 10100      |    |
| 160   | 160Q40-12L                     | 7  | 160Q40-12M                     | 10 | 160Q40-12H                     | 16 | 40              | 172.5    | 63    | 8900       |    |
| 200   | 200Q60-12L                     | 8  | 200Q60-12M                     | 12 | 200Q60-12H                     | 20 | 60              | 212.5    | 63    | 7950       |    |
| 250   | 250Q60-12L                     | 10 | 250Q60-12M                     | 14 | 250Q60-12H                     | 24 | 60              | 262.5    | 63    | 7100       |    |
| 80    | –                              |    | R245-080Q32-18M                | 4  | R245-080Q32-18H <sup>1)</sup>  | 5  | 32              | 98.8     | 50    | 6100       | 18 |
| 100   | –                              |    | 100Q32-18M                     | 4  | 100Q32-18H <sup>1)</sup>       | 6  | 32              | 118.8    | 50    | 5400       |    |
| 125   | –                              |    | 125Q40-18M                     | 5  | 125Q40-18H                     | 7  | 40              | 138.8    | 63    | 4900       |    |
| 160   | –                              |    | 160Q40-18M                     | 6  | 160Q40-18H                     | 9  | 40              | 178.8    | 63    | 4300       |    |
| 200   | –                              |    | 200Q60-18M                     | 8  | 200Q60-18H                     | 12 | 60              | 218.8    | 63    | 3800       |    |
| 250   | –                              |    | 250Q60-18M                     | 10 | 250Q60-18H                     | 14 | 60              | 268.8    | 63    | 3400       |    |
|       | CIS En eje                     |    |                                |    |                                |    |                 |          |       |            |    |
| 80    | RA245-080J25.4-12L             | 4  | RA245-080J25.4-12M             | 6  | RA245-080J25.4-12H             | 8  | 25.4            | 92.5     | 50    | 12700      | 12 |
| 100   | 100J31.75-12L                  | 5  | 100J31.75-12M                  | 7  | 100J31.75-12H                  | 10 | 31.75           | 112.5    | 63    | 11300      |    |
| 125   | 125J38.1-12L                   | 6  | 125J38.1-12M                   | 8  | 125J38.1-12H                   | 12 | 38.1            | 137.5    | 63    | 10100      |    |
| 160   | 160J50.8-12L                   | 7  | 160J50.8-12M                   | 10 | 160J50.8-12H                   | 16 | 50.8            | 172.5    | 63    | 8900       |    |
| 200   | 200J47.625-12L                 | 8  | 200J47.625-12M                 | 12 | 200J47.625-12H                 | 20 | 47.625          | 212.5    | 63    | 7950       |    |
| 250   | 250J47.625-12L                 | 10 | 250J47.625-12M                 | 14 | –                              | 24 | 47.625          | 262.5    | 63    | 7100       |    |
| 80    | –                              |    | RA245-080J25-18M <sup>1)</sup> | 4  | RA245-080J25-18H <sup>1)</sup> | 5  | 25.4            | 101.3    | 50    | 6100       | 18 |
| 100   | –                              |    | 100J31-18M <sup>1)</sup>       | 4  | 100J31-18H <sup>1)</sup>       | 6  | 31.75           | 118.8    | 50    | 5400       |    |
| 125   | –                              |    | 125J38-18M                     | 5  | 125J38-18H                     | 7  | 38.1            | 143.8    | 63    | 4900       |    |
| 160   | –                              |    | 160J51-18M                     | 6  | 160J51-18H                     | 9  | 50.8            | 178.8    | 63    | 4300       |    |
| 200   | –                              |    | 200J47-18M                     | 8  | 200J47-18H                     | 12 | 47.625          | 218.8    | 63    | 3800       |    |
| 250   | –                              |    | 250J47-18M                     | 10 | 250J47-18H                     | 14 | 47.625          | 268.8    | 63    | 3400       |    |

<sup>1)</sup> Sin Placa de Apoyo



Planeado – CoroMill® 245

Plaquetas y calidades –  
recomendaciones de datos de corte – valores de partida



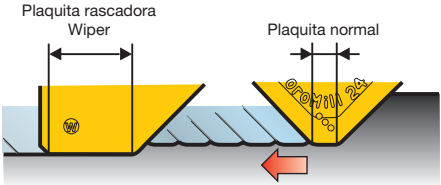
| ISO/ANSI | L = Ligero<br>M = Medio<br>H = Pesado | CONDICIONES BUENAS                                                                |                                                                                                       |                    | Primera elección<br>CONDICIONES NORMALES                                          |       |                                                                                                       | CONDICIONES DIFÍCILES                                                              |       |       |                                                                                                       |
|----------|---------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------|-----------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------|-------|-------------------------------------------------------------------------------------------------------|
|          |                                       |  |                                                                                                       |                    |  |       |                                                                                                       |  |       |       |                                                                                                       |
|          |                                       | L/M/H                                                                             | Código de pedido<br> | $v_c$              | $f_z$                                                                             | L/M/H | Código de pedido<br> | $v_c$                                                                              | $f_z$ | L/M/H | Código de pedido<br> |
| P        | L                                     | R245-12T3E-PL 530                                                                 | 305                                                                                                   | 0.11               | R245-12T3E-PL 1030                                                                | 250   | 0.08                                                                                                  | R245-12T3M-PL 4240                                                                 | 225   | 0.17  |                                                                                                       |
|          | M                                     | R245-12T3M-PM 4220                                                                | 290                                                                                                   | 0.24               | R245-12T3M-PM 4230                                                                | 250   | 0.21                                                                                                  | R245-12T3M-PM 4240                                                                 | 225   | 0.24  |                                                                                                       |
|          |                                       | R245-18T6M-PM 4220                                                                | 275                                                                                                   | 0.28               | R245-18T6M-PM 4230                                                                | 225   | 0.28                                                                                                  | R245-18T6M-PM 4240                                                                 | 190   | 0.28  |                                                                                                       |
| H        | R245-12T3M-PH 4220                    | 250                                                                               | 0.35                                                                                                  | R245-12T3M-PH 4230 | 205                                                                               | 0.35  | R245-12T3M-PH 4240                                                                                    | 175                                                                                | 0.35  |       |                                                                                                       |
| M        | L                                     | R245-12T3E-ML 1025                                                                | 295                                                                                                   | 0.08               | R245-12T3E-ML 2030                                                                | 230   | 0.14                                                                                                  | R245-12T3E-ML 2040                                                                 | 220   | 0.14  |                                                                                                       |
|          | M/H                                   | R245-12T3K-MM 2030                                                                | 200                                                                                                   | 0.23               | R245-12T3K-MM 2030                                                                | 200   | 0.23                                                                                                  | R245-12T3K-MM 2040                                                                 | 190   | 0.23  |                                                                                                       |
|          |                                       | R245-18T6M-MM 2030                                                                | 185                                                                                                   | 0.28               | R245-18T6M-MM 2040                                                                | 175   | 0.28                                                                                                  | R245-18T6M-MM 2040                                                                 | 175   | 0.28  |                                                                                                       |
| K        | L                                     | R245-12T3E-KL 1020                                                                | 285                                                                                                   | 0.11               | R245-12T3M-KL 1020                                                                | 230   | 0.18                                                                                                  | R245-12T3M-KL 3040                                                                 | 195   | 0.17  |                                                                                                       |
|          | M                                     | R245-12T3M-KM 3220                                                                | 225                                                                                                   | 0.24               | R245-12T3M-KM 1020                                                                | 210   | 0.24                                                                                                  | R245-12T3M-KM 3040                                                                 | 175   | 0.24  |                                                                                                       |
|          |                                       | R245-18T6M-KM 3220                                                                | 285                                                                                                   | 0.28               | R245-18T6M-KM 1020                                                                | 200   | 0.28                                                                                                  | R245-18T6M-KM 3040                                                                 | 165   | 0.28  |                                                                                                       |
| H        | R245-12T3M-KH 3220                    | 190                                                                               | 0.35                                                                                                  | R245-12T3M-KH 3040 | 150                                                                               | 0.35  | R245-12T3M-KH 3040                                                                                    | 150                                                                                | 0.35  |       |                                                                                                       |
| N        | L                                     | R245-12T3E CD10                                                                   | 1695                                                                                                  | 0.14               | R245-12T3E-AL H10                                                                 | 760   | 0.24                                                                                                  | R245-12T3E-KL H13A                                                                 | 700   | 0.11  |                                                                                                       |
|          | M/H                                   | R245-12T3E CD10                                                                   | 1695                                                                                                  | 0.14               | R245-12T3E-AL H10                                                                 | 760   | 0.24                                                                                                  | R245-12T3M-KM H13A                                                                 | 610   | 0.24  |                                                                                                       |
| S        | L                                     | R245-12T3E-ML 1025                                                                | 40                                                                                                    | 0.08               | R245-12T3E-ML 2030                                                                | 35    | 0.14                                                                                                  | R245-12T3E-ML 2040                                                                 | 35    | 0.14  |                                                                                                       |
|          | M/H                                   | R245-12T3E-ML 2030                                                                | 35                                                                                                    | 0.14               | R245-12T3K-MM 2030                                                                | 30    | 0.23                                                                                                  | R245-12T3K-MM 2040                                                                 | 30    | 0.23  |                                                                                                       |
| H        | L                                     | R245-12T3E CB50                                                                   | 145                                                                                                   | 0.14               | R245-12T3E-PL 1030                                                                | 40    | 0.08                                                                                                  | R245-12T3M-KM 3040                                                                 | 35    | 0.24  |                                                                                                       |
|          | M/H                                   | R245-12T3E CB50                                                                   | 145                                                                                                   | 0.14               | R245-12T3M-PM 4220                                                                | 45    | 0.24                                                                                                  | R245-12T3M-KH 3040                                                                 | 30    | 0.35  |                                                                                                       |



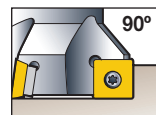
Plaqueta rascadora Wiper

La gran faceta de la plaqueta rascadora permite incrementar el avance por revolución hasta cuatro veces el avance normal - manteniendo la calidad superficial, especialmente cuando se utiliza el diámetro de fresa más grande. Normalmente, sólo es necesario utilizar una plaqueta rascadora.

Para más información, consulte el catálogo principal..



|                                            |                     |                                            |                     |
|--------------------------------------------|---------------------|--------------------------------------------|---------------------|
| <b>P</b> GC1030                            | <b>M</b> GC2030     | <b>K</b> GC1020                            | <b>H</b> GC1010     |
| R245-12 T3 E-W 1030<br>R245-18 T6 E-W 1030 | R245-18 T6 E-W 2030 | R245-12 T3 E-W 1020<br>R245-18 T6 E-W 1020 | R245-12 T3 E-W 1010 |



Baja

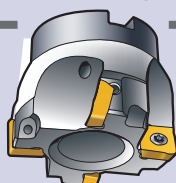


Paso grande (L)

Número reducido de plaquitas con paso diferencial, para una mayor productividad cuando la estabilidad y la potencia están limitadas.

Herramientas con voladizo.

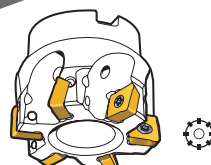
**Primera elección**  
Estabilidad de la operación



Paso normal (M)

Fresado en general y producción mixta.  
Siempre la primera elección.

Alta



Paso reducido (H)

Máximo número de plaquitas para una productividad óptima en condiciones estables.

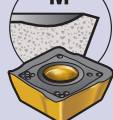
Materiales de viruta corta.

## Geometría de plaquita

## Primera elección

Mecanizado medio

-M



Para fresado en general en la mayoría de los materiales

Ligero

-L



Fresado ligero.  
Fuerzas de corte bajas. Avances bajos

Pesado

-H

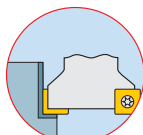


Fresado pesado.  
Fuerzas de corte elevadas. Avances elevados

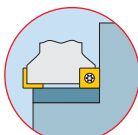
## Material de la pieza/Geometría

| ISO/ANSI          | L        | M | H |
|-------------------|----------|---|---|
| Acero             | <b>P</b> |   |   |
| Acero inoxidable  | <b>M</b> |   |   |
| Fundición         | <b>K</b> |   |   |
| Material templado | <b>H</b> |   |   |

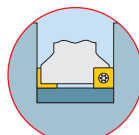
## Operaciones:



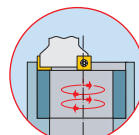
Fresado en escuadra  
repetido



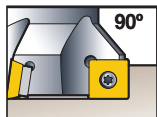
Escuadrado



Ranurado



Mandrinado

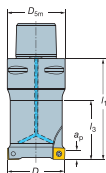


## Fresado en escuadra – CoroMill® 490

Diámetro – 20–84 mm



Profundidad de corte máx. ( $a_p$ )  
 tamaño de plaquita 8 = 5.5 mm  
 tamaño de plaquita 14 = 10 mm



= Paso uniforme

= Paso diferencial

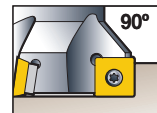
| $D_c$ | Código de pedido       |   |                             | Código de pedido            |   |                             | Código de pedido            |   |    | Dimensiones, mm |       |       |           |       |    |
|-------|------------------------|---|-----------------------------|-----------------------------|---|-----------------------------|-----------------------------|---|----|-----------------|-------|-------|-----------|-------|----|
|       | <i>Paso grande (L)</i> |   |                             | <i>Paso normal (M)</i>      |   |                             | <i>Paso reducido (H)</i>    |   |    | $D_{5m}$        | $l_1$ | $l_3$ | $n_{max}$ |       |    |
|       | Coromant Capto         |   |                             |                             |   |                             |                             |   |    |                 |       |       |           |       |    |
| 20    | 490-020C3-08L          | 2 | —                           | —                           | — | —                           | —                           | — | —  | —               | 32    | 80    | 40        | 48500 | 08 |
|       | 020C4-08L              | 2 | —                           | —                           | — | —                           | —                           | — | —  | —               | 40    | 70    | 40        | 39000 |    |
|       | 020C5-08L              | 2 | —                           | —                           | — | —                           | —                           | — | —  | —               | 50    | 75    | 40        | 28000 |    |
|       | 020C6-08L              | 2 | —                           | —                           | — | —                           | —                           | — | —  | —               | 63    | 80    | 40        | 20000 |    |
| 25    | —                      | — | —                           | 490-025C3-08M               | 3 | —                           | —                           | — | —  | —               | 32    | 80    | 60        | 40400 |    |
|       | —                      | — | —                           | 025C4-08M                   | 3 | —                           | —                           | — | —  | —               | 40    | 70    | 45        | 39000 |    |
|       | —                      | — | —                           | 025C5-08M                   | 3 | —                           | —                           | — | —  | —               | 50    | 75    | 50        | 28000 |    |
|       | —                      | — | —                           | 025C6-08M                   | 3 | —                           | —                           | — | —  | —               | 63    | 80    | 53        | 20000 |    |
| 32    | —                      | — | —                           | 490-032C3-08M               | 4 | —                           | —                           | — | —  | —               | 32    | 80    | 60        | 33900 |    |
|       | —                      | — | —                           | 032C4-08M                   | 4 | —                           | —                           | — | —  | —               | 40    | 70    | 45        | 33900 |    |
|       | —                      | — | —                           | 032C5-08M                   | 4 | —                           | —                           | — | —  | —               | 50    | 75    | 50        | 28000 |    |
|       | —                      | — | —                           | 032C6-08M                   | 4 | —                           | —                           | — | —  | —               | 63    | 80    | 53        | 20000 |    |
| 36    | —                      | — | —                           | 032C8-08M                   | 4 | —                           | —                           | — | —  | —               | 80    | 80    | 45        | 14000 |    |
|       | —                      | — | —                           | 490-036C3-08M               | — | 4                           | —                           | — | —  | —               | 32    | 50    | 30        | 31300 |    |
|       | 40                     | — | —                           | 490-040C4-08M               | — | 4                           | 490-040C4-08H               | 6 | —  | 40              | 70    | 45    | 29300     |       |    |
|       | —                      | — | —                           | 040C5-08M                   | — | 4                           | 040C5-08H                   | 6 | —  | 50              | 75    | 50    | 28000     |       |    |
| 44    | —                      | — | —                           | —                           | — | —                           | 040C6-08H                   | 6 | —  | 63              | 80    | 53    | 20000     |       |    |
|       | —                      | — | —                           | —                           | — | —                           | 040C8-08H                   | 6 | —  | 80              | 80    | 45    | 14000     |       |    |
|       | —                      | — | —                           | 490-044C4-08M               | — | 5                           | 044C4-08H                   | 6 | —  | 40              | 60    | 40    | 27600     |       |    |
|       | 50                     | — | —                           | 490-050C5-08M               | — | 5                           | 050C5-08H                   | 7 | —  | 50              | 75    | 50    | 25500     |       |    |
| 54    | —                      | — | —                           | 050C6-08M                   | — | 5                           | 050C6-08H                   | 7 | —  | 63              | 80    | 53    | 20000     |       |    |
|       | —                      | — | —                           | —                           | — | —                           | 050C8-08H                   | 7 | —  | 80              | 80    | 45    | 14000     |       |    |
|       | —                      | — | —                           | 490-054C5-08M               | — | 5                           | 054C5-08H                   | 7 | —  | 50              | 60    | 40    | 24300     |       |    |
|       | 63                     | — | —                           | 490-063C6-08M               | — | 6                           | 063C6-08H                   | 8 | —  | 63              | 50    | 23    | 20000     |       |    |
| 66    | —                      | — | —                           | —                           | — | —                           | 063C8-08H                   | 8 | —  | 80              | 80    | 45    | 14000     |       |    |
|       | —                      | — | —                           | 490-066C6-08M               | — | 6                           | 066C6-08H                   | — | 8  | 63              | 50    | 28    | 20000     |       |    |
|       | 80                     | — | —                           | 490-080C8-08M               | — | 8                           | 080C6-08H                   | — | 10 | 80              | 80    | 45    | 14000     |       |    |
|       | 84                     | — | —                           | 490-084C8-08M               | — | 8                           | 084C6-08H                   | — | 10 | 80              | 60    | 30    | 14000     |       |    |
| 40    | —                      | — | —                           | 490-040C4-14M <sup>1)</sup> | — | 3                           | 490-040C4-14H <sup>1)</sup> | 4 | —  | 40              | 70    | 45    | 26400     | 14    |    |
|       | —                      | — | —                           | 040C5-14M <sup>1)</sup>     | — | 3                           | 040C5-14H <sup>1)</sup>     | 4 | —  | 50              | 75    | 50    | 26400     |       |    |
|       | —                      | — | —                           | 040C6-14M <sup>1)</sup>     | — | 3                           | 040C6-14H <sup>1)</sup>     | 4 | —  | 63              | 80    | 53    | 20000     |       |    |
|       | —                      | — | —                           | —                           | — | —                           | 040C8-14H <sup>1)</sup>     | 4 | —  | 80              | 80    | 45    | 14000     |       |    |
| 44    | —                      | — | 490-044C4-14M <sup>1)</sup> | —                           | 3 | 490-044C4-14H <sup>1)</sup> | 4                           | — | 40 | 70              | 70    | 24600 |           |       |    |
| 50    | —                      | — | —                           | 490-050C5-14M               | — | 4                           | 490-050C5-14H <sup>1)</sup> | 5 | —  | 50              | 75    | 50    | 13700     |       |    |
|       | —                      | — | —                           | 050C6-14M                   | — | 4                           | 050C6-14H <sup>1)</sup>     | 5 | —  | 63              | 80    | 53    | 13700     |       |    |
|       | —                      | — | —                           | —                           | — | —                           | 050C8-14H                   | 5 | —  | 80              | 80    | 45    | 13700     |       |    |
|       | —                      | — | —                           | 490-054C5-14M               | — | 4                           | 490-054C5-14H <sup>1)</sup> | 5 | —  | 50              | 60    | 60    | 13000     |       |    |
| 54    | —                      | — | —                           | 490-063C6-14M               | — | 5                           | 490-063C6-14H               | 6 | —  | 63              | 80    | 53    | 11700     |       |    |
|       | —                      | — | —                           | —                           | — | —                           | 063C8-14H                   | 6 | —  | 80              | 80    | 45    | 11700     |       |    |
|       | 66                     | — | —                           | 490-066C6-14M               | — | 5                           | 490-066C6-14H               | 6 | —  | 63              | 65    | 65    | 11400     |       |    |
|       | 80                     | — | —                           | 490-080C6-14M               | — | 6                           | 490-080C6-14H               | 8 | —  | 63              | 65    | 65    | 10100     |       |    |
| 84    | —                      | — | —                           | 490-080C8-14M               | — | 6                           | 490-080C8-14H               | 8 | —  | 80              | 80    | 45    | 10100     |       |    |
|       | —                      | — | —                           | 490-084C8-14M               | — | 6                           | 490-084C8-14H               | 8 | —  | 80              | 70    | 70    | 9800      |       |    |

<sup>1)</sup> No hay placa de apoyo



## Fresado en escuadra – CoroMill® 490

Diámetro – 20–63 mm

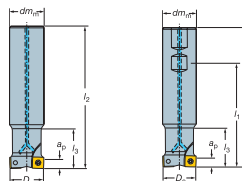


Profundidad de corte máx. ( $a_p$ )  
 tamaño de plaquita 8 = 5.5 mm  
 tamaño de plaquita 14 = 10 mm



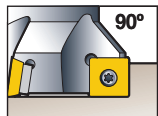
= Paso uniforme

= Paso diferencial



|       | Código de pedido |                                                                                   |                                                                                   | Código de pedido          |                                                                                   |                                                                                   | Código de pedido  |                                                                                   |                                                                                   | Dimensiones, mm  |       |       |       |                   |                                                                                     |  |
|-------|------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------|-------|-------|-------|-------------------|-------------------------------------------------------------------------------------|--|
| $D_c$ | Paso grande (L)  |  |  | Paso normal (M)           |  |  | Paso reducido (H) |  |  | $D_{m\text{ m}}$ | $l_1$ | $l_2$ | $l_3$ | $n_{\text{ max}}$ |  |  |
|       | Weldon           |                                                                                   |                                                                                   |                           |                                                                                   |                                                                                   |                   |                                                                                   |                                                                                   |                  |       |       |       |                   |                                                                                     |  |
| 20    | 490-020B16-08L   | 2                                                                                 | –                                                                                 | –                         | –                                                                                 | –                                                                                 | –                 | –                                                                                 | –                                                                                 | 16               | 50.5  | 74    | 25    | 48500             | 08                                                                                  |  |
|       | 020B20-08L       | 2                                                                                 | –                                                                                 | –                         | –                                                                                 | –                                                                                 | –                 | –                                                                                 | –                                                                                 | 20               | 51.5  | 76    | 25    | 48500             |                                                                                     |  |
| 25    | 490-025B20-08L   | 2                                                                                 | –                                                                                 | –                         | –                                                                                 | –                                                                                 | –                 | –                                                                                 | –                                                                                 | 20               | 58.5  | 83    | 32    | 40400             |                                                                                     |  |
|       | –                | –                                                                                 | –                                                                                 | 490-025B25-08M            | 3                                                                                 | –                                                                                 | –                 | –                                                                                 | –                                                                                 | 25               | 56.5  | 88    | 32    | 40400             |                                                                                     |  |
| 32    | 490-032B25-08L   | –                                                                                 | 3                                                                                 | 490-032B25-08M            | 4                                                                                 | –                                                                                 | –                 | –                                                                                 | –                                                                                 | 25               | 66.5  | 98    | 40    | 33900             |                                                                                     |  |
|       | 032B32-08L       | –                                                                                 | 3                                                                                 | 032B32-08M                | 4                                                                                 | –                                                                                 | –                 | –                                                                                 | –                                                                                 | 32               | 64.5  | 100   | 40    | 33900             |                                                                                     |  |
| 40    | –                | –                                                                                 | –                                                                                 | 490-040B32-08M            | –                                                                                 | 4                                                                                 | 490-040B32-08H    | 6                                                                                 | –                                                                                 | 32               | 76.5  | 112   | 50    | 29300             |                                                                                     |  |
| 40    | –                | –                                                                                 | –                                                                                 | 490-040B32-14M*           | –                                                                                 | 3                                                                                 | 490-040B32-14H*   | 4                                                                                 | –                                                                                 | 32               | 76.5  | 112   | 50    | 26400             | 14                                                                                  |  |
|       | Mango cilíndrico |                                                                                   |                                                                                   |                           |                                                                                   |                                                                                   |                   |                                                                                   |                                                                                   |                  |       |       |       |                   |                                                                                     |  |
| 20    | 490-020A16-08L   | 2                                                                                 | –                                                                                 | –                         | –                                                                                 | –                                                                                 | –                 | –                                                                                 | –                                                                                 | 16               | 100   | 25    | 48500 | 08                | 08                                                                                  |  |
|       | 020A20-08L       | 2                                                                                 | –                                                                                 | –                         | –                                                                                 | –                                                                                 | –                 | –                                                                                 | –                                                                                 | 20               | 110   | 25    | 48500 |                   |                                                                                     |  |
| 22    | 490-022A20-08L   | 2                                                                                 | –                                                                                 | –                         | –                                                                                 | –                                                                                 | –                 | –                                                                                 | –                                                                                 | 20               | 170   | 30    | 20300 |                   |                                                                                     |  |
| 25    | 490-025A20-08L   | 2                                                                                 | –                                                                                 | 490-025A20-08M            | 3                                                                                 | –                                                                                 | –                 | –                                                                                 | –                                                                                 | 20               | 110   | 32    | 40400 |                   |                                                                                     |  |
|       | 025A25-08L       | 2                                                                                 | –                                                                                 | 025A25-08M                | 3                                                                                 | –                                                                                 | –                 | –                                                                                 | –                                                                                 | 25               | 120   | 32    | 40400 |                   |                                                                                     |  |
| 28    | 490-028A25-08L   | 2                                                                                 | –                                                                                 | –                         | –                                                                                 | –                                                                                 | –                 | –                                                                                 | –                                                                                 | 25               | 210   | 35    | 11000 | 14                | 14                                                                                  |  |
| 32    | 490-032A25-08L   | –                                                                                 | 3                                                                                 | 490-032A25-08M            | 4                                                                                 | –                                                                                 | –                 | –                                                                                 | –                                                                                 | 25               | 120   | 40    | 33900 |                   |                                                                                     |  |
|       | 032A32-08L       | –                                                                                 | 3                                                                                 | 032A32-08M                | 4                                                                                 | –                                                                                 | –                 | –                                                                                 | –                                                                                 | 32               | 130   | 40    | 33900 |                   |                                                                                     |  |
| 40    | 490-040A32-08L   | –                                                                                 | 3                                                                                 | 490-040A32-08M            | –                                                                                 | 4                                                                                 | 490-040A32-08H    | 6                                                                                 | –                                                                                 | 32               | 170   | 50    | 20300 |                   |                                                                                     |  |
| 40    | –                | –                                                                                 | –                                                                                 | 490-040A32-14M*           | –                                                                                 | 3                                                                                 | 490-040A32-14H*   | 4                                                                                 | –                                                                                 | 32               | 170   | 50    | 26400 |                   |                                                                                     |  |
|       | –                | –                                                                                 | –                                                                                 | 040A32L-14M <sup>1)</sup> | –                                                                                 | 3                                                                                 | –                 | –                                                                                 | –                                                                                 | 32               | 250   | 65    | 7600  | 14                | 14                                                                                  |  |
| 50    | 490-050A32-14L   | –                                                                                 | 3                                                                                 | 490-050A32-14M            | –                                                                                 | 4                                                                                 | –                 | –                                                                                 | –                                                                                 | 32               | 120   | 40    | 13700 |                   |                                                                                     |  |
| 63    | 490-063A32-14L   | –                                                                                 | 4                                                                                 | 490-063A32-14M            | –                                                                                 | 5                                                                                 | –                 | –                                                                                 | –                                                                                 | 32               | 120   | 40    | 11700 |                   |                                                                                     |  |

<sup>1)</sup> No hay placa de apoyo

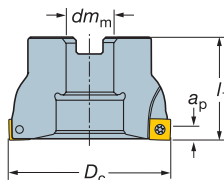


## Fresado en escuadra – CoroMill® 490

Diámetro – 40–250 mm



Profundidad de corte máx. ( $a_p$ )  
 tamaño de plaquita 8 = 5.5 mm  
 tamaño de plaquita 14 = 10 mm



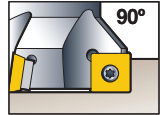
- = Paso uniforme  
 = Paso diferencial

| $D_c$ | Código de pedido       |      | Código de pedido       |      | Código de pedido             |      | Dimensiones, mm |          |       |           |    |
|-------|------------------------|------|------------------------|------|------------------------------|------|-----------------|----------|-------|-----------|----|
|       | <i>Paso grande (L)</i> |      | <i>Paso normal (M)</i> |      | <i>Paso reducido (H)</i>     |      | $D_{m1}$        | $D_{5m}$ | $l_1$ | $n_{max}$ |    |
|       | CIS En eje             |      |                        |      |                              |      |                 |          |       |           |    |
| 80    | A490-080J25.4-08L      | – 6  | A490-080J25.4-08M      | – 8  | A490-080J25.4-08H            | – 10 | 25.4            | 58       | 50    | 19400     | 08 |
| 100   | A490-100J31.75-08L     | – 6  | A490-100J31.75-08M     | – 8  | A490-100J31.75-08H           | – 10 | 31.7            | 76       | 63    | 17100     |    |
| 125   | A490-125J38.1-08L      | – 8  | A490-125J38.1-08M      | – 10 | A490-125J38.1-08H            | – 12 | 38.1            | 85       | 63    | 15200     |    |
| 80    | A490-080J25.4-14L      | – 4  | A490-080J25.4-14M      | – 6  | A490-080J25.4-14H            | 8 –  | 25.4            | 58       | 50    | 10100     | 14 |
| 100   | A490-100J31.75-14L     | – 5  | A490-100J31.75-14M     | – 7  | A490-100J31.75-14H           | 10 – | 31.7            | 76       | 63    | 8900      |    |
| 125   | A490-125J38.1-14L      | – 6  | A490-125J38.1-14M      | – 8  | –                            | –    | 38.1            | 85       | 63    | 7800      |    |
| 160   | –                      | –    | A490-160J50.8-14M      | – 12 | –                            | –    | 50.8            | 110      | 63    | 6800      |    |
| 200   | –                      | –    | A490-200J47.625-14M    | – 16 | –                            | –    | 47.6            | 160      | 63    | 6000      |    |
| 250   | –                      | –    | A490-250J47.625-14M    | – 18 | –                            | –    | 47.6            | 160      | 63    | 5300      |    |
|       | Eje                    |      |                        |      |                              |      |                 |          |       |           |    |
| 40    | –                      | –    | 490-040Q16-08M         | – 4  | 490-040Q16-08H               | 6 –  | 16              | 30       | 40    | 29300     | 08 |
| 44    | –                      | –    | 490-044Q16-08M         | – 5  | –                            | –    | 16              | 30       | 40    | 27600     |    |
| 50    | 490-050Q22-08L         | – 4  | 490-050Q22-08M         | – 5  | 490-050Q22-08H               | 7 –  | 22              | 46       | 40    | 25500     |    |
| 54    | –                      | –    | 490-054Q22-08M         | – 5  | –                            | –    | 22              | 46       | 40    | 24300     |    |
| 63    | 490-063Q22-08L         | – 5  | 490-063Q22-08M         | – 6  | 490-063Q22-08H               | 8 –  | 22              | 46       | 40    | 22200     |    |
| 80    | 490-080Q27-08L         | – 6  | 490-080Q27-08M         | – 8  | 490-080Q27-08H               | – 10 | 27              | 58       | 50    | 19400     |    |
| 100   | 490-100Q32-08L         | – 6  | 490-100Q32-08M         | – 8  | 490-100Q32-08H               | – 10 | 32              | 76       | 50    | 17100     | 14 |
| 125   | 490-125Q40-08L         | – 8  | 490-125Q40-08M         | – 10 | 490-125Q40-08H               | – 12 | 40              | 85       | 63    | 15200     |    |
| 50    | –                      | –    | 490-050Q22-14M         | – 4  | 490-050Q22-14H <sup>1)</sup> | 5 –  | 22              | 41       | 40    | 13700     |    |
| 63    | –                      | –    | 490-063Q22-14M         | – 5  | 490-063Q22-14H               | 6 –  | 22              | 41       | 40    | 11700     |    |
| 80    | –                      | –    | 490-080Q27-14M         | – 6  | 490-080Q27-14H               | 8 –  | 27              | 58       | 50    | 10100     |    |
| 100   | 490-100Q32-14L         | – 5  | 490-100Q32-14M         | – 7  | 490-100Q32-14H               | 10 – | 32              | 76       | 50    | 8900      |    |
| 125   | 490-125Q40-14L         | – 6  | 490-125Q40-14M         | – 8  | 490-125Q40-14H               | 12 – | 40              | 85       | 63    | 7800      | 14 |
| 160   | 490-160Q40-14L         | – 8  | 490-160Q40-14M         | – 12 | 490-160Q40-14H               | 15 – | 40              | 110      | 63    | 6800      |    |
| 200   | 490-200Q60-14L         | – 10 | 490-200Q60-14M         | – 16 | –                            | –    | 60              | 160      | 63    | 6000      |    |
| 250   | 490-250Q60-14L         | – 12 | 490-250Q60-14M         | – 18 | –                            | –    | 60              | 160      | 63    | 5300      |    |

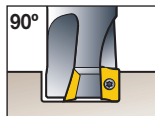
<sup>1)</sup> No hay placa de apoyo



**P N** Fresado en escuadra – CoroMill® 490

**M S** Plaquetas y calidades –  
**K H** recomendaciones de datos de corte – valores de partida


| ISO/ANSI | L = Ligero<br>M = Medio<br>H = Pesado | CONDICIONES BUENAS   |       |       | Primera elección<br>CONDICIONES NORMALES |       |       | CONDICIONES DIFÍCILES |       |       |
|----------|---------------------------------------|----------------------|-------|-------|------------------------------------------|-------|-------|-----------------------|-------|-------|
|          |                                       |                      |       |       |                                          |       |       |                       |       |       |
|          | L/M/H                                 | Código de pedido<br> | $v_c$ | $f_z$ | Código de pedido<br>                     | $v_c$ | $f_z$ | Código de pedido<br>  | $v_c$ | $f_z$ |
| <b>P</b> | <b>L</b>                              | 490R-08T308M-PL 1030 | 325   | 0.12  | 490R-08T308M-PL 1030                     | 290   | 0.10  | 490R-08T308M-PL 4240  | 250   | 0.10  |
|          |                                       | 490R-140408M-PL 1030 | 325   | 0.12  | 490R-140408M-PL 1030                     | 290   | 0.10  | 490R-140408M-PL 4240  | 250   | 0.10  |
|          | <b>M</b>                              | 490R-08T308M-PM 1030 | 290   | 0.17  | 490R-08T308M-PM 1030                     | 250   | 0.15  | 490R-08T308M-PM 4240  | 200   | 0.15  |
|          |                                       | 490R-140408M-PM 4230 | 290   | 0.17  | 490R-140408M-PM 4240                     | 230   | 0.15  | 490R-140408M-PM 4240  | 200   | 0.15  |
|          | <b>H</b>                              | 490R-08T308M-PH 1030 | 250   | 0.24  | 490R-08T308M-PH 1030                     | 200   | 0.21  | 490R-08T316M-PH 1030  | 180   | 0.21  |
|          |                                       | 490R-140408M-PH 4230 | 250   | 0.24  | 490R-140408M-PH 4240                     | 200   | 0.21  | 490R-140420M-PH 1030  | 180   | 0.21  |
| <b>M</b> | <b>L</b>                              | 490R-08T308E-ML 2030 | 220   | 0.14  | 490R-08T308E-ML 2030                     | 200   | 0.14  | 490R-08T308E-ML 2040  | 180   | 0.14  |
|          | <b>M/H</b>                            | 490R-08T312E-MM 2030 | 200   | 0.18  | 490R-08T312E-MM 2030                     | 190   | 0.18  | 490R-08T316E-MM 2030  | 190   | 0.18  |
| <b>K</b> | <b>L</b>                              | 490R-08T308M-KL 1020 | 300   | 0.14  | 490R-08T308M-KL 1020                     | 275   | 0.12  | 490R-08T308M-KL 3040  | 180   | 0.12  |
|          |                                       | 490R-140408M-PL 1020 | 300   | 0.14  | 490R-140408M-PL 1020                     | 275   | 0.12  | 490R-140408M-PL 3040  | 180   | 0.12  |
|          | <b>M</b>                              | 490R-08T308M-KM 1020 | 280   | 0.19  | 490R-08T308M-KM 1020                     | 250   | 0.17  | 490R-08T308M-KM 3040  | 160   | 0.17  |
|          |                                       | 490R-140408M-PM 3040 | 250   | 0.19  | 490R-140408M-PM 3040                     | 220   | 0.17  | 490R-140408M-PM 3040  | 180   | 0.17  |
|          | <b>H</b>                              | 490R-08T308M-KH 1020 | 250   | 0.26  | 490R-08T308M-KH 1020                     | 200   | 0.24  | 490R-08T316M-KH 1020  | 180   | 0.24  |
|          |                                       | 490R-140408M-PH 3040 | 230   | 0.26  | 490R-140408M-PH 3040                     | 190   | 0.24  | 490R-140420M-PH 1020  | 180   | 0.24  |
| <b>H</b> | <b>L</b>                              | 490R-08T308M-PL 1010 | 110   | 0.10  | 490R-08T308M-PL 1010                     | 110   | 0.10  | 490R-08T308M-PL 1030  | 70    | 0.10  |
|          |                                       | 490R-14T308M-PL 1030 | 70    | 0.10  | 490R-14T308M-PL 1030                     | 70    | 0.10  | 490R-08T308M-PL 1030  | 70    | 0.10  |
|          | <b>M/H</b>                            | 490R-08T308M-PM 1010 | 95    | 0.15  | 490R-08T308M-PM 1010                     | 95    | 0.15  | 490R-08T308M-PM 1030  | 50    | 0.15  |
|          |                                       | 490R-14T308M-PM 1030 | 50    | 0.15  | 490R-14T308M-PM 1030                     | 50    | 0.15  | 490R-14T308M-PM 1030  | 50    | 0.15  |



# Fresado en escuadra – CoroMill® 390

Tamaños de plaquita 11 y 17 mm

ISO/ANSI



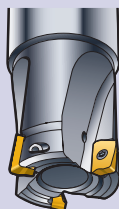
Baja



*Paso grande (L)*

Número reducido de plaquetas para utilizar cuando la estabilidad y la potencia son limitadas.  
Operaciones de ranurado profundo.  
Máquinas pequeñas.  
Fuerzas de corte bajas.

**Primera elección**  
**Estabilidad de la operación**



*Paso normal (M)*

Fresado en general y producción mixta. Máquinas pequeñas a medianas. Generalmente la primera elección.

Alta



*Paso reducido (H)*

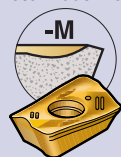
Número máximo de plaquetas para utilizar en condiciones estables.  
Materiales de viruta corta.  
Materiales termorresistentes.  
Operaciones de contorneado.

## Geometría de plaquita

## Material de la pieza/Geometría



**Primera elección**  
*Mecanizado medio*

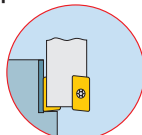


Para fresado en general en la mayoría de los materiales

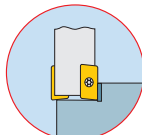


| ISO/ANSI                  | L        | M | H |
|---------------------------|----------|---|---|
| Acero                     | <b>P</b> |   |   |
| Acero inoxidable          | <b>M</b> |   |   |
| Fundición                 | <b>K</b> |   |   |
| Material no férreo        | <b>N</b> |   |   |
| Material termorresistente | <b>S</b> |   |   |
| Material templado         | <b>H</b> |   |   |

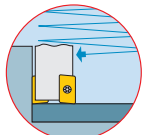
## Operaciones:



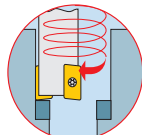
Fresado en escuadra repetido



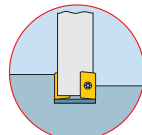
Fresado en escuadra



Avance en rampa



Mandrinado helicoidal

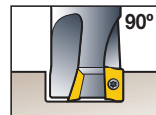


Fresado de ranuras

## Fresado en escuadra – CoroMill® 390

Diámetro 12 – 40 mm

Mangos cilíndricos y Weldon

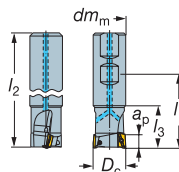


## Tamaños de plaquita 11 y 17 mm

Profundidad de corte máx. ( $a_p$ )

Tamaño de plaquita 11 = 10 mm

Tamaño de plaquita 17 = 15,7 mm

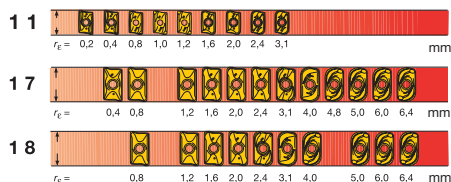


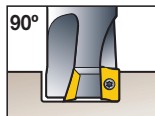
| $D_c$ | Código de pedido |   | Código de pedido              |   | Código de pedido              |   | Dimensiones, mm |       |       |       |           |    |
|-------|------------------|---|-------------------------------|---|-------------------------------|---|-----------------|-------|-------|-------|-----------|----|
|       | Paso grande (L)  |   | Paso normal (M)               |   | Paso reducido (H)             |   | $dm_m$          | $l_1$ | $l_2$ | $l_3$ | $n_{max}$ |    |
|       | Mango cilíndrico |   |                               |   |                               |   |                 |       |       |       |           |    |
| 12    | R390-012A16-11L  | 1 | —                             |   | —                             |   | 16              | —     | 95    | 20    | 68600     | 11 |
| 16    | 016A16-11L       | 2 | —                             |   | —                             |   | 16              | —     | 100   | 25    | 41500     |    |
| 20    | 020A20-11L       | 2 | R390-020A20-11M               | 3 | —                             |   | 20              | —     | 110   | 25    | 34600     |    |
| 25    | 025A25-11L       | 2 | 025A25-11M                    | 3 | R390-025A25-11H               | 4 | 25              | —     | 120   | 32    | 36500     |    |
| 32    | 032A32-11L       | 2 | 032A32-11M <sup>1)</sup>      | 3 | 032A32-11H <sup>1)</sup>      | 5 | 32              | —     | 130   | 40    | 31000     |    |
| 40    | 040A32-11L       | 2 | 040A32-11M <sup>1)</sup>      | 4 | 040A32-11H <sup>1)</sup>      | 6 | 32              | —     | 170   | 50    | 27000     |    |
| 25    | R390-025A25-17L  | 2 | —                             |   | —                             |   | 25              | —     | 120   | 32    | 30800     | 17 |
| 32    | 032A32-17L       | 2 | R390-032A32-17M               | 3 | —                             |   | 32              | —     | 130   | 40    | 25600     |    |
| 40    | 040A32-17L       | 2 | 040A32-17M <sup>1)</sup>      | 3 | R390-040A32-17H <sup>1)</sup> | 4 | 32              | —     | 170   | 50    | 21900     |    |
|       | Weldon           |   |                               |   |                               |   |                 |       |       |       |           |    |
| 12    | R390-012B16-11L  | 1 | —                             |   | —                             |   | 16              | 44.5  | 68    | 20    | 68600     | 11 |
| 16    | 016B16-11L       | 2 | —                             |   | —                             |   | 16              | 49.5  | 68    | 25    | 41500     |    |
| 20    | 020B20-11L       | 2 | R390-020B20-11M               | 3 | —                             |   | 20              | 56.5  | 81    | 25    | 34600     |    |
| 25    | 025B25-11L       | 2 | 025B25-11M                    | 3 | R390-025B25-11H               | 4 | 25              | 56.5  | 88    | 32    | 36500     |    |
| 32    | 032B32-11L       | 2 | 032B32-11M <sup>1)</sup>      | 3 | 032B32-11H <sup>1)</sup>      | 5 | 32              | 64.5  | 100   | 40    | 31000     |    |
| 40    | 040B32-11L       | 2 | 040B32-11M <sup>1)</sup>      | 4 | 040B32-11H <sup>1)</sup>      | 6 | 32              | 74.5  | 110   | 50    | 27000     |    |
| 25    | R390-025B25-17L  | 2 | —                             |   | —                             |   | 25              | 56.5  | 88    | 32    | 30800     | 17 |
| 32    | 032B32-17L       | 2 | R390-032B32-17M <sup>1)</sup> | 3 | —                             |   | 32              | 64.5  | 100   | 40    | 25600     |    |
| 40    | 040B32-17L       | 2 | 040B32-17M <sup>1)</sup>      | 3 | R390-040B32-17H <sup>1)</sup> | 4 | 32              | 74.5  | 110   | 50    | 21900     |    |

<sup>1)</sup> Paso diferencial.

## Plaquetas de radio normalizadas CoroMill 390

Seleccione el mayor radio posible para prolongar la vida de la herramienta y obtener la máxima seguridad del filo.





## Fresado en escuadra – CoroMill® 390

Diámetro 16 – 125 mm

Montaje por el eje y Coromant Capto

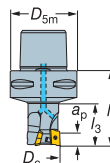
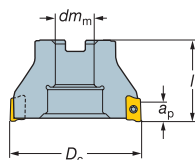


## Tamaños de plaqueta 11 y 17 mm

Profundidad de corte máx. ( $a_p$ )

Tamaño de plaqueta 11 = 10 mm

Tamaño de plaqueta 17 = 15,7 mm

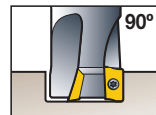


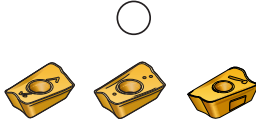
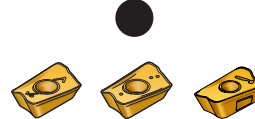
|       | Código de pedido         |   | Código de pedido              |   | Código de pedido              |    | Dimensiones, mm |       |       |                    |    |
|-------|--------------------------|---|-------------------------------|---|-------------------------------|----|-----------------|-------|-------|--------------------|----|
| $D_c$ | Paso grande (L)          |   | Paso normal (M)               |   | Paso reducido (H)             |    | $dm_m$          | $l_1$ | $l_3$ | $n_{m\acute{a}x.}$ |    |
|       | Eje                      |   |                               |   |                               |    |                 |       |       |                    |    |
| 40    | —                        |   | R390-040Q16-11M <sup>1)</sup> | 4 | R390-040Q16-11H <sup>1)</sup> | 6  | 16              | 40    | —     | 27000              | 11 |
| 50    | —                        |   | 050Q22-11M <sup>1)</sup>      | 5 | 050Q22-11H <sup>1)</sup>      | 7  | 22              | 40    | —     | 23700              |    |
| 63    | —                        |   | 063Q22-11M <sup>1)</sup>      | 6 | 063Q22-11H <sup>1)</sup>      | 8  | 22              | 40    | —     | 20700              |    |
| 80    | —                        |   | 080Q27-11M <sup>1)</sup>      | 7 | 080Q27-11H <sup>1)</sup>      | 10 | 27              | 50    | —     | 18200              |    |
| 40    | R390-040Q16-17L          | 2 | R390-040Q16-17M <sup>1)</sup> | 3 | R390-040Q16-17H <sup>1)</sup> | 4  | 16              | 40    | —     | 21900              | 17 |
| 50    | 050Q22-17L <sup>1)</sup> | 3 | 050Q22-17M <sup>1)</sup>      | 4 | 050Q22-17H <sup>1)</sup>      | 5  | 22              | 40    | —     | 19000              |    |
| 63    | 063Q22-17L <sup>1)</sup> | 4 | 063Q22-17M <sup>1)</sup>      | 5 | 063Q22-17H <sup>1)</sup>      | 6  | 22              | 40    | —     | 16500              |    |
| 80    | 080Q27-17L <sup>1)</sup> | 4 | 080Q27-17M <sup>1)</sup>      | 6 | 080Q27-17H <sup>1)</sup>      | 8  | 27              | 50    | —     | 14400              |    |
| 100   | 100Q32-17L               | 5 | 100Q32-17M                    | 7 | 100Q32-17H                    | 9  | 32              | 50    | —     | 12700              |    |
| 125   | 125Q40-17L               | 6 | 125Q40-17M                    | 8 | 125Q40-17H                    | 11 | 40              | 50    | —     | 11200              |    |
|       | CIS En eje               |   |                               |   |                               |    |                 |       |       |                    |    |
| 80    | RA390-080J25.4-17L       | 4 | RA390-080J25.4-17M            | 6 | RA390-080J25.4-17H            | 8  | 25.4            | 50    | —     | 14400              | 17 |
|       | Coromant Capto           |   |                               |   |                               |    |                 |       |       |                    |    |
| 16    | R390-016C4-11L           | 2 | —                             | — | —                             | —  | C4              | 50    | 25    | 39000              | 11 |
| 20    | 020C4-11L                | 2 | —                             | — | —                             | —  | C4              | 50    | 25    | 34600              |    |
|       | —                        | — | R390-020C5-11M095             | 3 | —                             | —  | C5              | 95    | 40    | 34600              |    |
|       | —                        | — | 020C6-11M110                  | 3 | —                             | —  | C6              | 110   | 40    | 34600              |    |
| 25    | 025C4-11L                | 2 | 025C4-11M                     | 3 | —                             | —  | C4              | 55    | 32    | 36500              |    |
|       | —                        | — | 025C5-11M095                  | 3 | —                             | —  | C5              | 95    | 45    | 36500              |    |
|       | —                        | — | 025C6-11M110                  | 3 | —                             | —  | C6              | 110   | 45    | 36500              |    |
| 32    | 032C4-11L                | 2 | 032C4-11M <sup>1)</sup>       | 3 | —                             | —  | C4              | 65    | 40    | 31000              |    |
|       | 032C5-11L                | 2 | 032C5-11M <sup>1)</sup>       | 3 | —                             | —  | C5              | 65    | 40    | 31000              |    |
|       | —                        | — | 032C5-11M095                  | 3 | —                             | —  | C5              | 95    | 50    | 31000              |    |
|       | —                        | — | 032C6-11M080                  | 3 | —                             | —  | C6              | 80    | 40    | 31000              |    |
|       | —                        | — | 032C6-11M110                  | 3 | —                             | —  | C6              | 110   | 50    | 31000              |    |
| 36    | —                        | — | 036C3-11M050                  | 3 | —                             | —  | C3              | 50    | 50    | 29000              |    |
|       | —                        | — | 036C3-11M075                  | 3 | —                             | —  | C3              | 75    | 75    | 29000              |    |
| 40    | —                        | — | 040C4-11M <sup>1)</sup>       | 4 | —                             | —  | C4              | 70    | 70    | 27000              |    |
|       | —                        | — | —                             | — | R390-040C4-11H <sup>1)</sup>  | 6  | C4              | 70    | 50    | 27000              |    |
|       | —                        | — | 040C5-11M <sup>1)</sup>       | 4 | 040C5-11H <sup>1)</sup>       | 6  | C5              | 75    | 50    | 27000              |    |
|       | —                        | — | 040C6-11M080                  | 4 | —                             | —  | C6              | 80    | 40    | 27000              |    |
| 44    | —                        | — | 044C4-11M060                  | 4 | —                             | —  | C4              | 60    | 60    | 25600              |    |
|       | —                        | — | 044C4-11M075                  | 4 | —                             | —  | C4              | 75    | 75    | 25600              |    |
| 50    | —                        | — | 050C5-11M060                  | 5 | —                             | —  | C5              | 60    | 60    | 23700              |    |
|       | —                        | — | 050C6-11M080                  | 5 | —                             | —  | C6              | 80    | 40    | 23700              |    |
| 54    | —                        | — | 054C5-11M060                  | 5 | —                             | —  | C5              | 60    | 60    | 22700              |    |
|       | —                        | — | 054C5-11M080                  | 5 | —                             | —  | C5              | 80    | 80    | 22700              |    |
| 63    | —                        | — | 063C5-11M060                  | 5 | —                             | —  | C5              | 60    | 60    | 20700              |    |
|       | —                        | — | 063C6-11M080                  | 6 | —                             | —  | C6              | 80    | 40    | 20700              |    |
| 66    | —                        | — | 066C6-11M060                  | 6 | —                             | —  | C6              | 60    | 60    | 20200              |    |
|       | —                        | — | 066C6-11M080                  | 6 | —                             | —  | C6              | 80    | 80    | 20200              |    |
| 80    | —                        | — | 080C6-11M060                  | 7 | —                             | —  | C6              | 60    | 60    | 18200              |    |
|       | —                        | — | 080C6-11M080                  | 7 | —                             | —  | C6              | 80    | 80    | 18200              |    |

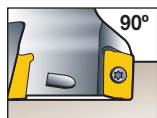
<sup>1)</sup> Paso diferencial.

## Fresado en escuadra – CoroMill® 390

Tamaños de plaquita 11 y 17 mm. Calidades –  
recomendaciones sobre datos de corte – valores de partida



| ISO/ANSI | L = Ligero<br>M = Medio<br>H = Pesado | CONDICIONES BUENAS                                                                                    |       |       | Primera elección<br>CONDICIONES NORMALES                                                              |       |       | CONDICIONES DIFÍCILES                                                                                 |       |       |
|----------|---------------------------------------|-------------------------------------------------------------------------------------------------------|-------|-------|-------------------------------------------------------------------------------------------------------|-------|-------|-------------------------------------------------------------------------------------------------------|-------|-------|
|          |                                       |                      |       |       |                      |       |       |                     |       |       |
|          | L/M/H                                 | Código de pedido<br> | $v_c$ | $f_z$ | Código de pedido<br> | $v_c$ | $f_z$ | Código de pedido<br> | $v_c$ | $f_z$ |
| P        | L                                     | R390-11T308M-PL 4230                                                                                  | 320   | 0.08  | R390-11T308M-PL 1030                                                                                  | 275   | 0.08  | R390-11T308M-PL 4240                                                                                  | 270   | 0.10  |
|          | M                                     | R390-11T308M-PM 4230                                                                                  | 320   | 0.10  | R390-11T308M-PM 1030                                                                                  | 270   | 0.12  | R390-11T308M-PM 4240                                                                                  | 270   | 0.12  |
|          |                                       | R390-170408M-PM 4230                                                                                  | 320   | 0.17  | R390-170408M-PM 1030                                                                                  | 265   | 0.15  | R390-170408M-PM 4240                                                                                  | 265   | 0.15  |
|          | H                                     | R390-170408M-PH 4240                                                                                  | 260   | 0.20  | R390-170408M-PH 4240                                                                                  | 260   | 0.20  | R390-170408M-PH 4240                                                                                  | 260   | 0.20  |
| M        | L                                     | R390-11T308E-ML 2030                                                                                  | 275   | 0.1   | R390-11T308E-ML 2030                                                                                  | 275   | 0.10  | R390-11T308E-ML 2040                                                                                  | 260   | 0.10  |
|          | M/H                                   | R390-11T308M-PM 1030                                                                                  | 290   | 0.12  | R390-11T308M-MM 2030                                                                                  | 270   | 0.13  | R390-11T308M-MM 2040                                                                                  | 260   | 0.13  |
|          |                                       | R390-170408M-PM 1030                                                                                  | 285   | 0.15  | R390-170408M-MM 2030                                                                                  | 270   | 0.15  | R390-170408M-MM 2040                                                                                  | 255   | 0.15  |
| K        | L                                     | R390-11T308M-KL 3040                                                                                  | 235   | 0.10  | R390-11T308M-KL 3040                                                                                  | 235   | 0.10  | R390-11T308M-KM 1020                                                                                  | 280   | 0.12  |
|          | M                                     | R390-11T308M-KM 3040                                                                                  | 230   | 0.12  | R390-11T308M-KM 3040                                                                                  | 230   | 0.12  | R390-11T308M-KM 1020                                                                                  | 280   | 0.12  |
|          |                                       | R390-170408M-KM 3040                                                                                  | 230   | 0.15  | R390-170408M-KM 3040                                                                                  | 230   | 0.15  | R390-170408M-KH 1020                                                                                  | 270   | 0.20  |
|          | H                                     | R390-170408M-KH 3040                                                                                  | 225   | 0.20  | R390-170408M-KH 3040                                                                                  | 225   | 0.20  | R390-170408M-KH 1020                                                                                  | 270   | 0.20  |
| N        | L/M/H                                 | R390-11T304E-P4-NL CD10                                                                               | 1860  | 0.17  | R390-11T308E-NL H13A                                                                                  | 750   | 0.15  | R390-11T308E-NL H13A                                                                                  | 750   | 0.15  |
|          |                                       | R390-170408E-P6-NL CD10                                                                               | 1860  | 0.17  | R390-170408E-NL H13A                                                                                  | 750   | 0.15  | R390-170408E-NL H13A                                                                                  | 750   | 0.15  |
| S        | L/M/H                                 | R390-11T308M-PL 1030                                                                                  | 40    | 0.08  | R390-11T308E-ML 2030                                                                                  | 40    | 0.10  | R390-11T308E-ML 2040                                                                                  | 40    | 0.10  |
|          |                                       | R390-170408M-PL 1030                                                                                  | 40    | 0.08  | R390-170408E-ML 2030                                                                                  | 40    | 0.10  | R390-170408E-ML 2040                                                                                  | 40    | 0.1   |
| H        | L/M/H                                 | R390-11T308M-PL 530                                                                                   | 90    | 0.08  | R390-11T308M-KL 3040                                                                                  | 50    | 0.10  | R390-11T308M-PL 1025                                                                                  | 45    | 0.08  |
|          |                                       | R390-170408M-PL 530                                                                                   | 90    | 0.08  | R390-170408M-KL 3040                                                                                  | 50    | 0.10  | R390-170408M-PL 1025                                                                                  | 45    | 0.08  |



## Fresado en escuadra – CoroMill® 390

Tamaño de plaquita 18 mm

ISO/ANSI

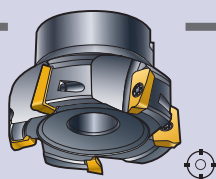


Baja



Paso grande (L)

Número reducido de plaquitas para utilizar cuando la estabilidad y la potencia son limitadas. Operaciones de ranurado profundo. Máquinas pequeñas. Fuerzas de corte bajas.

**Primera elección**  
**Estabilidad de la operación**


Paso normal (M)

Fresado en general y producción mixta. Máquinas pequeñas a medianas. Generalmente la primera elección.

Alta



Paso reducido (H)

Número máximo de plaquitas para utilizar en condiciones estables. Materiales de viruta corta. Operaciones de contorno.

## Geometría de plaquita

## Material de la pieza/Geometría



Ligero

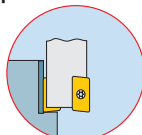
Fresado ligero. Fuerzas de corte bajas. Avances bajos

**Primera elección**  
**Mecanizado medio**

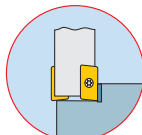

Para fresado en general en la mayoría de los materiales

| ISO/ANSI                  | L        | M | H |
|---------------------------|----------|---|---|
| Acero                     | <b>P</b> |   |   |
| Acero inoxidable          | <b>M</b> |   |   |
| Fundición                 | <b>K</b> |   |   |
| Material termorresistente | <b>S</b> |   |   |

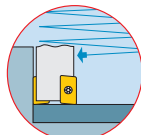
## Operaciones:



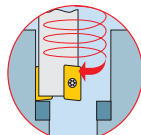
Fresado en escuadra repetido



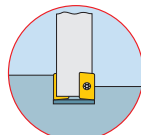
Fresado en escuadra



Avance en rampa



Mandrinado helicoidal

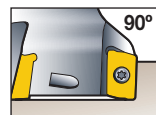


Fresado de ranuras

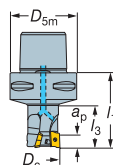
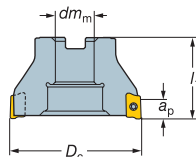
## Fresado en escuadra – CoroMill® 390

Diámetro 40 – 200 mm

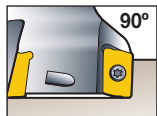
Montajes en Eje y Coromant Capto



## Tamaño de plaquita 18 mm

Profundidad de corte máx. ( $a_p$ ) = 15,7 mm

| $D_c$ | Código de pedido     |    | Código de pedido   |    | Código de pedido  |   | Dimensiones, mm    |       |       |           |    |
|-------|----------------------|----|--------------------|----|-------------------|---|--------------------|-------|-------|-----------|----|
|       | Paso grande (L)      |    | Paso normal (M)    |    | Paso reducido (H) |   | $dm_m$<br>$D_{5m}$ | $l_1$ | $l_3$ | $n_{max}$ |    |
|       | Eje                  |    |                    |    |                   |   |                    |       |       |           |    |
| 50    | R390-050Q22-18L      | 3  | R390-050Q22-18M    | 4  | R390-050Q22-18H   | 5 | 22                 | 40    | –     | 7900      | 18 |
| 63    | 063Q22-18L           | 4  | 063Q22-18M         | 5  | 063Q22-18H        | 6 | 22                 | 40    | –     | 6800      |    |
| 80    | 080Q27-18L           | 4  | 080Q27-18M         | 6  | –                 | – | 27                 | 50    | –     | 5900      |    |
| 100   | 100Q32-18L           | 5  | 100Q32-18M         | 7  | –                 | – | 32                 | 50    | –     | 5200      |    |
| 125   | 125Q40-18L           | 6  | 125Q40-18M         | 8  | –                 | – | 40                 | 63    | –     | 4600      |    |
| 160   | 160Q40-18L           | 8  | 160Q40-18M         | 12 | –                 | – | 40                 | 63    | –     | 4000      |    |
| 200   | 200Q60-18L           | 10 | –                  | –  | –                 | – | 60                 | 63    | –     | 3600      |    |
|       | CIS En eje           |    |                    |    |                   |   |                    |       |       |           |    |
| 80    | –                    | –  | RA390-080J25.4-18M | 6  | –                 | – | 25.4               | 50    | –     | 5900      | 18 |
| 100   | –                    | –  | 100J31.75-18M      | 7  | –                 | – | 31.8               | 50    | –     | 5200      |    |
| 125   | –                    | –  | 125J38.1-18M       | 8  | –                 | – | 38.1               | 63    | –     | 4600      |    |
| 160   | –                    | –  | 160J50.8-18M       | 12 | –                 | – | 50.8               | 63    | –     | 4000      |    |
| 200   | RA390-200J47.625-18L | 10 | –                  | –  | –                 | – | 47.625             | 63    | –     | 3600      |    |
|       | Coromant Capto       |    |                    |    |                   |   |                    |       |       |           |    |
| 40    | –                    | –  | R390-040C4-18M060  | 3  | –                 | – | C4                 | 60    | 40    | 9200      | 18 |
| –     | –                    | –  | 040C5-18M080       | 3  | –                 | – | C5                 | 80    | 40    | 9200      |    |
| –     | –                    | –  | 040C6-18M100       | 3  | –                 | – | C6                 | 100   | 50    | 9200      |    |
| 44    | R390-044C4-18L080    | 2  | –                  | –  | –                 | – | C4                 | 80    | –     | 8600      |    |
| –     | –                    | –  | 044C4-18M060       | 3  | –                 | – | C4                 | 60    | –     | 8600      |    |
| –     | –                    | –  | 044C4-18M080       | 3  | –                 | – | C4                 | 80    | –     | 8600      |    |
| 50    | –                    | –  | 050C5-18M060       | 4  | –                 | – | C5                 | 60    | 40    | 7900      |    |
| –     | –                    | –  | 050C6-18M080       | 4  | –                 | – | C6                 | 80    | 40    | 7900      |    |
| 54    | –                    | –  | 054C5-18M060       | 4  | –                 | – | C5                 | 60    | –     | 7500      |    |
| –     | –                    | –  | 054C5-18M080       | 4  | –                 | – | C5                 | 80    | –     | 7500      |    |
| 63    | –                    | –  | 063C5-18M060       | 5  | –                 | – | C5                 | 60    | –     | 6800      |    |
| –     | –                    | –  | 063C6-18M060       | –  | –                 | – | C6                 | 60    | 38–   | 6800      |    |
| 66    | –                    | –  | 066C6-18M060       | 5  | –                 | – | C6                 | 60    | –     | 6700      |    |
| –     | –                    | –  | 066C6-18M080       | 5  | –                 | – | C6                 | 80    | –     | 6700      |    |
| 80    | –                    | –  | 080C6-18M060       | 6  | –                 | – | C6                 | 60    | –     | 5900      |    |
| 84    | –                    | –  | 084C8-18M070       | 6  | –                 | – | C8                 | 70    | –     | 5800      |    |
| –     | –                    | –  | 084C8-18M100       | 6  | –                 | – | C8                 | 100   | –     | 5800      |    |



## Fresado en escuadra – CoroMill® 390

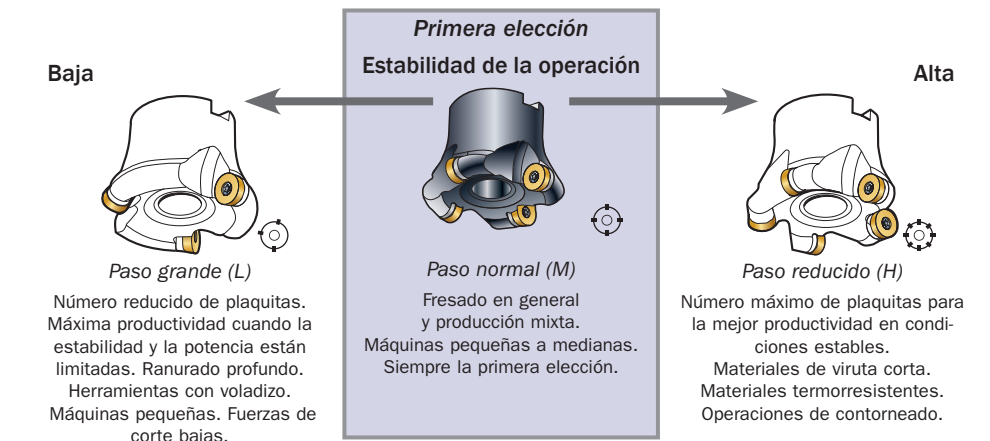
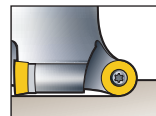
Tamaño de plaquita 18 mm. Calidades – recomendaciones de datos de corte – valores de partida

ISO/ANSI

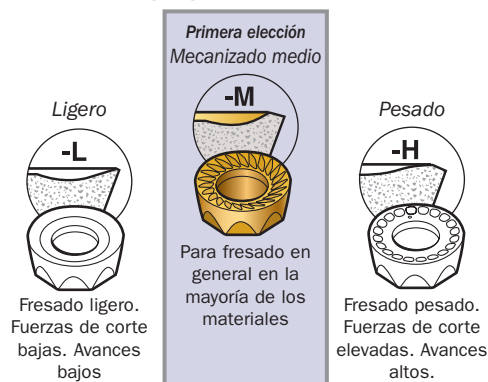


| ISO/ANSI | L = Ligero<br>M = Medio<br>H = Pesado                                                                 | CONDICIONES BUENAS                                                                |       |                                                                                                       | Primera elección<br>CONDICIONES NORMALES                                          |       |                                                                                                       | CONDICIONES DIFÍCILES                                                             |       |      |
|----------|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------|------|
|          |                                                                                                       |  |       |                                                                                                       |  |       |                                                                                                       |  |       |      |
|          |                                                                                                       |  |       |                                                                                                       |  |       |                                                                                                       |  |       |      |
| L/M/H    | Código de pedido<br> | $v_c$                                                                             | $f_z$ | Código de pedido<br> | $v_c$                                                                             | $f_z$ | Código de pedido<br> | $v_c$                                                                             | $f_z$ |      |
| P        | L                                                                                                     | R390-180612M-PM 4220                                                              | 375   | 0.18                                                                                                  | R390-180612M-PM 4230                                                              | 305   | 0.20                                                                                                  | R390-180612M-PM 4240                                                              | 255   | 0.22 |
|          | M                                                                                                     | R390-180612M-PM 4220                                                              | 375   | 0.18                                                                                                  | R390-180612M-PM 4230                                                              | 305   | 0.20                                                                                                  | R390-180612M-PM 4240                                                              | 255   | 0.22 |
|          | H                                                                                                     | R390-180612H-PL 1030                                                              | 270   | 0.11                                                                                                  | R390-180612M-PM 4230                                                              | 305   | 0.20                                                                                                  | R390-180612M-PM 4240                                                              | 255   | 0.22 |
| M        | L/M                                                                                                   | R390-180612M-PM 1030                                                              | 275   | 0.20                                                                                                  | R390-180612M-MM 2030                                                              | 265   | 0.18                                                                                                  | R390-180612M-MM 2040                                                              | 255   | 0.15 |
| K        | L/M                                                                                                   | R390-180612M-KM 3040                                                              | 220   | 0.22                                                                                                  | R390-180612M-KM 3040                                                              | 220   | 0.22                                                                                                  | R390-180612M-KM 1020                                                              | 270   | 0.22 |
|          | H                                                                                                     | R390-180631H-KL 3040                                                              | 230   | 0.13                                                                                                  | R390-180631H-KL 3040                                                              | 230   | 0.13                                                                                                  | R390-180631H-KL 1020                                                              | 280   | 0.13 |
| S        | L/M/H                                                                                                 | R390-180612M-PM 1030                                                              | 40    | 0.2                                                                                                   | R390-180612M-MM 2030                                                              | 40    | 0.18                                                                                                  | R390-180612M-MM 2040                                                              | 40    | 0.15 |



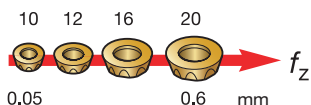


### Geometría de plaquita



### Material de la pieza/Geometría

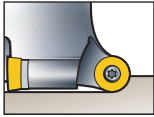
| ISO/ANSI          | L        | M | H |
|-------------------|----------|---|---|
| Acero             | <b>P</b> |   |   |
| Acero inoxidable  | <b>M</b> |   |   |
| Fundición         | <b>K</b> |   |   |
| Material templado | <b>H</b> |   |   |



Se dispone de cuatro tamaños de plaquita, en tres geometrías que cubren profundidades de corte de hasta 10 mm, con una gama de avances de 0,05 – 0,6 mm por plaquita.

### Operaciones:





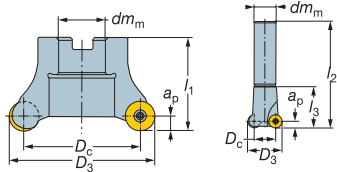
Fresado de perfiles y planeado – CoroMill® 200

Diámetro 32–100 mm

ISO/ANSI



Profundidad de corte máx. ( $a_p$ ) = 6 mm

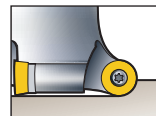


| $D_3$ | Código de pedido               |   | Código de pedido               |   | Código de pedido              |   | Dimensiones, mm                             |        |       |                    |       |    |
|-------|--------------------------------|---|--------------------------------|---|-------------------------------|---|---------------------------------------------|--------|-------|--------------------|-------|----|
|       | Paso grande (L)<br>Diferencial |   | Paso normal (M)<br>Diferencial |   | Paso reducido (H)<br>Uniforme |   | $D_c$                                       | $dm_m$ | $l_1$ | $r_{m\acute{a}x.}$ |       |    |
|       | Eje                            |   |                                |   |                               |   |                                             |        |       |                    |       |    |
| 50    | R200-038Q22-12L                | 3 | R200-038Q22-12M                | 4 | R200-038Q22-12H               | 5 | 38                                          | 22     | 50    | 18800              | 12    |    |
| 52    | 040Q22-12L                     | 3 | 040Q22-12M                     | 4 | 040Q22-12H                    | 5 | 40                                          | 22     | 50    | 18000              |       |    |
| 63    | 051Q22-12L                     | 3 | 051Q22-12M                     | 4 | 051Q22-12H                    | 5 | 51                                          | 22     | 50    | 16200              |       |    |
| 80    | 068Q27-12L                     | 4 | 068Q27-12M                     | 6 | –                             | – | 68                                          | 27     | 50    | 14000              |       |    |
| 100   | 088Q32-12L                     | 4 | 088Q32-12M                     | 6 | –                             | – | 88                                          | 32     | 50    | 12300              |       |    |
|       | CIS En eje                     |   |                                |   |                               |   |                                             |        |       |                    |       |    |
| 80    | RA200-068J25.4-12L             | 4 | RA200-068J25.4-12M             | 6 | –                             | – | 68                                          | 25.4   | 50    | 14000              | 12    |    |
| 100   | 088J31.75-12L                  | 4 | 088J31.75-12M                  | 6 | –                             | – | 88                                          | 31.75  | 63    | 12300              |       |    |
| $D_3$ | Paso grande (–L)<br>Uniforme   |   | Paso normal (M)<br>Uniforme    |   | Paso reducido (H)<br>Uniforme |   | $D_c$ $dm_m$ $l_2$ $l_3$ $r_{m\acute{a}x.}$ |        |       |                    |       |    |
|       | Mango cilíndrico               |   |                                |   |                               |   |                                             |        |       |                    |       |    |
| 32    | –                              |   | R200-020A25-12M                | 2 | R200-020A25-12H               | 3 | 20                                          | 25     | 190   | 35                 | 31100 | 12 |
| 40    | R200-028A32-12L                | 2 | 028A32-12M                     | 3 | –                             | – | 28                                          | 32     | 240   | 63                 | 26300 |    |
| 50    | 038A32-12L                     | 3 | 038A32-12M                     | 4 | –                             | – | 38                                          | 32     | 240   | 63                 | 22500 |    |

Para otros tamaños de fresas (10, 16 y 20 mm), consulte el catálogo principal.

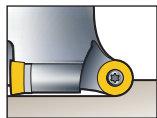
## Fresado de perfiles y planeado – CoroMill® 200

Plaquetas y calidades – recomendaciones de datos de corte  
– valores de partida



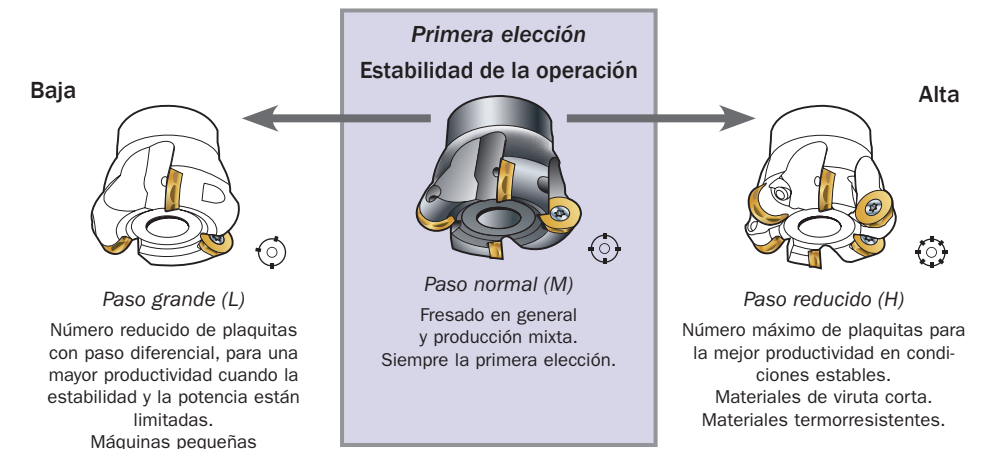
| ISO/ANSI | L = Ligero<br>M = Medio<br>H = Pesado | CONDICIONES BUENAS               |       |       | Primera elección<br>CONDICIONES NORMALES |       |       | CONDICIONES DIFÍCILES |       |       |
|----------|---------------------------------------|----------------------------------|-------|-------|------------------------------------------|-------|-------|-----------------------|-------|-------|
|          |                                       |                                  |       |       |                                          |       |       |                       |       |       |
|          |                                       | Código de pedido<br>             | $v_c$ | $f_z$ | Código de pedido<br>                     | $v_c$ | $f_z$ | Código de pedido<br>  | $v_c$ | $f_z$ |
| P        | L                                     | RCHT1204M0-PL 1030               | 250   | 0.08  | RCHT1204M0-PL 1030                       | 250   | 0.08  | RCHT1204M0-PL 1030    | 250   | 0.08  |
|          | M                                     | RCKT1204M0-PM 4220               | 290   | 0.24  | RCKT1204M0-PM 4230                       | 250   | 0.21  | RCKT1204M0-PM 4240    | 205   | 0.24  |
|          | H                                     | RCKT1204M0-PH 4220               | 250   | 0.35  | RCKT1204M0-PH 4230                       | 205   | 0.35  | RCKT1204M0-PH 4240    | 175   | 0.35  |
| M        | L                                     | RCHT1204M0-PL 1030               | 265   | 0.08  | RCHT1204M0-ML 2030                       | 205   | 0.21  | RCHT1204M0-ML 2040    | 195   | 0.21  |
|          | M/H                                   | RCKT1204M0-MM 2030               | 185   | 0.28  | RCKT1204M0-MM 2030                       | 185   | 0.28  | RCKT1204M0-MM 2040    | 175   | 0.28  |
| K        | L                                     | RCHT1204M0-KL H13A               | 105   | 0.11  | RCHT1204M0-KL H13A                       | 105   | 0.11  | RCHT1204M0-KL H13A    | 105   | 0.11  |
|          | M                                     | RCKT1204M0-KM 3220 <sup>1)</sup> | 225   | 0.24  | RCKT1204M0-KM 1020                       | 210   | 0.24  | RCKT1204M0-KM 1020    | 210   | 0.24  |
|          | H                                     | RCKT1204M0-KH 3220 <sup>1)</sup> | 190   | 0.35  | RCKT1204M0-KH 3040                       | 150   | 0.35  | RCKT1204M0-KH 3040    | 150   | 0.35  |
| H        | L/M/H                                 | RCHT1204M0-PL 1010               | 100   | 0.14  | RCKT1204M0-PM 4220                       | 45    | 0.24  | RCKT1204M0-KM 3040    | 35    | 0.24  |

<sup>1)</sup> Calidad 3220 sólo para fresado en seco.



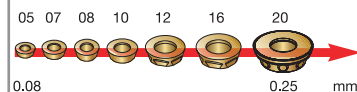
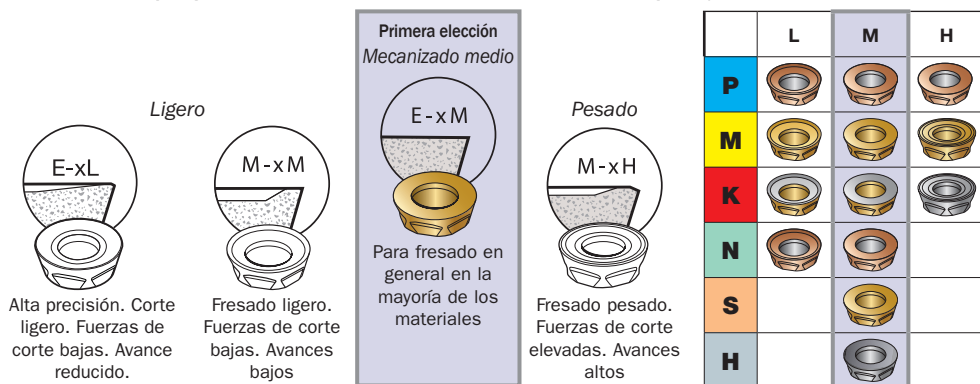
# Fresado de perfiles y planeado – CoroMill® 300

Desbaste a semi-acabado y perfilado



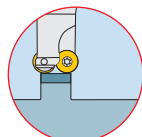
## Geometría de plaquita

## Material de la pieza/Geometría

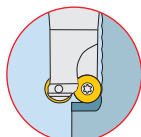


Hay siete tamaños de plaquita disponibles en cuatro geometrías, que cubren hasta 10 mm de profundidad de corte (recomendaciones de Hex mín. 0,05 -máx. 0,55).

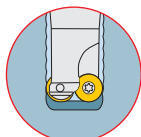
## Operaciones:



Planeado en general



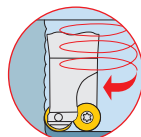
Fresado en escuadra



Fresado de ranuras



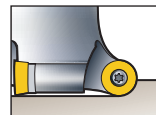
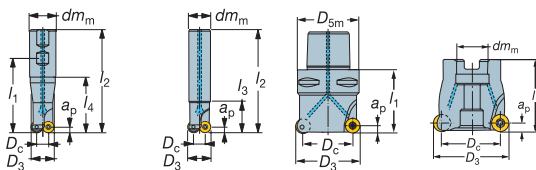
Perfilado



Interpolación helicoidal

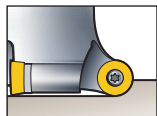
## Fresado de perfiles y planeado – CoroMill® 300

Diámetro 25 – 80 mm

Profundidad de corte máx. ( $a_p$ ) = 6 mm

|       | Código de pedido                                       | Código de pedido               | Código de pedido              | Dimensiones, mm |          |        |       |           |           |    |
|-------|--------------------------------------------------------|--------------------------------|-------------------------------|-----------------|----------|--------|-------|-----------|-----------|----|
| $D_3$ | Paso grande (L)                                        | Paso normal (M)                | Paso reducido (H)             | $D_c$           | $dm_m$   | $l_2$  | $l_3$ | $n_{max}$ |           |    |
| 25    | Mango cilíndrico – Diseño neutro<br>R300-025A32L-12L 2 | –                              | –                             | 13              | 32       | 250    | 80    | 15800     | 12        |    |
| 32    | –                                                      | R300-032A25-12M 2              | –                             | 20              | 25       | 190    | 40    | 8900      | 12        |    |
| 40    | –                                                      | 040A32-12M 3                   | –                             | 28              | 32       | 250    | 40    | 11400     |           |    |
| 32    | –                                                      | –                              | R300-032A25-12H 3             | 20              | 25       | 150    | 40    | 35500     |           |    |
| 40    | –                                                      | –                              | 040A32-12H 4                  | 28              | 32       | 150    | 40    | 28500     |           |    |
| $D_3$ | Paso grande (L)<br>Uniforme                            | Paso normal (M)<br>Diferencial | Paso reducido (H)<br>Uniforme | $D_c$           | $dm_m$   | $l_1$  | $l_2$ | $l_4$     | $n_{max}$ |    |
| 25    | Weldon – Diseño neutro<br>R300-025B32L-12L 2           | –                              | –                             | 13              | 32       | 105    | 141   | 41        | 20200     | 12 |
| $D_3$ | Paso grande (L)<br>Diferencial                         | Paso normal (M)<br>Diferencial | Paso reducido (H)<br>Uniforme | $D_c$           | $D_{5m}$ | $dm_m$ | $l_1$ | $n_{max}$ |           |    |
|       | Coromant Capto – Diseño positivo                       |                                |                               |                 |          |        |       |           | 12        |    |
| 35    | –                                                      | R300-035C3-12M 3               | R300-035C3-12H 4              | 23              | C3       |        | 40    | 32900     |           |    |
| 42    | –                                                      | 042C4-12M 3                    | 042C4-12H 4                   | 30              | C4       |        | 40    | 28300     |           |    |
| 52    | R300-052C5-12L 3                                       | 052C5-12M 4                    | 052C5-12H 5                   | 40              | C5       |        | 50    | 24400     |           |    |
| 66    | 066C6-12L 4                                            | 066C6-12M 5                    | 066C6-12H 7                   | 54              | C6       |        | 50    | 21700     |           |    |
| 80    | –                                                      | 080C6-12M 6                    | 080C6-12H 8                   | 68              | C6       |        | 50    | 18900     |           |    |
|       | Eje – Diseño positivo                                  |                                |                               |                 |          |        |       |           | 12        |    |
| 50    | R300-050Q22-12L 3                                      | R300-050Q22-12M 4              | R300-050Q22-12H 5             | 38              |          | 22     | 50    | 25000     |           |    |
| 52    | 052Q22-12L 3                                           | 052Q22-12M 4                   | 052Q22-12H 5                  | 40              |          | 22     | 50    | 24400     |           |    |
| 63    | 063Q22-12L 4                                           | 063Q22-12M 5                   | 063Q22-12H 7                  | 51              |          | 22     | 50    | 22100     |           |    |
| 80    | –                                                      | 080Q27-12M 6                   | 080Q27-12H 8                  | 68              |          | 22     | 50    | 18900     |           |    |

Para otros tamaños de fresas (5, 7, 8, 10, 16 y 20 mm), consulte el catálogo principal.



# Fresado de perfiles y planeado – CoroMill® 300

Plaquetas y calidades – recomendaciones de datos de corte  
– valores de partida

ISO/ANSI

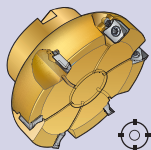
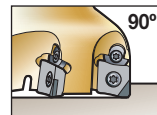


| ISO/ANSI | L = Ligero<br>M = Medio<br>H = Pesado | CONDICIONES BUENAS               |       |       | Primera elección<br>CONDICIONES NORMALES |       |       | CONDICIONES DIFÍCILES    |       |       |
|----------|---------------------------------------|----------------------------------|-------|-------|------------------------------------------|-------|-------|--------------------------|-------|-------|
|          |                                       |                                  |       |       |                                          |       |       |                          |       |       |
|          |                                       | <br>Código de pedido<br>         | $v_c$ | $f_z$ | <br>Código de pedido<br>                 | $v_c$ | $f_z$ | <br>Código de pedido<br> | $v_c$ | $f_z$ |
| <b>P</b> | L                                     | R300-1240M-PM 4230               | 250   | 0.21  | R300-1240M-PM 1030                       | 210   | 0.21  | R300-1240M-PM 4240       | 210   | 0.21  |
|          | M                                     | R300-1240M-PM 4230               | 250   | 0.21  | R300-1240E-PM 1030                       | 200   | 0.25  | R300-1240E-PM 4240       | 200   | 0.25  |
|          | H                                     | R300-1240M-PH 4230               | 225   | 0.28  | R300-1240M-PH 1030                       | 190   | 0.28  | R300-1240M-PH 4240       | 190   | 0.28  |
| <b>M</b> | L                                     | R300-1240E-PM 1030               | 205   | 0.25  | R300-1240M-MM 2030                       | 205   | 0.21  | R300-1240M-MM 2040       | 195   | 0.21  |
|          | M                                     | R300-1240M-PM 1030               | 220   | 0.21  | R300-1240E-MM 2030                       | 195   | 0.25  | R300-1240E-MM 2040       | 185   | 0.25  |
|          | H                                     | R300-1240M-MH 2030               | 185   | 0.28  | R300-1240M-MH 2030                       | 185   | 0.28  | R300-1240M-MH 2040       | 175   | 0.28  |
| <b>K</b> | L                                     | R300-1240M-PM 4220               | 190   | 0.21  | R300-1240M-PM 4230                       | 160   | 0.21  | R300-1240M-PM 4240       | 145   | 0.21  |
|          | M                                     | R300-1240M-PM 4220               | 190   | 0.21  | R300-1240M-PM 4230                       | 160   | 0.21  | R300-1240E-PM 4240       | 140   | 0.25  |
|          | H                                     | R300-1240M-KH 3220 <sup>1)</sup> | 210   | 0.28  | R300-1240M-KH 3040                       | 165   | 0.28  | R300-1240M-KH 3040       | 165   | 0.28  |
| <b>N</b> | L/M/H                                 | R300-1240E-PL 1030               | 945   | 0.18  | R300-1240E-PL 1030                       | 945   | 0.18  | R300-1240M-PM 1030       | 915   | 0.21  |
| <b>S</b> | L/M/H                                 | R300-1240E-PM 1030               | 35    | 0.25  | R300-1240E-MM 2030                       | 30    | 0.25  | R300-1240E-MM 2040       | 30    | 0.25  |
| <b>H</b> | L/M/H                                 | R300-1240E-PM 1010               | 80    | 0.25  | R300-1240M-PM 4220                       | 45    | 0.21  | R300-1240M-KH 3040       | 30    | 0.28  |

<sup>1)</sup> Calidad 3220 sólo para fresado en seco.

## Planeado – CoroMill® Century

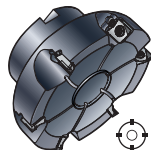
Para el mecanizado a alta velocidad de metales no féreos  
Cuerpos de aluminio y acero



**Fresas de aluminio de alta aleación para el mecanizado de materiales no féreos**

### Paso normal (M)

Fresas de planear ligeras para el mecanizado a alta velocidad de materiales no féreos. El cuerpo de poco peso evita que se forme una carga excesiva en los rodamientos del husillo. Corte extremadamente suave con geometrías del filo muy positivas. Primera elección para el mecanizado de materiales no féreos.

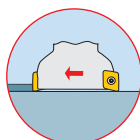


**Fresas de acero para el mecanizado de aluminio altamente abrasivo y operaciones que demandan tenacidad**

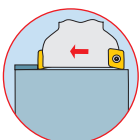
### Paso normal (M)

Fresas de planear con cuerpos de acero para adecuarse a cualquier demanda producida por los materiales no féreos a mecanizar. Corte extremadamente ligero con geometrías del filo muy positivas.

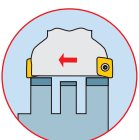
### Operaciones:



Planeado en general



Acabado espejo



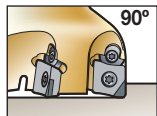
Mecanizado discontinuo

### Áreas de aplicación

| ISO/ANSI           | Metal duro |       | Nitruro de boro |       | PCD |       |
|--------------------|------------|-------|-----------------|-------|-----|-------|
|                    | L          | Wiper | L               | Wiper | L   | Wiper |
| Fundición          | <b>K</b>   |       |                 |       |     |       |
| Material no férreo | <b>N</b>   |       |                 |       |     |       |
| Material templado  | <b>H</b>   |       |                 |       |     |       |

### Plaquitas y calidades – recomendaciones de datos de corte – valores de partida

| ISO/ANSI | L = Ligero<br>M = Medio<br>H = Pesado | CONDICIONES BUENAS     |       |       | Primera elección<br>CONDICIONES NORMALES |       |       | CONDICIONES DIFÍCILES |       |       |
|----------|---------------------------------------|------------------------|-------|-------|------------------------------------------|-------|-------|-----------------------|-------|-------|
|          |                                       | <br>                   |       |       | <br>                                     |       |       |                       |       |       |
|          |                                       | Código de pedido       | $v_c$ | $f_z$ | Código de pedido                         | $v_c$ | $f_z$ | Código de pedido      | $v_c$ | $f_z$ |
| <b>K</b> | L                                     | R590-1105H-ZC2-KL CB50 | 640   | 0.4   | R590-1105H-ZC2-KL CB50                   | 640   | 0.4   | –                     |       |       |
| <b>N</b> | L                                     | R590-1105H-PR2-NL CD10 | 1570  | 0.15  | R590-110504H-NL H10                      | 730   | 0.20  | R590-110504H-NL H10   | 730   | 0.20  |
| <b>H</b> | L                                     | R590-1105H-ZC2-KL CB50 | 140   | 0.24  | R590-1105H-ZC2-KL CB50                   | 140   | 0.24  | –                     |       |       |

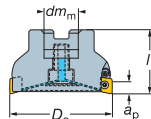
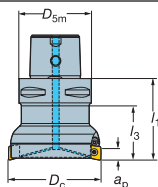


# Planeado – CoroMill® Century

Diámetro 40 – 200 mm



Profundidad de corte máx. ( $a_p$ ) = 2-10 mm  
dependiendo del tipo de plaquita

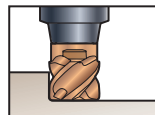


| $D_c$ | Código de pedido  |    | Cuerpo de la fresa | Dimensiones, mm |       |       |           |    |
|-------|-------------------|----|--------------------|-----------------|-------|-------|-----------|----|
|       | Paso normal (M)   |    |                    | $dm_m$          | $l_1$ | $l_3$ | $n_{max}$ |    |
|       | Eje               |    |                    |                 |       |       |           |    |
| 80    | R590-080Q27A-11M  | 6  | Aluminio           | 27              | 50    | —     | 27500     | 11 |
| 100   | 100Q32A-11M       | 6  |                    | 32              | 50    | —     | 23800     |    |
| 125   | 125Q40A-11M       | 8  |                    | 40              | 63    | —     | 20700     |    |
| 160   | 160Q40A-11M       | 10 |                    | 40              | 63    | —     | 17900     |    |
| 200   | 200Q60A-11M       | 16 |                    | 60              | 63    | —     | 15700     |    |
| 50    | R590-050Q22S-11M  | 4  | Acero              | 22              | 40    | —     | 41600     | 11 |
| 63    | 063Q22S-11M       | 5  |                    | 22              | 40    | —     | 35100     |    |
| 80    | 080Q27S-11M       | 6  |                    | 27              | 50    | —     | 27500     |    |
| 100   | 100Q32S-11M       | 6  |                    | 32              | 50    | —     | 23800     |    |
| 125   | 125Q40S-11M       | 8  |                    | 40              | 63    | —     | 20700     |    |
| 160   | 160Q40S-11M       | 10 |                    | 40              | 63    | —     | 17900     |    |
| 200   | 200Q60S-11M       | 16 |                    | 60              | 63    | —     | 15700     |    |
|       | CIS En eje        |    |                    |                 |       |       |           |    |
| 80    | RA590-080J25A-11M | 6  | Aluminio           | 25.3            | 50    | —     | 27500     | 11 |
| 100   | 100J31A-11M       | 6  |                    | 31.75           | 50    | —     | 23800     |    |
| 125   | 125J38A-11M       | 8  |                    | 38.1            | 63    | —     | 20700     |    |
| 160   | 160J38A-11M       | 10 |                    | 38.1            | 63    | —     | 17900     |    |
| 200   | 200J47A-11M       | 16 |                    | 47.625          | 63    | —     | 15700     |    |
| 80    | RA590-080J25S-11M | 6  | Acero              | 25.4            | 50    | —     | 27500     | 11 |
| 100   | 100J31S-11M       | 6  |                    | 31.8            | 50    | —     | 23800     |    |
| 125   | 125J38S-11M       | 8  |                    | 38.1            | 63    | —     | 20700     |    |
| 160   | 160J38S-11M       | 10 |                    | 38.1            | 63    | —     | 17900     |    |
| 200   | 200J47S-11M       | 16 |                    | 47.625          | 63    | —     | 15700     |    |
|       | Coromant Capto    |    |                    |                 |       |       |           |    |
| 40    | R590-040C3-11M    | 3  | Acero              | C3              | 55    | 40    | 48000     | 11 |
| 40    | 040C4-11M         | 3  |                    | C4              | 63    | 40    | 39000     |    |
| 50    | 050C5-11M         | 4  |                    | C5              | 63    | 40    | 28000     |    |
| 63    | 063C5-11M         | 5  |                    | C5              | 63    | 40    | 28000     |    |
| 80    | 080C6-11M         | 6  |                    | C6              | 71    | —     | 20000     |    |

## Plaquetas Wiper

|          | CB50                   |                        | CD10 |                     | H10 |
|----------|------------------------|------------------------|------|---------------------|-----|
| <b>K</b> | R590-1105H-ZC2-KW CB50 | —                      |      | —                   |     |
| <b>N</b> | —                      | R590-1105H-RR2-NW CD10 |      | R590-110504H-NW H10 |     |
| <b>H</b> | R590-1105H-ZC2-KW CB50 | —                      |      | —                   |     |



**Fresa para achaflanar**

Achaflanado.

Mecanizado con y sin corte al centro.

Ángulo del Chaflan

15°, 30°, 45°, 60°.



Página 173

**Fresa de punta esférica**

Fresado de perfiles.

Corte central.

Ángulo de Hélice 40°.



Página 173

**Primera elección****Fresa para ranurar con radio de esquina**

Fresado general.

Corte central.

Paso diferencial.

Ángulo de Hélice 50°.



Página 172

**Fresa con alto avance**

Fresado en desbaste.

Sin corte al centro.

Ángulo de Hélice 50°.



Página 174

**Fresa para desbaste**

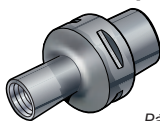
Geometría Kordell.

Corte central.

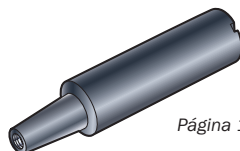
Ángulo de Hélice 40°, 45°.



Página 174

**Adaptador  
Coromant Capto®**

Página 175

**Para mango cilíndrico**

Página 176

**Operaciones:**

Fresado general



Achaflanado

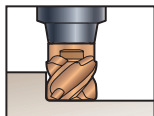


Fresado del perfil

Fresado con alto  
avance

Fresado en desbaste.

Encontrará la gama completa en el último suplemento o el catálogo principal.

**CoroMill® 316**

Cabeza intercambiable

ISO/ANSI

**Fresa para ranurar con radio de esquina**

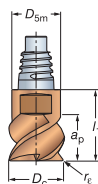
Primera elección para fresado general

Diámetro: 10 – 25 mm

Corte central

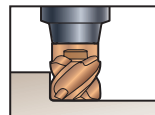
Paso diferencial

Ángulo de Hélice: 50°

Tolerancia:  $D_c = h9$ 

| $D_c$<br>mm | Código de pedido   | Tamaño de<br>acoplamiento | Dimensiones, mm |      |      |     |      | $z_n$ | $d_{5m}$ | $l_1$ | $r_\epsilon$ | $a_p$ | P      | M      | K      | S      |
|-------------|--------------------|---------------------------|-----------------|------|------|-----|------|-------|----------|-------|--------------|-------|--------|--------|--------|--------|
|             |                    |                           |                 |      |      |     |      |       |          |       |              |       | GC1030 | GC1030 | GC1030 | GC1030 |
| 10          | 316-10SM350-10005P | E10                       | 3               | 9.7  | 12.4 | 0.5 | 5.5  | 3     | 9.7      | 12.4  | 1.0          | 5.5   |        |        |        |        |
|             | -10SM350-10010P    |                           | 3               | 9.7  | 12.4 | 1.0 | 5.5  | 4     | 9.7      | 12.4  | 0.5          | 5.5   |        |        |        |        |
|             | -10SM450-10005P    |                           | 4               | 9.7  | 12.4 | 0.5 | 5.5  | 4     | 9.7      | 12.4  | 1.0          | 5.5   | ★      | ★      | ★      | ★      |
|             | -10SM450-10010P    |                           | 4               | 9.7  | 12.4 | 1.0 | 5.5  | 4     | 9.7      | 12.4  | 1.5          | 5.5   |        |        |        |        |
|             | -10SM450-10015P    |                           | 4               | 9.7  | 12.4 | 1.5 | 5.5  | 4     | 9.7      | 12.4  | 2.0          | 5.5   |        |        |        |        |
|             | -10SM450-10020P    |                           | 4               | 9.7  | 12.4 | 2.0 | 5.5  | 4     | 9.7      | 12.4  | 3.0          | 5.5   |        |        |        |        |
|             | -10SM450-10030P    |                           | 4               | 9.7  | 12.4 | 3.0 | 5.5  |       |          |       |              |       |        |        |        |        |
| 12          | 316-12SM350-12005P | E12                       | 3               | 11.7 | 14.5 | 0.5 | 6.5  | 3     | 11.7     | 14.5  | 1.0          | 6.5   |        |        |        |        |
|             | -12SM350-12010P    |                           | 3               | 11.7 | 14.5 | 1.0 | 6.5  | 4     | 11.7     | 14.5  | 0.5          | 6.5   |        |        |        |        |
|             | -12SM450-12005P    |                           | 4               | 11.7 | 14.5 | 0.5 | 6.5  | 4     | 11.7     | 14.5  | 1.0          | 6.5   | ★      | ★      | ★      | ★      |
|             | -12SM450-12010P    |                           | 4               | 11.7 | 14.5 | 1.0 | 6.5  | 4     | 11.7     | 14.5  | 1.5          | 6.5   |        |        |        |        |
|             | -12SM450-12015P    |                           | 4               | 11.7 | 14.5 | 1.5 | 6.5  | 4     | 11.7     | 14.5  | 2.0          | 6.5   |        |        |        |        |
|             | -12SM450-12020P    |                           | 4               | 11.7 | 14.5 | 2.0 | 6.5  | 4     | 11.7     | 14.5  | 3.0          | 6.5   |        |        |        |        |
|             | -12SM450-12030P    |                           | 4               | 11.7 | 14.5 | 3.0 | 6.5  | 4     | 11.7     | 14.5  | 4.0          | 6.5   |        |        |        |        |
| 16          | 316-16SM350-16005P | E16                       | 3               | 15.5 | 18.7 | 0.5 | 8.5  | 3     | 15.5     | 18.7  | 1.0          | 8.5   |        |        |        |        |
|             | -16SM350-16010P    |                           | 3               | 15.5 | 18.7 | 1.0 | 8.5  | 4     | 15.5     | 18.7  | 0.5          | 8.5   |        |        |        |        |
|             | -16SM450-16005P    |                           | 4               | 15.5 | 18.7 | 0.5 | 8.5  | 4     | 15.5     | 18.7  | 1.0          | 8.5   | ★      | ★      | ★      | ★      |
|             | -16SM450-16010P    |                           | 4               | 15.5 | 18.7 | 1.0 | 8.5  | 4     | 15.5     | 18.7  | 1.5          | 8.5   |        |        |        |        |
|             | -16SM450-16015P    |                           | 4               | 15.5 | 18.7 | 1.5 | 8.5  | 4     | 15.5     | 18.7  | 2.0          | 8.5   |        |        |        |        |
|             | -16SM450-16020P    |                           | 4               | 15.5 | 18.7 | 2.0 | 8.5  | 4     | 15.5     | 18.7  | 3.0          | 8.5   |        |        |        |        |
|             | -16SM450-16030P    |                           | 4               | 15.5 | 18.7 | 3.0 | 8.5  | 4     | 15.5     | 18.7  | 4.0          | 8.5   |        |        |        |        |
| 20          | 316-20SM350-20005P | E20                       | 3               | 19.3 | 21.3 | 0.5 | 11.0 | 3     | 19.3     | 21.3  | 1.0          | 11.0  |        |        |        |        |
|             | -20SM350-20010P    |                           | 3               | 19.3 | 21.3 | 1.0 | 11.0 | 4     | 19.3     | 21.3  | 0.5          | 11.0  |        |        |        |        |
|             | -20SM450-20005P    |                           | 4               | 19.3 | 21.3 | 0.5 | 11.0 | 4     | 19.3     | 21.3  | 1.0          | 11.0  | ★      | ★      | ★      | ★      |
|             | -20SM450-20010P    |                           | 4               | 19.3 | 21.3 | 1.0 | 11.0 | 4     | 19.3     | 21.3  | 1.5          | 11.0  |        |        |        |        |
|             | -20SM450-20015P    |                           | 4               | 19.3 | 21.3 | 1.5 | 11.0 | 4     | 19.3     | 21.3  | 2.0          | 11.0  |        |        |        |        |
|             | -20SM450-20020P    |                           | 4               | 19.3 | 21.3 | 2.0 | 11.0 | 4     | 19.3     | 21.3  | 4.0          | 11.0  |        |        |        |        |
|             | -20SM450-20040P    |                           | 4               | 19.3 | 21.3 | 4.0 | 11.0 |       |          |       |              |       |        |        |        |        |
| 25          | 316-25SM350-25010P | E25                       | 5               | 24.2 | 25.6 | 1.0 | 13.0 | 5     | 24.2     | 25.6  | 1.5          | 13.0  | ★      | ★      | ★      | ★      |
|             | -25SM350-25015P    |                           | 5               | 24.2 | 25.6 | 1.5 | 13.0 |       |          |       |              |       |        |        |        |        |
|             | -25SM450-25020P    |                           | 5               | 24.2 | 25.6 | 2.0 | 13.0 |       |          |       |              |       |        |        |        |        |

 $z_n$  = Número de dientes

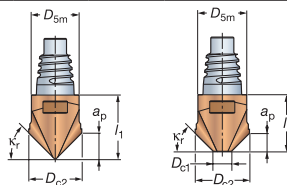
**Fresa para achaflanar**

Achaflanado

Diámetro: 10 – 16 mm

Mecanizado con y sin corte al centro

Ángulo del Chaflan: 15°, 30°, 45°, 60°

Tolerancia:  $D_c = h10$ 

| $D_{c2}$<br>mm | Código de pedido   | Tamaño de<br>acoplamiento | Dimensiones, mm |          |          |       |       |       | P      | M      | K      | S      |
|----------------|--------------------|---------------------------|-----------------|----------|----------|-------|-------|-------|--------|--------|--------|--------|
|                |                    |                           | $z_n$           | $d_{5m}$ | $d_{c1}$ | $l_1$ | $K_r$ | $a_p$ | GC1030 | GC1030 | GC1030 | GC1030 |
| 10             | 316-10CM400-10045G | E10                       | 4               | 9.7      |          | 12.4  | 45    | 4.25  | ★      | ★      | ★      | ★      |
|                | -10CM400-10060G    |                           | 4               | 9.7      | 3.50     | 12.4  | 60    | 5.5   | ★      | ★      | ★      | ★      |
| 12             | 316-12CM600-12015G | E12                       | 6               | 11.7     |          | 14.5  | 15    | 1.2   |        |        |        |        |
|                | -12CM600-12030G    |                           | 6               | 11.7     |          | 14.5  | 30    | 2.6   | ★      | ★      | ★      | ★      |
|                | -12CM600-12045G    |                           | 6               | 11.7     |          | 14.5  | 45    | 4.5   |        |        |        |        |
|                | -12CM600-12060G    |                           | 6               | 11.7     | 4.50     | 14.5  | 60    | 6.5   |        |        |        |        |
| 16             | 316-16CM800-16045G | E16                       | 8               | 15.5     |          | 18.7  | 45    | 6.5   | ★      | ★      | ★      | ★      |

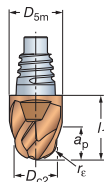
 $z_n$  = Número de dientes**Fresa de punta esférica**

Fresado del perfil

Diámetro: 10 – 25 mm

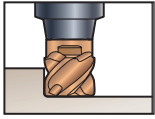
Corte central

Ángulo de Hélice: 40°

Tolerancia:  $D_c = h9$ 

| $D_{c2}$<br>mm | Código de pedido   | Tamaño de<br>acoplamiento | Dimensiones, mm |          |       |                 |       |  | P      | M      | K      | S      |
|----------------|--------------------|---------------------------|-----------------|----------|-------|-----------------|-------|--|--------|--------|--------|--------|
|                |                    |                           | $z_n$           | $d_{5m}$ | $l_1$ | $r_\varepsilon$ | $a_p$ |  | GC1030 | GC1030 | GC1030 | GC1030 |
| 10             | 316-10BM440-10050G | E10                       | 4               | 9.7      | 12.4  | 5.0             | 5.5   |  | ★      | ★      | ★      | ★      |
| 12             | 316-12BM440-12060G | E12                       | 4               | 11.7     | 14.5  | 6.0             | 6.5   |  | ★      | ★      | ★      | ★      |
| 16             | 316-16BM440-16080G | E16                       | 4               | 15.5     | 18.7  | 8.0             | 8.5   |  | ★      | ★      | ★      | ★      |
| 20             | 316-20BM240-200AG  | E20                       | 2               | 19.3     | 21.3  | 10.0            | 11.0  |  | ★      | ★      | ★      | ★      |
|                | -20BM440-200AG     |                           | 4               | 19.3     | 21.3  | 10.0            | 11.0  |  |        |        |        |        |
| 25             | 316-25BM240-250DG  | E25                       | 2               | 24.2     | 25.6  | 12.5            | 13.5  |  | ★      | ★      | ★      | ★      |
|                | -25BM440-250DG     |                           | 4               | 24.2     | 25.6  | 12.5            | 13.5  |  |        |        |        |        |

 $z_n$  = Número de dientes

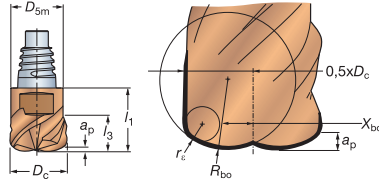
**CoroMill® 316**

Cabeza intercambiable

ISO/ANSI

**Fresa con alto avance**

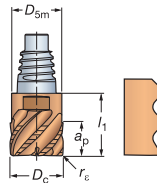
Fresado en desbaste.  
 Diámetro: 10 – 25 mm  
 Sin corte al centro  
 Ángulo de Hélice: 50°  
 Tolerancia:  $D_c = h9$



| $D_c$<br>mm | Código de pedido                      | Tamaño de<br>acoplamiento | Dimensiones, mm |          |       |       |            |          |          |              |       |        | P      | M      | K      | S |
|-------------|---------------------------------------|---------------------------|-----------------|----------|-------|-------|------------|----------|----------|--------------|-------|--------|--------|--------|--------|---|
|             |                                       |                           | $z_n$           | $d_{5m}$ | $l_1$ | $l_3$ | $R_{comp}$ | $R_{bo}$ | $X_{bo}$ | $r_\epsilon$ | $a_p$ | GC1030 | GC1030 | GC1030 | GC1030 |   |
| 10          | 316-10HM350-10015P<br>-10HM450-10015P | E10                       | 3               | 9.7      | 12.4  | 5.5   | 1.99       | 5.00     | 1.70     | 1.5          | 0.7   | ★      | ★      | ★      | ★      |   |
|             |                                       |                           | 4               | 9.7      | 12.4  | 5.5   | 1.99       | 5.00     | 1.70     | 1.5          | 0.7   | ★      | ★      | ★      | ★      |   |
| 12          | 316-12HM350-12015P<br>-12HM450-12015P | E12                       | 3               | 11.7     | 14.5  | 6.5   | 2.10       | 6.00     | 2.25     | 1.5          | 0.8   | ★      | ★      | ★      | ★      |   |
|             |                                       |                           | 4               | 11.7     | 14.5  | 6.5   | 2.10       | 6.00     | 2.25     | 1.5          | 0.8   | ★      | ★      | ★      | ★      |   |
| 16          | 316-16HM350-16020P<br>-16HM450-16020P | E16                       | 3               | 15.5     | 18.7  | 8.5   | 2.75       | 8.00     | 3.10     | 2.0          | 1.0   | ★      | ★      | ★      | ★      |   |
|             |                                       |                           | 4               | 15.5     | 18.7  | 8.5   | 2.75       | 8.00     | 3.10     | 2.0          | 1.0   | ★      | ★      | ★      | ★      |   |
| 20          | 316-20HM350-20020P<br>-20HM450-20020P | E20                       | 3               | 19.3     | 21.3  | 11.0  | 3.07       | 10.00    | 4.00     | 2.0          | 1.3   | ★      | ★      | ★      | ★      |   |
|             |                                       |                           | 4               | 19.3     | 21.3  | 11.0  | 3.07       | 10.00    | 4.00     | 2.0          | 1.3   | ★      | ★      | ★      | ★      |   |
| 25          | 316-25HM450-25030P                    | E25                       | 4               | 24.2     | 25.6  | 13.0  | 4.21       | 12.00    | 5.00     | 3.0          | 1.6   | ★      | ★      | ★      | ★      |   |

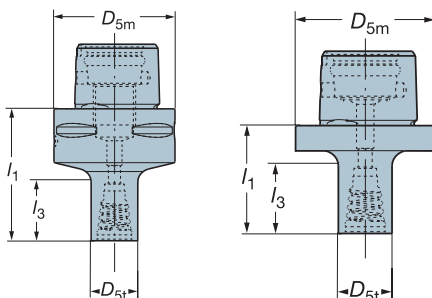
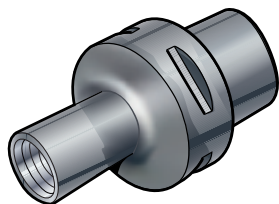
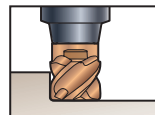
 $R_{comp}$  = valor que se debe programar cuando se mecanice un radio $z_n$  = Número de dientes**Fresa para desbaste**

Diámetro 10 – 25 mm  
 Geometría Kordell  
 Corte central  
 Ángulo de Hélice: 40°, 45°  
 Tolerancia:  $D_c = h12$



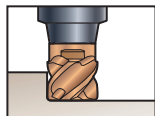
| $D_{c2}$<br>mm | Código de pedido                      | Tamaño de<br>acoplamiento | Dimensiones, mm |          |       |              |       |  |  | P      | M      | K      | S      |
|----------------|---------------------------------------|---------------------------|-----------------|----------|-------|--------------|-------|--|--|--------|--------|--------|--------|
|                |                                       |                           | $z_n$           | $d_{5m}$ | $l_1$ | $r_\epsilon$ | $a_p$ |  |  | GC1030 | GC1030 | GC1030 | GC1030 |
| 10             | 316-10SM440-10004K<br>-10SM545-10004K | E10                       | 4               | 9.7      | 12.4  | 0.4          | 5.5   |  |  | ★      | ★      | ★      | ★      |
|                |                                       |                           | 5               | 9.7      | 12.4  | 0.4          | 5.5   |  |  | ★      | ★      | ★      | ★      |
| 12             | 316-12SM440-12004K<br>-12SM545-12004K | E12                       | 4               | 11.7     | 14.5  | 0.4          | 6.5   |  |  | ★      | ★      | ★      | ★      |
|                |                                       |                           | 5               | 11.7     | 14.5  | 0.4          | 6.5   |  |  | ★      | ★      | ★      | ★      |
| 16             | 316-16SM440-16004K<br>-16SM645-16004K | E16                       | 4               | 15.5     | 18.7  | 0.4          | 8.5   |  |  | ★      | ★      | ★      | ★      |
|                |                                       |                           | 6               | 15.5     | 18.7  | 0.4          | 8.5   |  |  | ★      | ★      | ★      | ★      |
| 20             | 316-20SM845-20004K                    | E20                       | 6               | 19.3     | 21.3  | 0.4          | 11.0  |  |  | ★      | ★      | ★      | ★      |
| 25             | 316-25SM845-25004K                    | E25                       | 8               | 24.2     | 25.6  | 0.4          | 13.5  |  |  | ★      | ★      | ★      | ★      |

 $z_n$  = Número de dientes



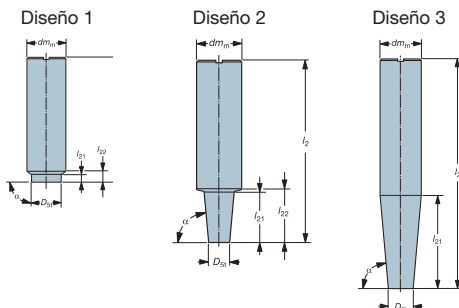
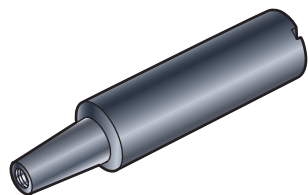
| Coromant<br>Capto<br>tamaño                                | Tamaño<br>de acopla-<br>miento | Código de pedido | Refrige-<br>rante* | Dimensiones, mm |          |       |       |
|------------------------------------------------------------|--------------------------------|------------------|--------------------|-----------------|----------|-------|-------|
|                                                            |                                |                  |                    | $D_{5m}$        | $D_{5t}$ | $l_1$ | $l_3$ |
| C3                                                         | E10                            | C3-391.EH-10 035 | 3                  | 32              | 9.6      | 35    | 13.2  |
|                                                            | E12                            | -391.EH-12 038   | 3                  | 32              | 11.6     | 38    | 16.4  |
|                                                            | E16                            | -391.EH-16 043   | 3                  | 32              | 15.4     | 43    | 21.9  |
| C4                                                         | E10                            | C4-391.EH-10 041 | 3                  | 40              | 9.6      | 41    | 13.1  |
|                                                            | E12                            | -391.EH-12 044   | 3                  | 40              | 11.6     | 44    | 16.4  |
|                                                            | E16                            | -391.EH-16 049   | 3                  | 40              | 15.4     | 49    | 21.9  |
|                                                            | E20                            | -391.EH-20 046   | 3                  | 40              | 19.2     | 46    | 19.4  |
| C5                                                         | E10                            | C5-391.EH-10 042 | 3                  | 50              | 9.6      | 42    | 12.8  |
|                                                            | E12                            | -391.EH-12 045   | 3                  | 50              | 11.6     | 45    | 16.0  |
|                                                            | E16                            | -391.EH-16 050   | 3                  | 50              | 15.4     | 50    | 21.5  |
|                                                            | E20                            | -391.EH-20 047   | 3                  | 50              | 19.2     | 47    | 19.0  |
|                                                            | E25                            | -391.EH-25 052   | 3                  | 50              | 24.1     | 52    | 24.7  |
| C6                                                         | E12                            | C6-391.EH-12 049 | 3                  | 63              | 11.6     | 49    | 16.3  |
|                                                            | E16                            | -391.EH-16 054   | 3                  | 63              | 15.4     | 54    | 21.8  |
|                                                            | E20                            | -391.EH-20 051   | 3                  | 63              | 19.2     | 51    | 19.3  |
|                                                            | E25                            | -391.EH-25 056   | 3                  | 63              | 24.1     | 56    | 25.0  |
| Sin ranuras de retención para cambio manual de herramienta |                                |                  |                    |                 |          |       |       |
| C3                                                         | E10                            | C3-391.EH-10 026 | 3                  | 32              | 9.6      | 26    | 13.0  |
|                                                            | E12                            | -391.EH-12 029   | 3                  | 32              | 11.6     | 29    | 16.0  |
| C4                                                         | E10                            | C4-391.EH-10 028 | 3                  | 40              | 9.6      | 26    | 13.0  |
|                                                            | E12                            | -391.EH-12 029   | 3                  | 40              | 11.6     | 29    | 16.0  |
|                                                            | E16                            | -391.EH-16 035   | 3                  | 40              | 15.4     | 35    | 22.0  |

\*El refrigerante puede suministrarse por el centro o de forma radial

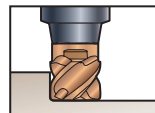


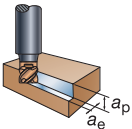
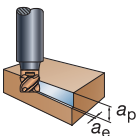
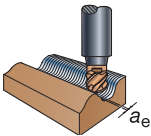
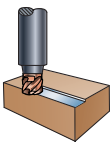
## CoroMill® 316

Mango cilíndrico para cabeza intercambiable



| Tamaño de acoplamiento | Diseño | Código de pedido | Dimensiones, mm |          |       |          |          |           |
|------------------------|--------|------------------|-----------------|----------|-------|----------|----------|-----------|
|                        |        |                  | $dm_m$          | $D_{5t}$ | $l_2$ | $l_{21}$ | $l_{22}$ | $n_{max}$ |
| Acero                  |        |                  |                 |          |       |          |          |           |
| E10                    | 1      | E10-A16-SS-065   | 16              | 9.6      | 65    | 5        | 7        | 40000     |
|                        | 1      | -A10-SS-075      | 10              | 9.6      | 75    | 20       | 21       | 40000     |
|                        | 3      | -A16-CS-140      | 16              | 9.6      | 140   | 36.5     | —        | 16000     |
|                        | 2      | -A16-CS-160      | 16              | 9.6      | 160   | 50       | 52       | 12000     |
|                        | 3      | -A32-CS-250      | 32              | 9.6      | 250   | 63.5     | —        | 10000     |
| E12                    | 1      | E12-A16-SS-065   | 16              | 11.6     | 65    | 5        | 7        | 40000     |
|                        | 1      | -A12-SS-100      | 12              | 11.6     | 100   | 22       | 23       | 31000     |
|                        | 3      | -A16-CS-140      | 16              | 11.6     | 140   | 25.1     | —        | 16000     |
|                        | 2      | -A16-CS-170      | 16              | 11.6     | 170   | 60       | 62       | 12000     |
|                        | 3      | -A32-CS-250      | 32              | 11.6     | 250   | 57.8     | —        | 10000     |
| E16                    | 1      | E16-A20-SS-070   | 20              | 15.4     | 70    | 5        | 7        | 40000     |
|                        | 1      | -A20-SS-110      | 20              | 15.4     | 110   | 25       | 27       | 40000     |
|                        | 3      | -A25-CS-170      | 25              | 15.4     | 170   | 54.8     | —        | 18000     |
|                        | 2      | -A20-CS-190      | 20              | 15.4     | 190   | 75       | 78       | 13000     |
| E20                    | 1      | E20-A25-SS-080   | 25              | 19.2     | 80    | 5        | 7        | 40000     |
|                        | 1      | -A20-SS-120      | 20              | 19.2     | 120   | 30       | 31       | 34000     |
|                        | 3      | -A32-CS-180      | 32              | 19.2     | 180   | 73.1     | —        | 20000     |
| E25                    | 1      | E25-A32-SS-080   | 32              | 24.1     | 80    | 5        | 7        | 40000     |
|                        | 1      | -A25-SS-140      | 25              | 24.1     | 140   | 40       | 41       | 25000     |
|                        | 3      | -A32-CS-200      | 32              | 24.1     | 200   | 45.1     | —        | 15000     |
| Metal duro             |        |                  |                 |          |       |          |          |           |
| E10                    | 1      | E10-A10-SE-100   | 10              | 9.6      | 100   | 50       | 51       | 35000     |
|                        | 2      | -A16-CE-155      | 16              | 9.6      | 155   | 100      | 103      | 22000     |
| E12                    | 1      | E12-A12-SE-100   | 12              | 11.6     | 100   | 48       | 49       | 40000     |
|                        | 2      | -A16-CE-150      | 16              | 11.6     | 150   | 90       | 92       | 23000     |
| E16                    | 1      | E16-A16-SE-135   | 16              | 15.4     | 135   | 80       | 81       | 27000     |
|                        | 2      | -A20-CE-175      | 20              | 15.4     | 175   | 118      | 120      | 22000     |
| E20                    | 1      | E20-A20-SE-095   | 20              | 19.2     | 95    | 38       | 39       | 40000     |
|                        | 1      | -A20-SE-180      | 20              | 19.2     | 180   | 110      | 111      | 20000     |
| E25                    | 1      | E25-A25-SE-200   | 25              | 24.1     | 200   | 120      | 121      | 19000     |

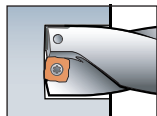


| GC1030                                                                                                                                                          | ISO/ANSI | CMC          | Velocidad de corte en<br>m/min<br>$v_c$ | $D_c$<br>mm                | Avance/diente<br>mm<br>$f_z$              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------|-----------------------------------------|----------------------------|-------------------------------------------|
| <b>Desbaste</b><br><br>$a_e \leq 1.0 \times D_c$<br>$a_p \leq 0.5 \times D_c$  | <b>P</b> | <b>02.1</b>  | 165                                     | 10<br>12<br>16<br>20<br>25 | 0.045<br>0.055<br>0.065<br>0.080<br>0.100 |
|                                                                                                                                                                 | <b>M</b> | <b>05.21</b> | 55                                      |                            |                                           |
|                                                                                                                                                                 | <b>K</b> | <b>08.2</b>  | 110                                     |                            |                                           |
|                                                                                                                                                                 | <b>S</b> | <b>23.22</b> | 40                                      |                            |                                           |
|                                                                                                                                                                 |          |              |                                         |                            |                                           |
| <b>Acabado</b><br><br>$a_e \leq 0.3 \times D_c$<br>$a_p \leq 0.5 \times D_c$   | <b>P</b> | <b>02.1</b>  | 245                                     | 10<br>12<br>16<br>20<br>25 | 0.070<br>0.085<br>0.110<br>0.130<br>0.160 |
|                                                                                                                                                                 | <b>M</b> | <b>05.21</b> | 85                                      |                            |                                           |
|                                                                                                                                                                 | <b>K</b> | <b>08.2</b>  | 160                                     |                            |                                           |
|                                                                                                                                                                 | <b>S</b> | <b>23.22</b> | 80                                      |                            |                                           |
|                                                                                                                                                                 |          |              |                                         |                            |                                           |
| <b>Perfilado</b><br><br>$a_e < 0.005 \times D_c$                             | <b>P</b> | <b>02.1</b>  | 555                                     | 10<br>12<br>16<br>20<br>25 | 0.120<br>0.140<br>0.160<br>0.180<br>0.200 |
|                                                                                                                                                                 | <b>M</b> | <b>05.21</b> | 190                                     |                            |                                           |
|                                                                                                                                                                 | <b>K</b> | <b>08.2</b>  | 360                                     |                            |                                           |
|                                                                                                                                                                 | <b>S</b> | <b>23.22</b> | 150                                     |                            |                                           |
|                                                                                                                                                                 |          |              |                                         |                            |                                           |
| <b>Avance elevado</b><br>*316-**H**50-****P                                  |          |              |                                         | 10<br>12<br>16<br>20<br>25 | 0.250<br>0.300<br>0.400<br>0.500<br>0.600 |

**Datos de corte**

Utilice PluraGuide para seleccionar la herramienta y los datos de corte correctos.

Número de pedido: C-2948-117



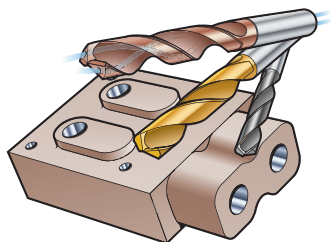
## Taladrado en general

CoroDrill® Delta C y CoroDrill® 880

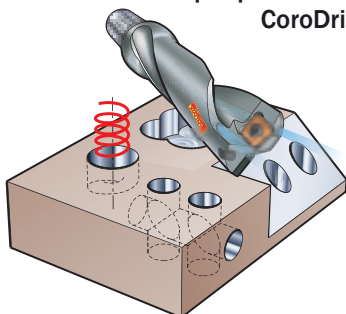
ISO/ANSI



### Broca enteriza CoroDrill® Delta C



### Broca de plaquita intercambiable CoroDrill® 880



| Tipos de brocas                                    | Calidades         | Material | Versatilidad | Profundidad de taladrado máx.<br>Tolerancia del agujero<br>Acabado superficial | Página  |
|----------------------------------------------------|-------------------|----------|--------------|--------------------------------------------------------------------------------|---------|
| <b>CoroDrill® Delta C R840</b> , Ø 3 – 20 mm<br>   | <br><b>GC1220</b> |          |              | $3-7 \times D_c$<br>IT8-10<br>$R_a$ 1-2 µm                                     | 182-186 |
| <b>CoroDrill® Delta C R842</b> , Ø 3.0 – 20 mm<br> | <br><b>GC1210</b> |          |              | $3-5 \times D_c$<br>IT8-9<br>$R_a$ 1-2 µm                                      | 187-188 |
| <b>CoroDrill® Delta C R846</b> , Ø 3.0 – 12 mm<br> | <br><b>GC1220</b> |          |              | $3-5 \times D_c$<br>IT8-9<br>$R_a$ 1-2 µm                                      | 189     |
| <b>CoroDrill® Delta C R850</b> , Ø 5.0 – 14 mm<br> | <br><b>N20D</b>   |          |              | $3-7 \times D_c$<br>IT9-10<br>$R_a$ 1-2 µm                                     | 190-191 |
| <b>CoroDrill® 880</b><br>Ø 12 – 63.00 mm<br>       |                   |          |              | $2-5 \times D_c$<br>IT 12-13<br>$R_a$ 0.5 – 4 µm                               | 194-201 |



Suministro de refrigerante interno.



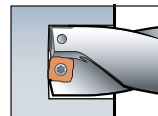
Suministro de refrigerante externo.



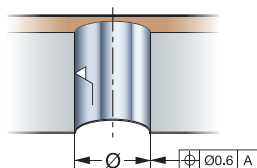


## Cómo utilizar la guía

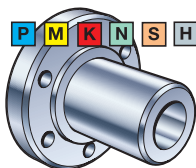
La elección de la herramienta adecuada



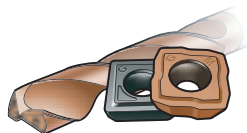
1. Defina el diámetro del agujero, su profundidad y los requisitos de calidad.



2. Defina el material de la pieza y las condiciones de mecanizado.



4. Elija la calidad de la broca y su geometría.



3. Seleccione el tipo de broca.

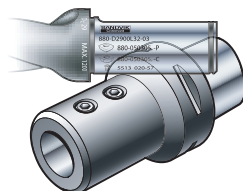
CoroDrill Delta C Ø 3-20 mm IT 8-10  
CoroDrill 880 Ø 12-63 mm IT 12-13

CoroDrill Delta C, tolerancia estrecha y óptimo acabado superficial.



CoroDrill 880, la más alta productividad y la mejor economía de fabricación.

5. Seleccione el tipo de mango.

ISO/ANSI  
**P**ISO/ANSI  
**M**ISO/ANSI  
**K**ISO/ANSI  
**N**ISO/ANSI  
**S**ISO/ANSI  
**H**

### Calidades para CoroDrill Delta C

GC1220

GC1220

GC1220

GC1210

GC1220

N20D

GC1220

GC1220

### Calidades para taladrado

Resistencia al desgaste

Estables



GC4014  
GC4024  
GC4034  
GC1044  
GC4044

GC4024  
GC4034  
GC1044  
GC4044  
GC1144  
GC2044

H13A  
GC4014  
GC4024  
GC4034  
GC1044  
GC4044

H13A  
GC1044  
GC4044

H13A  
GC1044  
GC4044  
GC1144  
GC2044

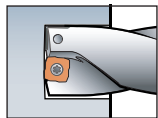
GC4024  
GC1044  
GC4044



Condiciones de mecanizado

Tenacidad

Inestables



## Taladrado en general

Recomendaciones para un buen taladrado

ISO/ANSI



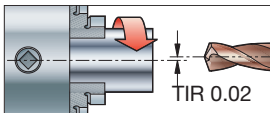
### Aplicación de las brocas

Para poder utilizar y sacar el máximo partido de las capacidades de las brocas Sandvik Coromant durante la producción a alta velocidad de agujeros de calidad, deberá asegurarse de que exista una máxima estabilidad y una sujeción segura en todo el sistema, desde el eje hasta la herramienta y la pieza. Las vibraciones tienen un efecto negativo en la seguridad de la producción, la duración de la herramienta y la calidad del agujero.

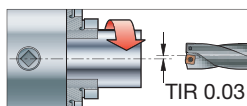
### Excentricidad de la herramienta (TIR)

Una excentricidad mínima de la herramienta es esencial para el taladrado. Uno de los criterios principales para el uso correcto de brocas de metal duro enterizo es la excentricidad más reducida posible. Se recomienda no exceder el valor máximo de TIR (Lectura total del indicador) de 0.02/0.03 mm para la broca y el portabrocas.

CoroDrill Delta C



CoroDrill 880



### Suministro de refrigerante

Con el fin de sacar el máximo partido de las altas velocidades de corte y los avances de las brocas Sandvik Coromant, la evacuación de la viruta debe realizarse de manera eficiente y con refrigerante, suministrado de forma externa o interna. Las brocas CoroDrill Delta C están disponibles para suministro de refrigerante interno o externo, y las brocas CoroDrill 880, para suministro interno.

### Suministro interno de refrigerante

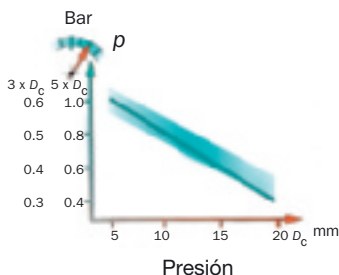
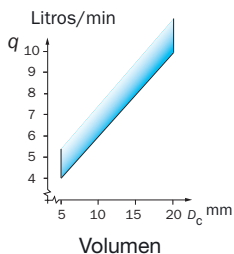
El volumen depende del diámetro de la broca y de la presión. Las brocas de diámetro pequeño necesitan una mayor presión debido a que la cantidad de refrigerante que circula por ellas es menor.

Los siguientes diagramas son sólo una guía aproximada.

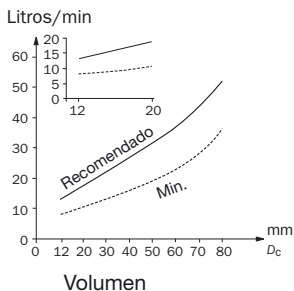
El volumen de refrigerante debe ser igual al diámetro de la broca en l/min.

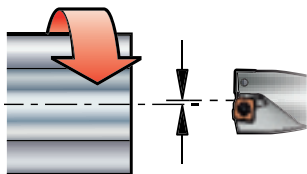
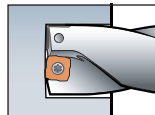
Las virutas no deben presentar nunca un color azulado o marrón.

CoroDrill® Delta C

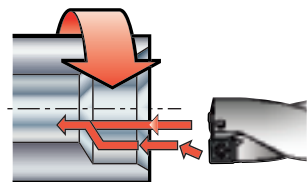


CoroDrill® 880

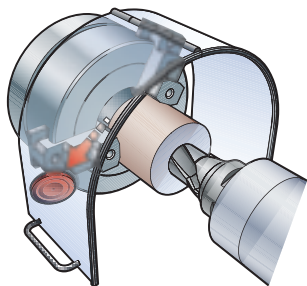


**CoroDrill 880 como broca fija**

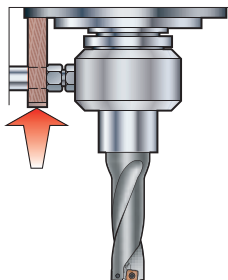
Si se utilizan las brocas fijas, por ejemplo en un torno, se debe alinear el centro de la broca con el centro del husillo.

**Posibilidades de taladrado fijo con CoroDrill 880**

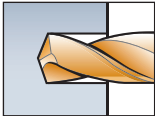
Cuando se utilizan brocas fijas, puede taladrarse un agujero de una sola pasada a la vez que se realiza una operación de achaflanado. También pueden producirse agujeros más grandes que el diámetro de la broca con CoroDrill 880.

**Información sobre seguridad**

Cuando se taladran agujeros pasantes en piezas rotativas con una broca con plaquitas intercambiables, al ser atravesada la pieza por la broca se crea un disco que puede salir disparado a veces a gran velocidad por las mordazas y provocar accidentes. Por ello se recomienda que se coloque una protección adecuada en el plato.

**Tope de seguridad**

Si el refrigerante contiene restos de virutas, las ranuras de sellado pueden agarrotarse y el alojamiento comenzará a girar. Con ello los tubos de suministro girarán con el alojamiento, pudiendo provocar un grave accidente. Debe utilizarse siempre un tope de seguridad.



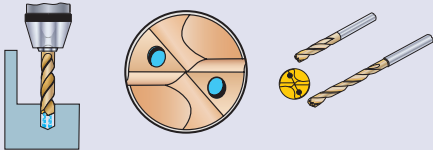
CoroDrill® Delta C

Brocas integrales de metal duro para producir agujeros de calidad poco profundos



Primera elección

Taladrado con suministro de refrigerante interno

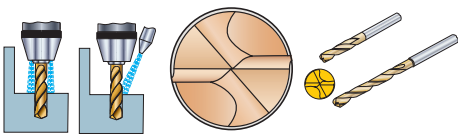


Refrigerante interno

Para obtener unos excelentes resultados, recomendamos utilizar la broca CoroDrill Delta-C con refrigerante interno. Una sujeción rígida y segura, así como una transmisión de par de calidad son factores claves para aumentar la producción y la vida de la herramienta.

Complemento

Taladrado con suministro de refrigerante externo



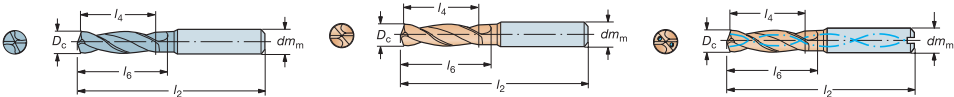
Suministro de refrigerante externo

Se recomiendan las mismas precauciones en operaciones con suministro de refrigerante externo.

Áreas de aplicación y calidades

| ISO/ANSI              |   | $D_c^*$   | Diámetros de la broca / Calidades |        |                  |        |
|-----------------------|---|-----------|-----------------------------------|--------|------------------|--------|
|                       |   |           | Primera elección                  |        | Elección general |        |
| Acero                 | P | 3-20      | R840-                             | GC1220 | R840-            | GC1220 |
| Acero inoxidable      | M | 3-16 (20) | R846-                             | GC1220 | R840-            | GC1220 |
| Fundición             | K | 3-20      | R842-                             | GC1210 | R840-            | GC1220 |
| Material no férreo    | N | 3-14 (20) | R850-                             | N20D   | R840-            | GC1220 |
| Aleaciones de titanio | S | 3-16 (20) | R846-                             | GC1220 | R840-            | GC1220 |
| Material templado     | H | 3-20      | R840-                             | GC1220 | R840-            | GC1220 |

Planos de dimensiones e información sobre pedido



Ejemplo: R840-0300-x0-AyA

Cuando realice el pedido, sustituya "x" en el código por:

3 para 2-3 x  $D_c$

5 para 4-5 x  $D_c$

7 para 6-7 x  $D_c$

Cambie "y" en el código por:

0 para suministro de refrigerante externo

1 para suministro de refrigerante interno

Ejemplo en código completo:

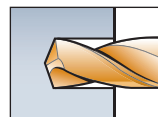
R840-0300-30-A1A 1220

**CoroDrill® Delta C – R840**

Diámetro de la broca 3 – 20 mm

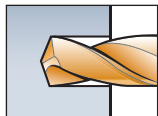
Profundidad máx del agujero: 2-7 x diámetro de la broca ( $D_c$ )

Mango cilíndrico



| $D_c$ mm | $dm_m$ | Código de pedido | GC1220          |                 | 2 - 3 x $D_c$ |       |       | 4 - 5 x $D_c$ |       |       | 6 - 7 x $D_c$ |       |       |
|----------|--------|------------------|-----------------|-----------------|---------------|-------|-------|---------------|-------|-------|---------------|-------|-------|
|          |        |                  | 0 <sup>1)</sup> | 1 <sup>2)</sup> | $l_2$         | $l_4$ | $l_6$ | $l_2$         | $l_4$ | $l_6$ | $l_2$         | $l_4$ | $l_6$ |
| 3.00     | 6.0    | R840-0300-x0-AyA | ☆               | ★               | 62            | 13    | 20    | 66            | 20    | 28    | –             | –     | –     |
| 3.10     | 6.0    | 0310-x0-AyA      | ☆               | ★               | 62            | 13    | 20    | 66            | 20    | 28    | –             | –     | –     |
| 3.17     | 6.0    | 0317-x0-AyA      | –               | ★               | 62            | 13    | 20    | 66            | 20    | 28    | –             | –     | –     |
| 3.20     | 6.0    | 0320-x0-AyA      | ☆               | ★               | 62            | 13    | 20    | 66            | 20    | 28    | –             | –     | –     |
| 3.30     | 6.0    | 0330-x0-AyA      | ☆               | ★               | 62            | 13    | 20    | 66            | 20    | 28    | –             | –     | –     |
| 3.38     | 6.0    | 0338-x0-AyA      | ☆               | –               | –             | –     | –     | 66            | 20    | 28    | –             | –     | –     |
| 3.40     | 6.0    | 0340-x0-AyA      | ☆               | ★               | 62            | 13    | 20    | 66            | 20    | 28    | –             | –     | –     |
| 3.45     | 6.0    | 0345-x0-AyA      | –               | ★               | 62            | 14    | 20    | 66            | 20    | 28    | –             | –     | –     |
| 3.50     | 6.0    | 0350-x0-AyA      | ☆               | ★               | 62            | 14    | 20    | 66            | 20    | 28    | –             | –     | –     |
| 3.55     | 6.0    | 0355-x0-AyA      | –               | ★               | 62            | 14    | 20    | 66            | 20    | 28    | –             | –     | –     |
| 3.57     | 6.0    | 0357-x0-AyA      | –               | ★               | 62            | 14    | 20    | 66            | 20    | 28    | –             | –     | –     |
| 3.60     | 6.0    | R840-0360-x0-AyA | ☆               | ★               | 62            | 14    | 20    | 66            | 20    | 28    | –             | –     | –     |
| 3.70     | 6.0    | 0370-x0-AyA      | ☆               | ★               | 62            | 14    | 20    | 66            | 20    | 28    | –             | –     | –     |
| 3.80     | 6.0    | 0380-x0-AyA      | ☆               | ★               | 62            | 14    | 20    | 66            | 20    | 28    | –             | –     | –     |
| 3.90     | 6.0    | 0390-x0-AyA      | ☆               | ★               | 62            | 14    | 20    | 66            | 20    | 28    | –             | –     | –     |
| 3.97     | 6.0    | 0397-x0-AyA      | –               | ★               | 66            | 17    | 24    | 74            | 27    | 36    | –             | –     | –     |
| 4.00     | 6.0    | 0400-x0-AyA      | ☆               | ★               | 66            | 17    | 24    | 74            | 27    | 36    | –             | –     | –     |
| 4.10     | 6.0    | 0410-x0-AyA      | ☆               | ★               | 66            | 17    | 24    | 74            | 27    | 36    | –             | –     | –     |
| 4.20     | 6.0    | 0420-x0-AyA      | ☆               | ★               | 66            | 17    | 24    | 74            | 27    | 36    | –             | –     | –     |
| 4.30     | 6.0    | 0430-x0-AyA      | ☆               | ★               | 66            | 17    | 24    | 74            | 27    | 36    | –             | –     | –     |
| 4.36     | 6.0    | 0436-x0-AyA      | –               | ★               | 66            | 17    | 24    | 74            | 27    | 36    | –             | –     | –     |
| 4.40     | 6.0    | R840-0440-x0-AyA | ☆               | ★               | 66            | 17    | 24    | 74            | 27    | 36    | –             | –     | –     |
| 4.50     | 6.0    | 0450-x0-AyA      | ☆               | ★               | 66            | 17    | 24    | 74            | 27    | 36    | –             | –     | –     |
| 4.55     | 6.0    | 0455-x0-AyA      | –               | ★               | 66            | 17    | 24    | 74            | 27    | 36    | –             | –     | –     |
| 4.60     | 6.0    | 0460-x0-AyA      | ☆               | ★               | 66            | 17    | 24    | 74            | 27    | 36    | –             | –     | –     |
| 4.70     | 6.0    | 0470-x0-AyA      | ☆               | ★               | 66            | 17    | 24    | 74            | 27    | 36    | –             | –     | –     |
| 4.76     | 6.0    | 0476-x0-AyA      | –               | ★               | 66            | 18    | 28    | 74            | 27    | 36    | –             | –     | –     |
| 4.80     | 6.0    | 0480-x0-AyA      | ☆               | ★               | 66            | 18    | 28    | 74            | 27    | 36    | –             | –     | –     |
| 4.90     | 6.0    | 0490-x0-AyA      | ☆               | ★               | 66            | 18    | 28    | 82            | 34    | 44    | –             | –     | –     |
| 5.00     | 6.0    | R840-0500-x0-AyA | ☆               | ★               | 66            | 18    | 28    | 82            | 35    | 44    | 93            | 42    | 50    |
| 5.10     | 6.0    | 0510-x0-AyA      | ☆               | ★               | 66            | 18    | 28    | 82            | 35    | 44    | 93            | 42    | 50    |
| 5.16     | 6.0    | 0516-x0-AyA      | –               | ★               | 66            | 18    | 28    | 82            | 35    | 44    | 93            | 42    | 50    |
| 5.20     | 6.0    | 0520-x0-AyA      | ☆               | ★               | 66            | 18    | 28    | 82            | 35    | 44    | 93            | 42    | 50    |
| 5.25     | 6.0    | 0525-x0-AyA      | –               | ★               | –             | –     | –     | 82            | 35    | 44    | –             | –     | –     |
| 5.30     | 6.0    | 0530-x0-AyA      | ☆               | ★               | 66            | 18    | 28    | 82            | 35    | 44    | 93            | 42    | 50    |
| 5.40     | 6.0    | 0540-x0-AyA      | ☆               | ★               | 66            | 18    | 28    | 82            | 35    | 44    | 93            | 42    | 50    |
| 5.50     | 6.0    | 0550-x0-AyA      | ☆               | ★               | 66            | 19    | 28    | 82            | 35    | 44    | 93            | 42    | 50    |
| 5.55     | 6.0    | 0555-x0-AyA      | –               | ★               | –             | –     | –     | 82            | 35    | 44    | –             | –     | –     |
| 5.56     | 6.0    | 0556-x0-AyA      | –               | ★               | 66            | 19    | 28    | 82            | 35    | 44    | 93            | 42    | 50    |
| 5.60     | 6.0    | R840-0560-x0-AyA | ☆               | ★               | 66            | 19    | 28    | 82            | 35    | 44    | 93            | 42    | 50    |
| 5.70     | 6.0    | 0570-x0-AyA      | ☆               | ★               | 66            | 19    | 28    | 82            | 35    | 44    | 93            | 42    | 50    |
| 5.80     | 6.0    | 0580-x0-AyA      | ☆               | ★               | 66            | 19    | 28    | 82            | 35    | 44    | 93            | 42    | 50    |
| 5.90     | 6.0    | 0590-x0-AyA      | ☆               | ★               | 66            | 19    | 28    | 82            | 35    | 44    | 93            | 42    | 50    |
| 5.95     | 6.0    | 0595-x0-AyA      | –               | ★               | 66            | 19    | 28    | 82            | 35    | 44    | 93            | 42    | 50    |
| 6.00     | 6.0    | 0600-x0-AyA      | ☆               | ★               | 66            | 19    | 28    | 82            | 35    | 44    | 93            | 49    | 50    |
| 6.10     | 8.0    | 0610-x0-AyA      | ☆               | ★               | 79            | 22    | 34    | 91            | 39    | 53    | 105           | 49    | 59    |
| 6.20     | 8.0    | 0620-x0-AyA      | ☆               | ★               | 79            | 22    | 34    | 91            | 39    | 53    | 105           | 49    | 59    |
| 6.30     | 8.0    | 0630-x0-AyA      | ☆               | ★               | 79            | 22    | 34    | 91            | 39    | 53    | 105           | 49    | 59    |
| 6.35     | 8.0    | 0635-x0-AyA      | –               | ★               | 79            | 22    | 34    | 91            | 39    | 53    | 105           | 49    | 59    |

<sup>1)</sup> Suministro de refrigerante externo.<sup>2)</sup> Suministro de refrigerante interno.

**CoroDrill® Delta C – R840**

Diámetro de la broca 3 – 20 mm

Profundidad máx del agujero: 2-7 x diámetro de la broca ( $D_c$ )

Mango cilíndrico



| $D_c$ mm | $dm_m$ | Código de pedido | GC1220<br>0 <sup>1)</sup> 1 <sup>2)</sup> |   | 2 - 3 x $D_c$ |       |       | 4 - 5 x $D_c$ |       |       | 6 - 7 x $D_c$ |       |       |
|----------|--------|------------------|-------------------------------------------|---|---------------|-------|-------|---------------|-------|-------|---------------|-------|-------|
|          |        |                  | ☆                                         | ★ | $l_2$         | $l_4$ | $l_6$ | $l_2$         | $l_4$ | $l_6$ | $l_2$         | $l_4$ | $l_6$ |
| 6.40     | 8.0    | R840-0640-x0-AyA | ☆                                         | ★ | 79            | 22    | 34    | 91            | 39    | 53    | 105           | 49    | 59    |
| 6.50     | 8.0    | 0650-x0-AyA      | ☆                                         | ★ | 79            | 22    | 34    | 91            | 39    | 53    | 105           | 49    | 59    |
| 6.60     | 8.0    | 0660-x0-AyA      | ☆                                         | ★ | 79            | 22    | 34    | 91            | 39    | 53    | 105           | 49    | 59    |
| 6.70     | 8.0    | 0670-x0-AyA      | ☆                                         | ★ | 79            | 22    | 34    | 91            | 39    | 53    | 105           | 49    | 59    |
| 6.75     | 8.0    | 0675-x0-AyA      | —                                         | ★ | 79            | 22    | 34    | 91            | 39    | 53    | 105           | 49    | 59    |
| 6.80     | 8.0    | 0680-x0-AyA      | ☆                                         | ★ | 79            | 22    | 34    | 91            | 39    | 53    | 105           | 49    | 59    |
| 6.90     | 8.0    | 0690-x0-AyA      | ☆                                         | ★ | 79            | 22    | 34    | 91            | 39    | 53    | 105           | 49    | 59    |
| 7.00     | 8.0    | 0700-x0-AyA      | ☆                                         | ★ | 79            | 22    | 34    | 91            | 40    | 53    | 105           | 49    | 59    |
| 7.10     | 8.0    | 0710-x0-AyA      | ☆                                         | ★ | 79            | 28    | 41    | 91            | 40    | 53    | 105           | 56    | 67    |
| 7.14     | 8.0    | 0714-x0-AyA      | —                                         | ★ | 79            | 28    | 41    | 91            | 40    | 53    | 105           | 56    | 67    |
| 7.20     | 8.0    | R840-0720-x0-AyA | ☆                                         | ★ | 79            | 28    | 41    | 91            | 40    | 53    | 105           | 56    | 67    |
| 7.30     | 8.0    | 0730-x0-AyA      | ☆                                         | ★ | 79            | 28    | 41    | 91            | 40    | 53    | 105           | 56    | 67    |
| 7.40     | 8.0    | 0740-x0-AyA      | ☆                                         | ★ | 79            | 28    | 41    | 91            | 40    | 53    | 105           | 56    | 67    |
| 7.50     | 8.0    | 0750-x0-AyA      | ☆                                         | ★ | 79            | 28    | 41    | 91            | 40    | 53    | 105           | 56    | 67    |
| 7.54     | 8.0    | 0754-x0-AyA      | —                                         | ★ | 79            | 28    | 41    | 91            | 40    | 53    | 105           | 56    | 67    |
| 7.60     | 8.0    | 0760-x0-AyA      | ☆                                         | ★ | 79            | 28    | 41    | 91            | 40    | 53    | 105           | 56    | 67    |
| 7.70     | 8.0    | 0770-x0-AyA      | ☆                                         | ★ | 79            | 28    | 41    | 91            | 40    | 53    | 105           | 56    | 67    |
| 7.80     | 8.0    | 0780-x0-AyA      | ☆                                         | ★ | 79            | 28    | 41    | 91            | 40    | 53    | 105           | 56    | 67    |
| 7.90     | 8.0    | 0790-x0-AyA      | ☆                                         | ★ | 79            | 28    | 41    | 91            | 40    | 53    | 105           | 56    | 67    |
| 7.94     | 8.0    | 0794-x0-AyA      | —                                         | ★ | 79            | 28    | 41    | 91            | 40    | 53    | 105           | 56    | 67    |
| 8.00     | 8.0    | R840-0800-x0-AyA | ☆                                         | ★ | 79            | 28    | 41    | 91            | 40    | 53    | 105           | 56    | 67    |
| 8.10     | 10.0   | 0810-x0-AyA      | ☆                                         | ★ | 89            | 30    | 47    | 103           | 44    | 61    | 120           | 62    | 75    |
| 8.15     | 10.0   | 0815-x0-AyA      | —                                         | ★ | —             | —     | —     | 103           | 44    | 61    | —             | —     | —     |
| 8.20     | 10.0   | 0820-x0-AyA      | ☆                                         | ★ | 89            | 30    | 47    | 103           | 44    | 61    | 120           | 62    | 75    |
| 8.30     | 10.0   | 0830-x0-AyA      | ☆                                         | ★ | 89            | 30    | 47    | 103           | 44    | 61    | 120           | 62    | 75    |
| 8.33     | 10.0   | 0833-x0-AyA      | —                                         | ★ | 89            | 30    | 47    | 103           | 44    | 61    | 120           | 62    | 75    |
| 8.40     | 10.0   | 0840-x0-AyA      | ☆                                         | ★ | 89            | 30    | 47    | 103           | 44    | 61    | 120           | 62    | 75    |
| 8.50     | 10.0   | 0850-x0-AyA      | ☆                                         | ★ | 89            | 30    | 47    | 103           | 44    | 61    | 120           | 62    | 75    |
| 8.60     | 10.0   | 0860-x0-AyA      | ☆                                         | ★ | 89            | 30    | 47    | 103           | 44    | 61    | 120           | 62    | 75    |
| 8.70     | 10.0   | 0870-x0-AyA      | ☆                                         | ★ | 89            | 30    | 47    | 103           | 44    | 61    | 120           | 62    | 75    |
| 8.73     | 10.0   | R840-0873-x0-AyA | —                                         | ★ | 89            | 30    | 47    | 103           | 44    | 61    | 120           | 62    | 75    |
| 8.80     | 10.0   | 0880-x0-AyA      | ☆                                         | ★ | 89            | 30    | 47    | 103           | 44    | 61    | 120           | 62    | 75    |
| 8.90     | 10.0   | 0890-x0-AyA      | ☆                                         | ★ | 89            | 30    | 47    | 103           | 45    | 61    | 120           | 62    | 75    |
| 9.00     | 10.0   | 0900-x0-AyA      | ☆                                         | ★ | 89            | 31    | 47    | 103           | 45    | 61    | 133           | 70    | 84    |
| 9.10     | 10.0   | 0910-x0-AyA      | ☆                                         | ★ | 89            | 31    | 47    | 103           | 45    | 61    | 133           | 70    | 84    |
| 9.13     | 10.0   | 0913-x0-AyA      | —                                         | ★ | 89            | 31    | 47    | 103           | 45    | 61    | 133           | 70    | 84    |
| 9.20     | 10.0   | 0920-x0-AyA      | ☆                                         | ★ | 89            | 31    | 47    | 103           | 45    | 61    | 133           | 70    | 84    |
| 9.30     | 10.0   | 0930-x0-AyA      | ☆                                         | ★ | 89            | 31    | 47    | 103           | 45    | 61    | 133           | 70    | 84    |
| 9.40     | 10.0   | 0940-x0-AyA      | ☆                                         | ★ | 89            | 31    | 47    | 103           | 45    | 61    | 133           | 70    | 84    |
| 9.50     | 10.0   | 0950-x0-AyA      | ☆                                         | ★ | 89            | 31    | 47    | 103           | 45    | 61    | 133           | 70    | 84    |
| 9.52     | 10.0   | R840-0952-x0-AyA | —                                         | ★ | 89            | 31    | 47    | 103           | 45    | 61    | 133           | 70    | 84    |
| 9.60     | 10.0   | 0960-x0-AyA      | ☆                                         | ★ | 89            | 31    | 47    | 103           | 45    | 61    | 133           | 70    | 84    |
| 9.70     | 10.0   | 0970-x0-AyA      | ☆                                         | ★ | 89            | 31    | 47    | 103           | 45    | 61    | 133           | 70    | 84    |
| 9.80     | 10.0   | 0980-x0-AyA      | ☆                                         | ★ | 89            | 31    | 47    | 103           | 45    | 61    | 133           | 70    | 84    |
| 9.90     | 10.0   | 0990-x0-AyA      | ☆                                         | ★ | 89            | 31    | 47    | 103           | 45    | 61    | 133           | 70    | 84    |
| 9.92     | 10.0   | 0992-x0-AyA      | —                                         | ★ | 89            | 31    | 47    | 103           | 45    | 61    | 133           | 70    | 84    |
| 10.00    | 12.0   | 1000-x0-AyA      | ☆                                         | ★ | 89            | 31    | 47    | 103           | 45    | 61    | 133           | 76    | 84    |
| 10.10    | 12.0   | 1010-x0-AyA      | ☆                                         | ★ | 102           | 34    | 55    | 118           | 50    | 71    | 140           | 76    | 91    |
| 10.20    | 12.0   | 1020-x0-AyA      | ☆                                         | ★ | 102           | 34    | 55    | 118           | 50    | 71    | 140           | 76    | 91    |

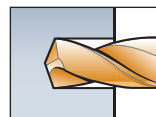
<sup>1)</sup> Suministro de refrigerante externo.<sup>2)</sup> Suministro de refrigerante interno.

**CoroDrill® Delta C – R840**

Diámetro de la broca 3 – 20 mm

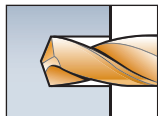
Profundidad máx del agujero: 2-7 x diámetro de la broca ( $D_c$ )

Mango cilíndrico



| $D_c$ mm | $dm_m$ | Código de pedido | GC1220          |                 | 2 - 3 x $D_c$ |       |       | 4 - 5 x $D_c$ |       |       | 6 - 7 x $D_c$ |       |       |
|----------|--------|------------------|-----------------|-----------------|---------------|-------|-------|---------------|-------|-------|---------------|-------|-------|
|          |        |                  | 0 <sup>1)</sup> | 1 <sup>2)</sup> | $l_2$         | $l_4$ | $l_6$ | $l_2$         | $l_4$ | $l_6$ | $l_2$         | $l_4$ | $l_6$ |
| 10.30    | 12.0   | R840-1030-x0-AyA | ☆               | ★               | 102           | 34    | 55    | 118           | 50    | 71    | 140           | 76    | 91    |
| 10.32    | 12.0   | 1032-x0-AyA      | —               | ★               | 102           | 34    | 55    | 118           | 50    | 71    | 140           | 76    | 91    |
| 10.40    | 12.0   | 1040-x0-AyA      | ☆               | ★               | 102           | 34    | 55    | 118           | 50    | 71    | 140           | 76    | 91    |
| 10.50    | 12.0   | 1050-x0-AyA      | ☆               | ★               | 102           | 34    | 55    | 118           | 50    | 71    | 140           | 76    | 91    |
| 10.60    | 12.0   | 1060-x0-AyA      | ☆               | ★               | 102           | 34    | 55    | 118           | 50    | 71    | 140           | 76    | 91    |
| 10.70    | 12.0   | 1070-x0-AyA      | ☆               | ★               | 102           | 34    | 55    | 118           | 50    | 71    | 140           | 76    | 91    |
| 10.71    | 12.0   | 1071-x0-AyA      | —               | ★               | 102           | 34    | 55    | 118           | 50    | 71    | 140           | 76    | 91    |
| 10.80    | 12.0   | 1080-x0-AyA      | ☆               | ★               | 102           | 34    | 55    | 118           | 50    | 71    | 140           | 76    | 91    |
| 10.90    | 12.0   | 1090-x0-AyA      | ☆               | ★               | 102           | 34    | 55    | 118           | 50    | 71    | 140           | 76    | 91    |
| 11.00    | 12.0   | 1100-x0-AyA      | ☆               | ★               | 102           | 35    | 55    | 118           | 51    | 71    | 151           | 84    | 101   |
| 11.10    | 12.0   | R840-1110-x0-AyA | ☆               | ★               | 102           | 35    | 55    | 118           | 51    | 71    | 152           | 84    | 101   |
| 11.11    | 12.0   | 1111-x0-AyA      | ☆               | ★               | 102           | 35    | 55    | 118           | 51    | 71    | 151           | 84    | 101   |
| 11.20    | 12.0   | 1120-x0-AyA      | ☆               | ★               | 102           | 35    | 55    | 118           | 51    | 71    | 151           | 84    | 101   |
| 11.30    | 12.0   | 1130-x0-AyA      | ☆               | ★               | 102           | 35    | 55    | 118           | 51    | 71    | 151           | 84    | 101   |
| 11.40    | 12.0   | 1140-x0-AyA      | ☆               | ★               | 102           | 35    | 55    | 118           | 51    | 71    | 151           | 84    | 101   |
| 11.50    | 12.0   | 1150-x0-AyA      | ☆               | ★               | 102           | 35    | 55    | 118           | 51    | 71    | 151           | 84    | 101   |
| 11.51    | 12.0   | 1151-x0-AyA      | —               | ★               | 102           | 35    | 55    | 118           | 51    | 71    | 151           | 84    | 101   |
| 11.60    | 12.0   | 1160-x0-AyA      | ☆               | ★               | 102           | 35    | 55    | 118           | 51    | 71    | 151           | 84    | 101   |
| 11.70    | 12.0   | 1170-x0-AyA      | ☆               | ★               | 102           | 35    | 55    | 118           | 51    | 71    | 151           | 84    | 101   |
| 11.80    | 12.0   | 1180-x0-AyA      | ☆               | ★               | 102           | 35    | 55    | 118           | 51    | 71    | 151           | 84    | 101   |
| 11.90    | 12.0   | R840-1190-x0-AyA | ☆               | ★               | 102           | 35    | 55    | 118           | 51    | 71    | 151           | 84    | 101   |
| 12.00    | 12.0   | 1200-x0-AyA      | ☆               | ★               | 102           | 35    | 55    | 118           | 51    | 71    | 151           | 84    | 101   |
| 12.10    | 14.0   | 1210-x0-AyA      | ☆               | ★               | 107           | 38    | 60    | 124           | 55    | 77    | 160           | 89    | 107   |
| 12.20    | 14.0   | 1220-x0-AyA      | —               | ★               | 107           | 38    | 60    | 124           | 55    | 77    | 160           | 89    | 107   |
| 12.30    | 14.0   | 1230-x0-AyA      | ☆               | ★               | 107           | 38    | 60    | 124           | 55    | 77    | 160           | 89    | 107   |
| 12.40    | 14.0   | 1240-x0-AyA      | ☆               | ★               | 107           | 38    | 60    | 124           | 55    | 77    | 160           | 89    | 107   |
| 12.50    | 14.0   | 1250-x0-AyA      | —               | ★               | 107           | 38    | 60    | 124           | 55    | 77    | 160           | 89    | 107   |
| 12.60    | 14.0   | 1260-x0-AyA      | ☆               | ★               | 107           | 38    | 60    | 124           | 55    | 77    | 160           | 89    | 107   |
| 12.70    | 14.0   | 1270-x0-AyA      | ☆               | ★               | 107           | 38    | 60    | 124           | 55    | 77    | 160           | 89    | 107   |
| 12.80    | 14.0   | 1280-x0-AyA      | ☆               | ★               | 107           | 38    | 60    | 124           | 55    | 77    | 160           | 89    | 107   |
| 13.00    | 14.0   | R840-1300-x0-AyA | ☆               | ★               | 107           | 39    | 60    | 124           | 56    | 77    | 160           | 89    | 107   |
| 13.10    | 14.0   | 1310-x0-AyA      | —               | ★               | 107           | 39    | 60    | 124           | 56    | 77    | 160           | 89    | 107   |
| 13.25    | 14.0   | 1325-x0-AyA      | ☆               | ★               | 107           | 39    | 60    | 124           | 56    | 77    | 160           | 89    | 107   |
| 13.50    | 14.0   | 1350-x0-AyA      | ☆               | ★               | 107           | 39    | 60    | 124           | 56    | 77    | 160           | 89    | 107   |
| 13.75    | 14.0   | 1375-x0-AyA      | ☆               | ★               | 107           | 39    | 60    | 124           | 56    | 77    | 160           | 89    | 107   |
| 13.80    | 14.0   | 1380-x0-AyA      | ☆               | ★               | 107           | 39    | 60    | 124           | 56    | 77    | 160           | 89    | 107   |
| 13.89    | 14.0   | 1389-x0-AyA      | —               | ★               | 107           | 39    | 60    | 124           | 56    | 77    | 160           | 89    | 107   |
| 14.00    | 14.0   | 1400-x0-AyA      | ☆               | ★               | 107           | 39    | 60    | 124           | 56    | 77    | 160           | 89    | 107   |
| 14.25    | 16.0   | 1425-x0-AyA      | ☆               | ★               | 115           | 41    | 65    | 133           | 59    | 83    | —             | —     | —     |
| 14.29    | 16.0   | 1429-x0-AyA      | —               | ★               | 115           | 41    | 65    | 133           | 59    | 83    | —             | —     | —     |
| 14.50    | 16.0   | R840 1450-x0-AyA | ☆               | ★               | 115           | 41    | 65    | 133           | 59    | 83    | —             | —     | —     |
| 14.69    | 16.0   | 1469-x0-AyA      | —               | ★               | 115           | 41    | 65    | 133           | 59    | 83    | —             | —     | —     |
| 14.75    | 16.0   | 1475-x0-AyA      | ☆               | ★               | 115           | 41    | 65    | 133           | 59    | 83    | —             | —     | —     |
| 14.80    | 16.0   | 1480-x0-AyA      | ☆               | ★               | 115           | 41    | 65    | 133           | 59    | 83    | —             | —     | —     |
| 15.00    | 16.0   | 1500-x0-AyA      | ☆               | ★               | 115           | 42    | 65    | 133           | 60    | 83    | —             | —     | —     |
| 15.50    | 16.0   | 1550-x0-AyA      | ☆               | ★               | 115           | 42    | 65    | 133           | 60    | 83    | —             | —     | —     |
| 15.80    | 16.0   | 1580-x0-AyA      | ☆               | ★               | 115           | 42    | 65    | 133           | 60    | 83    | —             | —     | —     |
| 15.87    | 16.0   | 1587-x0-AyA      | —               | ★               | 115           | 42    | 65    | 133           | 60    | 83    | —             | —     | —     |
| 16.00    | 16.0   | 1600-x0-AyA      | ☆               | ★               | 115           | 42    | 65    | 133           | 60    | 83    | 178           | 105   | 128   |

<sup>1)</sup> Suministro de refrigerante externo.<sup>2)</sup> Suministro de refrigerante interno.

**CoroDrill® Delta C – R840**

Diámetro de la broca 3 – 20 mm

Profundidad máx del agujero: 2-7 x diámetro de la broca ( $D_c$ )

Mango cilíndrico

ISO/ANSI



| $D_c$ mm | $dm_m$ | Código de pedido | GC1220          |                 | 2 - 3 x $D_c$ |       |       | 4 - 5 x $D_c$ |       |       | 6 - 7 x $D_c$ |       |       |
|----------|--------|------------------|-----------------|-----------------|---------------|-------|-------|---------------|-------|-------|---------------|-------|-------|
|          |        |                  | 0 <sup>1)</sup> | 1 <sup>2)</sup> | $l_2$         | $l_4$ | $l_6$ | $l_2$         | $l_4$ | $l_6$ | $l_2$         | $l_4$ | $l_6$ |
| 16.08    | 18.0   | R840-1608-x0-AyA | —               | ★               | 123           | 46    | 73    | 133           | 66    | 93    | —             | —     | —     |
| 16.10    | 18.0   | 1610-x0-AyA      | ☆               | ★               | 123           | 46    | 73    | 143           | 66    | 93    | —             | —     | —     |
| 16.30    | 18.0   | 1630-x0-AyA      | —               | ★               | —             | —     | —     | —             | —     | —     | 187           | 114   | 137   |
| 16.50    | 18.0   | 1650-x0-AyA      | ☆               | ★               | 123           | 46    | 73    | 143           | 66    | 93    | —             | —     | —     |
| 16.80    | 18.0   | 1680-x0-AyA      | ☆               | ★               | 123           | 46    | 73    | 143           | 66    | 93    | —             | —     | —     |
| 17.00    | 18.0   | 1700-x0-AyA      | ☆               | ★               | 123           | 47    | 73    | 143           | 67    | 93    | —             | —     | —     |
| 17.46    | 18.0   | 1746-x0-AyA      | —               | ★               | 123           | 47    | 73    | 143           | 67    | 93    | —             | —     | —     |
| 17.50    | 18.0   | 1750-x0-AyA      | ☆               | ★               | 123           | 47    | 73    | 143           | 67    | 93    | —             | —     | —     |
| 17.80    | 18.0   | 1780-x0-AyA      | ☆               | ★               | 123           | 47    | 73    | 143           | 67    | 93    | —             | —     | —     |
| 18.00    | 18.0   | R840-1800-x0-AyA | ☆               | ★               | 123           | 47    | 73    | 143           | 67    | 93    | —             | —     | —     |
| 18.50    | 20.0   | 1850-x0-AyA      | ☆               | ★               | 131           | 49    | 79    | 153           | 71    | 101   | —             | —     | —     |
| 18.80    | 20.0   | 1880-x0-AyA      | ☆               | ★               | 131           | 49    | 79    | 153           | 71    | 101   | —             | —     | —     |
| 19.00    | 20.0   | 1900-x0-AyA      | ☆               | ★               | 131           | 50    | 79    | 153           | 72    | 101   | —             | —     | —     |
| 19.05    | 20.0   | 1905-x0-AyA      | —               | ★               | 131           | 50    | 79    | 153           | 72    | 101   | —             | —     | —     |
| 19.25    | 20.0   | 1925-x0-AyA      | —               | ★               | 131           | 50    | 79    | 153           | 72    | 101   | —             | —     | —     |
| 19.30    | 20.0   | 1930-x0-AyA      | —               | ★               | 131           | 50    | 79    | 153           | 72    | 101   | —             | —     | —     |
| 19.50    | 20.0   | 1950-x0-AyA      | ☆               | ★               | 131           | 50    | 79    | 153           | 72    | 101   | —             | —     | —     |
| 19.80    | 20.0   | 1980-x0-AyA      | ☆               | ★               | 131           | 50    | 79    | 153           | 72    | 101   | —             | —     | —     |
| 20.00    | 20.0   | 2000-x0-AyA      | ☆               | ★               | 131           | 50    | 79    | 153           | 72    | 101   | —             | —     | —     |

<sup>1)</sup> Suministro de refrigerante externo.<sup>2)</sup> Suministro de refrigerante interno.

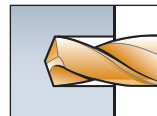


**CoroDrill® Delta C – R842**

Diámetro de la broca 3 – 16 mm

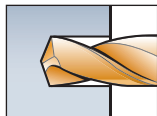
Profundidad máx del agujero: 2-5 x diámetro de la broca ( $D_c$ )

Mango cilíndrico



| $D_c$ mm | $dm_m$ | Código de pedido | GC1210          |                 | 2 - 3 x $D_c$ |       |       | 4 - 5 x $D_c$ |       |       |
|----------|--------|------------------|-----------------|-----------------|---------------|-------|-------|---------------|-------|-------|
|          |        |                  | 0 <sup>1)</sup> | 1 <sup>2)</sup> | $l_2$         | $l_4$ | $l_6$ | $l_2$         | $l_4$ | $l_6$ |
| 3.00     | 6.0    | R842-0300-x0-A0A | ☆               |                 | 62            | 13    | 20    | 66            | 20    | 28    |
| 3.20     | 6.0    | 0320-x0-A0A      | ☆               |                 | 62            | 13    | 20    | 66            | 20    | 28    |
| 3.30     | 6.0    | 0330-x0-A0A      | ☆               |                 | 62            | 13    | 20    | 66            | 20    | 28    |
| 3.38     | 6.0    | 0338-x0-A0A      | ☆               |                 | 62            | 13    | 20    | 66            | 20    | 28    |
| 3.50     | 6.0    | 0350-x0-A0A      | ☆               |                 | 62            | 14    | 20    | 66            | 20    | 28    |
| 4.00     | 6.0    | 0400-x0-A0A      | ☆               |                 | 66            | 17    | 24    | 74            | 27    | 36    |
| 4.10     | 6.0    | 0410-x0-A0A      | ☆               |                 | 66            | 17    | 24    | 74            | 27    | 36    |
| 4.20     | 6.0    | 0420-x0-A0A      | ☆               |                 | 66            | 17    | 24    | 74            | 27    | 36    |
| 4.30     | 6.0    | 0430-x0-A0A      | ☆               |                 | 66            | 17    | 24    | 74            | 27    | 36    |
| 4.50     | 6.0    | 0450-x0-A0A      | ☆               |                 | 66            | 17    | 24    | 74            | 27    | 36    |
| 4.80     | 6.0    | 0480-x0-A0A      | ☆               |                 | 66            | 18    | 28    | 74            | 27    | 36    |
| 5.00     | 6.0    | R842-0500-x0-A0A | ☆               |                 | 66            | 18    | 28    | 82            | 35    | 44    |
| 5.10     | 6.0    | 0510-x0-A0A      | ☆               |                 | 66            | 18    | 28    | 82            | 35    | 44    |
| 5.20     | 6.0    | 0520-x0-A0A      | ☆               |                 | 66            | 18    | 28    | 82            | 35    | 44    |
| 5.30     | 6.0    | 0530-x0-A0A      | ☆               |                 | 66            | 18    | 28    | 82            | 35    | 44    |
| 5.50     | 6.0    | 0550-x0-A0A      | ☆               |                 | 66            | 19    | 28    | 82            | 35    | 44    |
| 5.56     | 6.0    | 0556-x0-A0A      | ☆               |                 | 66            | 19    | 28    | 82            | 35    | 44    |
| 6.00     | 6.0    | 0600-x0-A0A      | ☆               |                 | 66            | 19    | 28    | 82            | 35    | 44    |
| 6.10     | 8.0    | R842-0610-x0-A1A |                 | ☆               | –             | –     | –     | 91            | 39    | 53    |
| 6.20     | 8.0    | 0620-x0-A1A      |                 | ☆               | –             | –     | –     | 91            | 39    | 53    |
| 6.30     | 8.0    | 0630-x0-A1A      |                 | ☆               | 79            | 22    | 34    | 91            | 39    | 53    |
| 6.35     | 8.0    | 0635-x0-A1A      |                 | ☆               | –             | –     | –     | 91            | 39    | 53    |
| 6.50     | 8.0    | 0650-x0-A1A      |                 | ☆               | 79            | 22    | 34    | 91            | 39    | 53    |
| 6.60     | 8.0    | 0660-x0-A1A      |                 | ☆               | –             | –     | –     | 91            | 39    | 53    |
| 6.70     | 8.0    | 0670-x0-A1A      |                 | ☆               | 79            | 22    | 34    | 91            | 39    | 53    |
| 6.80     | 8.0    | 0680-x0-A1A      |                 | ☆               | 79            | 22    | 34    | 91            | 39    | 53    |
| 6.90     | 8.0    | 0690-x0-A1A      |                 | ☆               | 79            | 22    | 34    | 91            | 40    | 53    |
| 7.00     | 8.0    | R842-0700-x0-A1A |                 | ☆               | 79            | 22    | 34    | 91            | 40    | 53    |
| 7.10     | 8.0    | 0710-x0-A1A      |                 | ☆               | –             | –     | –     | 91            | 40    | 53    |
| 7.14     | 8.0    | 0714-x0-A1A      |                 | ☆               | –             | –     | –     | 91            | 40    | 53    |
| 7.40     | 8.0    | 0740-x0-A1A      |                 | ☆               | –             | –     | –     | 91            | 40    | 53    |
| 7.50     | 8.0    | 0750-x0-A1A      |                 | ☆               | 79            | 28    | 41    | 91            | 40    | 53    |
| 7.80     | 8.0    | 0780-x0-A1A      |                 | ☆               | –             | –     | –     | 91            | 40    | 53    |
| 7.94     | 8.0    | 0794-x0-A1A      |                 | ☆               | 79            | 28    | 41    | 91            | 44    | 53    |
| 8.00     | 8.0    | R842-0800-x0-A1A |                 | ☆               | 79            | 28    | 41    | 91            | 44    | 53    |
| 8.10     | 10.0   | 0810-x0-A1A      |                 | ☆               | –             | –     | –     | 103           | 44    | 61    |
| 8.20     | 10.0   | 0820-x0-A1A      |                 | ☆               | 89            | 30    | 47    | 103           | 44    | 61    |
| 8.30     | 10.0   | 0830-x0-A1A      |                 | ☆               | 89            | 30    | 47    | 103           | 44    | 61    |
| 8.40     | 10.0   | 0840-x0-A1A      |                 | ☆               | 89            | 30    | 47    | 103           | 44    | 61    |
| 8.50     | 10.0   | 0850-x0-A1A      |                 | ☆               | 89            | 30    | 47    | 103           | 44    | 61    |
| 8.60     | 10.0   | 0860-x0-A1A      |                 | ☆               | 89            | 30    | 47    | 103           | 44    | 61    |
| 8.70     | 10.0   | 0870-x0-A1A      |                 | ☆               | 89            | 30    | 47    | 103           | 44    | 61    |
| 8.80     | 10.0   | 0880-x0-A1A      |                 | ☆               | –             | –     | –     | 103           | 45    | 61    |
| 8.90     | 10.0   | 0890-x0-A1A      |                 | ☆               | 89            | 30    | 47    | 103           | 45    | 61    |
| 9.00     | 10.0   | R842-0900-x0-A1A |                 | ☆               | 89            | 31    | 47    | 103           | 45    | 61    |
| 9.10     | 10.0   | 0910-x0-A1A      |                 | ☆               | –             | –     | –     | 103           | 45    | 61    |
| 9.30     | 10.0   | 0930-x0-A1A      |                 | ☆               | –             | –     | –     | 103           | 45    | 61    |
| 9.40     | 10.0   | 0940-x0-A1A      |                 | ☆               | –             | –     | –     | 103           | 45    | 61    |
| 9.50     | 10.0   | 0950-x0-A1A      |                 | ☆               | 89            | 31    | 47    | 103           | 45    | 61    |
| 9.52     | 10.0   | 0952-x0-A1A      |                 | ☆               | –             | –     | –     | 103           | 45    | 61    |
| 9.60     | 10.0   | 0960-x0-A1A      |                 | ☆               | –             | –     | –     | 103           | 45    | 61    |
| 9.80     | 10.0   | 0980-x0-A1A      |                 | ☆               | 89            | 31    | 47    | 103           | 45    | 61    |

<sup>1)</sup> Suministro de refrigerante externo.<sup>2)</sup> Suministro de refrigerante interno.



## CoroDrill® Delta C – R842

Diámetro de la broca 3 – 16 mm

Profundidad máx del agujero: 2-5 x diámetro de la broca ( $D_c$ )

Mango cilíndrico

ISO/ANSI



| $D_c$ mm | $d_{m_{in}}$ | Código de pedido | GC1210          |                 | 2 - 3 x $D_c$ |       |       | 4 - 5 x $D_c$ |       |       |
|----------|--------------|------------------|-----------------|-----------------|---------------|-------|-------|---------------|-------|-------|
|          |              |                  | 0 <sup>1)</sup> | 1 <sup>2)</sup> | $l_2$         | $l_4$ | $l_6$ | $l_2$         | $l_4$ | $l_6$ |
| 10.00    | 10.0         | R842-1000-x0-A1A |                 | ☆               | 89            | 31    | 47    | 103           | 45    | 61    |
| 10.10    | 12.0         | 1010-x0-A1A      |                 | ☆               | 102           | 34    | 55    | 118           | 50    | 71    |
| 10.20    | 12.0         | 1020-x0-A1A      |                 | ☆               | 102           | 34    | 55    | 118           | 50    | 71    |
| 10.30    | 12.0         | 1030-x0-A1A      |                 | ☆               | 102           | 34    | 55    | 118           | 50    | 71    |
| 10.40    | 12.0         | 1040-x0-A1A      |                 | ☆               | 102           | 34    | 55    | 118           | 50    | 71    |
| 10.50    | 12.0         | 1050-x0-A1A      |                 | ☆               | 102           | 34    | 55    | 118           | 50    | 71    |
| 10.60    | 12.0         | 1060-x0-A1A      |                 | ☆               | —             | —     | —     | 118           | 50    | 71    |
| 10.70    | 12.0         | 1070-x0-A1A      |                 | ☆               | 102           | 34    | 55    | 118           | 50    | 71    |
| 10.80    | 12.0         | 1080-x0-A1A      |                 | ☆               | 102           | 34    | 55    | 118           | 50    | 71    |
| 11.00    | 12.0         | R842-1100-x0-A1A |                 | ☆               | 102           | 35    | 55    | 118           | 51    | 71    |
| 11.10    | 12.0         | 1110-x0-A1A      |                 | ☆               | —             | —     | —     | 118           | 51    | 71    |
| 11.20    | 12.0         | 1120-x0-A1A      |                 | ☆               | —             | —     | —     | 118           | 51    | 71    |
| 11.50    | 12.0         | 1150-x0-A1A      |                 | ☆               | 102           | 35    | 55    | 118           | 51    | 71    |
| 11.70    | 12.0         | 1170-x0-A1A      |                 | ☆               | —             | —     | —     | 118           | 51    | 71    |
| 11.80    | 12.0         | 1180-x0-A1A      |                 | ☆               | —             | —     | —     | 118           | 51    | 71    |
| 12.00    | 12.0         | R842-1200-x0-A1A |                 | ☆               | 102           | 35    | 55    | 118           | 51    | 71    |
| 12.10    | 14.0         | 1210-x0-A1A      |                 | ☆               | 107           | 38    | 60    | 124           | 55    | 77    |
| 12.20    | 14.0         | 1220-x0-A1A      |                 | ☆               | 107           | 38    | 60    | 124           | 55    | 77    |
| 12.30    | 14.0         | 1230-x0-A1A      |                 | ☆               | 107           | 38    | 60    | 124           | 55    | 77    |
| 12.50    | 14.0         | 1250-x0-A1A      |                 | ☆               | 107           | 38    | 60    | 124           | 55    | 77    |
| 12.70    | 14.0         | 1270-x0-A1A      |                 | ☆               | 107           | 38    | 60    | 124           | 55    | 77    |
| 13.00    | 14.0         | 1300-x0-A1A      |                 | ☆               | 107           | 39    | 60    | 124           | 56    | 77    |
| 13.10    | 14.0         | 1310-x0-A1A      |                 | ☆               | 107           | 39    | 60    | 124           | 56    | 77    |
| 13.25    | 14.0         | 1325-x0-A1A      |                 | ☆               | —             | —     | —     | 124           | 56    | 77    |
| 13.50    | 14.0         | 1350-x0-A1A      |                 | ☆               | 107           | 39    | 60    | 124           | 56    | 77    |
| 14.00    | 14.0         | R842-1400-x0-A1A |                 | ☆               | 107           | 39    | 60    | 124           | 56    | 77    |
| 14.10    | 16.0         | 1410-x0-A1A      |                 | ☆               | 115           | 41    | 65    | 133           | 59    | 83    |
| 14.25    | 16.0         | 1425-x0-A1A      |                 | ☆               | —             | —     | —     | 133           | 59    | 83    |
| 14.29    | 16.0         | 1429-x0-A1A      |                 | ☆               | —             | —     | —     | 133           | 59    | 83    |
| 14.50    | 16.0         | 1450-x0-A1A      |                 | ☆               | 115           | 41    | 65    | 133           | 59    | 83    |
| 15.00    | 16.0         | 1500-x0-A1A      |                 | ☆               | 115           | 42    | 65    | 133           | 60    | 83    |
| 15.50    | 16.0         | 1550-x0-A1A      |                 | ☆               | 115           | 42    | 65    | 133           | 60    | 83    |
| 15.87    | 16.0         | 1587-x0-A1A      |                 | ☆               | 115           | 42    | 65    | 133           | 60    | 83    |
| 16.00    | 16.0         | 1600-x0-A1A      |                 | ☆               | 115           | 42    | 65    | 133           | 60    | 83    |

<sup>1)</sup> Suministro de refrigerante externo.

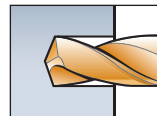
<sup>2)</sup> Suministro de refrigerante interno.

**CoroDrill® Delta C – R846**

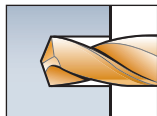
Diámetro de la broca 3 – 12 mm

Profundidad máx del agujero: 2-5 x diámetro de la broca ( $D_c$ )

Mango cilíndrico



| $D_c$ mm | $dm_m$ | Código de pedido | GC1220 | 2 - 3 x $D_c$ |       |       | 4 - 5 x $D_c$ |       |       |
|----------|--------|------------------|--------|---------------|-------|-------|---------------|-------|-------|
|          |        |                  |        | $l_2$         | $l_4$ | $l_6$ | $l_2$         | $l_4$ | $l_6$ |
| 3.00     | 6.0    | R846-0300-x0-A1A | ☆      | 62            | 13    | 20    | 66            | 20    | 28    |
| 4.00     | 6.0    | 0400-x0-A1A      | ☆      | 66            | 17    | 24    | 74            | 27    | 36    |
| 4.30     | 6.0    | 0430-x0-A1A      | ☆      | 66            | 17    | 24    | 74            | 27    | 36    |
| 4.50     | 6.0    | 0450-x0-A1A      | ☆      | 66            | 17    | 24    | 74            | 27    | 36    |
| 4.80     | 6.0    | 0480-x0-A1A      | ☆      | 66            | 18    | 28    | 74            | 27    | 36    |
| 5.00     | 6.0    | 0500-x0-A1A      | ☆      | 66            | 18    | 28    | 82            | 35    | 44    |
| 5.10     | 6.0    | 0510-x0-A1A      | ☆      | 66            | 18    | 28    | —             | —     | —     |
| 5.50     | 6.0    | 0550-x0-A1A      | ☆      | 66            | 19    | 28    | —             | —     | —     |
| 5.55     | 6.0    | 0555-x0-A1A      | ☆      | 66            | 19    | 28    | —             | —     | —     |
| 5.60     | 6.0    | 0560-x0-A1A      | ☆      | 66            | 19    | 28    | —             | —     | —     |
| 5.80     | 6.0    | 0580-x0-A1A      | ☆      | 66            | 19    | 28    | 82            | 35    | 44    |
| 6.00     | 6.0    | R846-0600-x0-A1A | ☆      | 66            | 19    | 28    | 82            | 35    | 44    |
| 6.50     | 8.0    | 0650-x0-A1A      | ☆      | 79            | 22    | 34    | —             | —     | —     |
| 6.60     | 8.0    | 0660-x0-A1A      | ☆      | 79            | 22    | 34    | —             | —     | —     |
| 6.70     | 8.0    | 0670-x0-A1A      | ☆      | 79            | 22    | 34    | —             | —     | —     |
| 6.80     | 8.0    | 0680-x0-A1A      | ☆      | —             | —     | —     | 91            | 39    | 53    |
| 6.90     | 8.0    | 0690-x0-A1A      | ☆      | 79            | 22    | 34    | —             | —     | —     |
| 7.00     | 8.0    | 0700-x0-A1A      | ☆      | 79            | 22    | 34    | 91            | 40    | 53    |
| 7.10     | 8.0    | 0710-x0-A1A      | ☆      | 79            | 28    | 41    | —             | —     | —     |
| 7.30     | 8.0    | 0730-x0-A1A      | ☆      | 79            | 28    | 41    | —             | —     | —     |
| 7.40     | 8.0    | 0740-x0-A1A      | ☆      | 79            | 28    | 41    | —             | —     | —     |
| 7.50     | 8.0    | 0750-x0-A1A      | ☆      | 79            | 28    | 41    | —             | —     | —     |
| 8.00     | 8.0    | R846-0800-x0-A1A | ☆      | 79            | 28    | 41    | 91            | 40    | 53    |
| 8.10     | 10.0   | 0810-x0-A1A      | ☆      | 89            | 30    | 47    | —             | —     | —     |
| 8.20     | 10.0   | 0820-x0-A1A      | ☆      | 89            | 30    | 47    | —             | —     | —     |
| 8.50     | 10.0   | 0850-x0-A1A      | ☆      | 89            | 30    | 47    | 103           | 44    | 61    |
| 8.60     | 10.0   | 0860-x0-A1A      | ☆      | 89            | 30    | 47    | —             | —     | —     |
| 8.70     | 10.0   | 0870-x0-A1A      | ☆      | 89            | 30    | 47    | —             | —     | —     |
| 9.00     | 10.0   | 0900-x0-A1A      | ☆      | 89            | 31    | 47    | 103           | 45    | 61    |
| 9.30     | 10.0   | 0930-x0-A1A      | ☆      | —             | —     | —     | 103           | 45    | 61    |
| 9.50     | 10.0   | 0950-x0-A1A      | ☆      | 89            | 31    | 47    | —             | —     | —     |
| 9.60     | 10.0   | 0960-x0-A1A      | ☆      | 89            | 31    | 47    | 103           | 45    | 61    |
| 9.80     | 10.0   | 0980-x0-A1A      | ☆      | —             | —     | —     | 103           | 45    | 61    |
| 10.00    | 10.0   | 1000-x0-A1A      | ☆      | 89            | 31    | 47    | 103           | 45    | 61    |
| 10.20    | 12.0   | 1020-x0-A1A      | ☆      | 102           | 34    | 55    | 118           | 50    | 71    |
| 10.50    | 12.0   | 1050-x0-A1A      | ☆      | 102           | 34    | 55    | —             | —     | —     |
| 11.00    | 12.0   | 1100-x0-A1A      | ☆      | 102           | 35    | 55    | 118           | 51    | 71    |
| 12.00    | 12.0   | 1200-x0-A1A      | ☆      | 102           | 35    | 55    | 118           | 51    | 71    |



## CoroDrill® Delta C – R850

Diámetro de la broca 3 – 14 mm

Profundidad máx del agujero: 2-3, 6-7 x diámetro de la broca ( $D_c$ )

Mango cilíndrico

ISO/ANSI



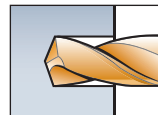
| $D_c$ mm | $dm_m$ | Código de pedido | N20D | 2 - 3 x $D_c$ |       |       | 6 - 7 x $D_c$ |       |       |
|----------|--------|------------------|------|---------------|-------|-------|---------------|-------|-------|
|          |        |                  |      | $l_2$         | $l_4$ | $l_6$ | $l_2$         | $l_4$ | $l_6$ |
| 5.00     | 6.0    | R850-0500-x0-A1A | ☆    | 66            | 18    | 28    | 93            | 42    | 50    |
| 5.10     | 6.0    | 0510-x0-A1A      | ☆    | 66            | 18    | 28    | 93            | 42    | 50    |
| 5.16     | 6.0    | 0516-x0-A1A      | ☆    | 66            | 18    | 28    | 93            | 42    | 50    |
| 5.20     | 6.0    | 0520-x0-A1A      | ☆    | 66            | 18    | 28    | 93            | 42    | 50    |
| 5.30     | 6.0    | 0530-x0-A1A      | ☆    | 66            | 18    | 28    | 93            | 42    | 50    |
| 5.40     | 6.0    | 0540-x0-A1A      | ☆    | 66            | 18    | 28    | 93            | 42    | 50    |
| 5.50     | 6.0    | 0550-x0-A1A      | ☆    | 66            | 19    | 28    | 93            | 42    | 50    |
| 5.56     | 6.0    | 0556-x0-A1A      | ☆    | 66            | 19    | 28    | 93            | 42    | 50    |
| 5.60     | 6.0    | 0560-x0-A1A      | ☆    | 66            | 19    | 28    | 93            | 42    | 50    |
| 5.70     | 6.0    | 0570-x0-A1A      | ☆    | 66            | 19    | 28    | 93            | 42    | 50    |
| 5.80     | 6.0    | 0580-x0-A1A      | ☆    | 66            | 19    | 28    | 93            | 42    | 50    |
| 5.90     | 6.0    | 0590-x0-A1A      | ☆    | 66            | 19    | 28    | 93            | 42    | 50    |
| 5.95     | 6.0    | 0595-x0-A1A      | ☆    | 66            | 19    | 28    | 93            | 42    | 50    |
| 6.00     | 8.0    | R850-0600-x0-A1A | ☆    | 66            | 19    | 28    | 93            | 42    | 50    |
| 6.10     | 8.0    | 0610-x0-A1A      | ☆    | 79            | 22    | 34    | 105           | 49    | 59    |
| 6.20     | 8.0    | 0620-x0-A1A      | ☆    | 79            | 22    | 34    | 105           | 49    | 59    |
| 6.30     | 8.0    | 0630-x0-A1A      | ☆    | 79            | 22    | 34    | 105           | 49    | 59    |
| 6.35     | 8.0    | 0635-x0-A1A      | ☆    | 79            | 22    | 34    | 105           | 49    | 59    |
| 6.40     | 8.0    | 0640-x0-A1A      | ☆    | 79            | 22    | 34    | 105           | 49    | 59    |
| 6.50     | 8.0    | 0650-x0-A1A      | ☆    | 79            | 22    | 34    | 105           | 49    | 59    |
| 6.60     | 8.0    | 0660-x0-A1A      | ☆    | 79            | 22    | 34    | 105           | 49    | 59    |
| 6.70     | 8.0    | 0670-x0-A1A      | ☆    | 79            | 22    | 34    | 105           | 49    | 59    |
| 6.75     | 8.0    | 0675-x0-A1A      | ☆    | 79            | 22    | 34    | 105           | 49    | 59    |
| 6.80     | 8.0    | 0680-x0-A1A      | ☆    | 79            | 22    | 34    | 105           | 49    | 59    |
| 6.90     | 8.0    | 0690-x0-A1A      | ☆    | 79            | 22    | 34    | 105           | 49    | 59    |
| 7.00     | 8.0    | R850-0700-x0-A1A | ☆    | 79            | 22    | 34    | 105           | 49    | 59    |
| 7.10     | 8.0    | 0710-x0-A1A      | ☆    | 79            | 28    | 41    | 105           | 56    | 67    |
| 7.14     | 8.0    | 0714-x0-A1A      | ☆    | 79            | 28    | 41    | 105           | 56    | 67    |
| 7.20     | 8.0    | 0720-x0-A1A      | ☆    | 79            | 28    | 41    | 105           | 56    | 67    |
| 7.30     | 8.0    | 0730-x0-A1A      | ☆    | 79            | 28    | 41    | 105           | 56    | 67    |
| 7.40     | 8.0    | 0740-x0-A1A      | ☆    | 79            | 28    | 41    | 105           | 56    | 67    |
| 7.50     | 8.0    | 0750-x0-A1A      | ☆    | 79            | 28    | 41    | 105           | 56    | 67    |
| 7.60     | 8.0    | 0760-x0-A1A      | ☆    | 79            | 28    | 41    | 105           | 56    | 67    |
| 7.70     | 8.0    | 0770-x0-A1A      | ☆    | 79            | 28    | 41    | —             | —     | —     |
| 7.80     | 8.0    | 0780-x0-A1A      | ☆    | 79            | 28    | 41    | 105           | 56    | 67    |
| 7.90     | 8.0    | 0790-x0-A1A      | ☆    | 79            | 28    | 41    | 105           | 56    | 67    |
| 7.94     | 8.0    | 0794-x0-A1A      | ☆    | 79            | 28    | 41    | 105           | 56    | 67    |
| 8.00     | 8.0    | R850-0800-x0-A1A | ☆    | 79            | 28    | 41    | 105           | 56    | 67    |
| 8.10     | 10.0   | 0810-x0-A1A      | ☆    | 89            | 30    | 47    | 120           | 62    | 75    |
| 8.20     | 10.0   | 0820-x0-A1A      | ☆    | 89            | 30    | 47    | 120           | 62    | 75    |
| 8.30     | 10.0   | 0830-x0-A1A      | ☆    | 89            | 30    | 47    | 120           | 62    | 75    |
| 8.33     | 10.0   | 0833-x0-A1A      | ☆    | 89            | 30    | 47    | —             | —     | —     |
| 8.40     | 10.0   | 0840-x0-A1A      | ☆    | 89            | 30    | 47    | 120           | 62    | 75    |
| 8.50     | 10.0   | 0850-x0-A1A      | ☆    | 89            | 30    | 47    | 120           | 62    | 75    |
| 8.60     | 10.0   | 0860-x0-A1A      | ☆    | 89            | 30    | 47    | 120           | 62    | 75    |
| 8.70     | 10.0   | 0870-x0-A1A      | ☆    | 89            | 30    | 47    | 120           | 62    | 75    |
| 8.73     | 10.0   | 0873-x0-A1A      | ☆    | 89            | 30    | 47    | 120           | 62    | 75    |
| 8.80     | 10.0   | 0880-x0-A1A      | ☆    | 89            | 30    | 47    | 120           | 62    | 75    |
| 8.90     | 10.0   | 0890-x0-A1A      | ☆    | —             | —     | —     | 120           | 62    | 75    |

**CoroDrill® Delta C – R850**

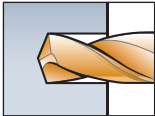
Diámetro de la broca 3 – 14 mm

Profundidad máx del agujero: 2-3, 6-7 x diámetro de la broca ( $D_c$ )

Mango cilíndrico



| $D_c$ mm | $dm_m$ | Código de pedido | N20D | 2 - 3 x $D_c$ |       |       | 6 - 7 x $D_c$ |       |       |
|----------|--------|------------------|------|---------------|-------|-------|---------------|-------|-------|
|          |        |                  |      | $l_2$         | $l_4$ | $l_6$ | $l_2$         | $l_4$ | $l_6$ |
| 9.00     | 10.0   | R850-0900-x0-A1A | ☆    | 89            | 31    | 47    | 133           | 70    | 84    |
| 9.10     | 10.0   | 0910-x0-A1A      | ☆    | 89            | 31    | 47    | 133           | 70    | 84    |
| 9.13     | 10.0   | 0913-x0-A1A      | ☆    | 89            | 31    | 47    | 133           | 70    | 84    |
| 9.20     | 10.0   | 0920-x0-A1A      | ☆    | 89            | 31    | 47    | 133           | 70    | 84    |
| 9.30     | 10.0   | 0930-x0-A1A      | ☆    | 89            | 31    | 47    | 133           | 70    | 84    |
| 9.40     | 10.0   | 0940-x0-A1A      | ☆    | 89            | 31    | 47    | 133           | 70    | 84    |
| 9.50     | 10.0   | 0950-x0-A1A      | ☆    | 89            | 31    | 47    | 133           | 70    | 84    |
| 9.52     | 10.0   | 0952-x0-A1A      | ☆    | 89            | 31    | 47    | 133           | 70    | 84    |
| 9.60     | 10.0   | 0960-x0-A1A      | ☆    | 89            | 31    | 47    | 133           | 70    | 84    |
| 9.70     | 10.0   | 0970-x0-A1A      | ☆    | 89            | 31    | 47    | 133           | 70    | 84    |
| 9.80     | 10.0   | 0980-x0-A1A      | ☆    | 89            | 31    | 47    | 133           | 70    | 84    |
| 9.90     | 10.0   | 0990-x0-A1A      | ☆    | 89            | 31    | 47    | 133           | 70    | 84    |
| 9.92     | 10.0   | 0992-x0-A1A      | ☆    | —             | —     | —     | 133           | 70    | 84    |
| 10.00    | 10.0   | R850-1000-x0-A1A | ☆    | 89            | 31    | 47    | 133           | 70    | 84    |
| 10.10    | 12.0   | 1010-x0-A1A      | ☆    | 102           | 34    | 55    | 140           | 76    | 91    |
| 10.20    | 12.0   | 1020-x0-A1A      | ☆    | 102           | 34    | 55    | 140           | 76    | 91    |
| 10.30    | 12.0   | 1030-x0-A1A      | ☆    | 102           | 34    | 55    | 140           | 76    | 91    |
| 10.32    | 12.0   | 1032-x0-A1A      | ☆    | 102           | 34    | 55    | 140           | 76    | 91    |
| 10.40    | 12.0   | 1040-x0-A1A      | ☆    | 102           | 34    | 55    | 140           | 76    | 91    |
| 10.45    | 12.0   | 1045-x0-A1A      | ☆    | 102           | 34    | 55    | —             | —     | —     |
| 10.50    | 12.0   | 1050-x0-A1A      | ☆    | 102           | 34    | 55    | 140           | 76    | 91    |
| 10.60    | 12.0   | 1060-x0-A1A      | ☆    | 102           | 34    | 55    | 140           | 76    | 91    |
| 10.70    | 12.0   | 1070-x0-A1A      | ☆    | 102           | 34    | 55    | 140           | 76    | 91    |
| 10.71    | 12.0   | 1071-x0-A1A      | ☆    | 102           | 34    | 55    | 140           | 76    | 91    |
| 10.80    | 12.0   | 1080-x0-A1A      | ☆    | —             | —     | —     | 140           | 76    | 91    |
| 10.90    | 12.0   | 1090-x0-A1A      | ☆    | 102           | 34    | 55    | —             | —     | —     |
| 11.00    | 12.0   | R850-1100-x0-A1A | ☆    | 102           | 35    | 55    | 151           | 84    | 101   |
| 11.10    | 12.0   | 1110-x0-A1A      | ☆    | 102           | 35    | 55    | 151           | 84    | 101   |
| 11.11    | 12.0   | 1111-x0-A1A      | ☆    | 102           | 35    | 55    | 151           | 84    | 101   |
| 11.20    | 12.0   | 1120-x0-A1A      | ☆    | 102           | 35    | 55    | 151           | 84    | 101   |
| 11.50    | 12.0   | 1150-x0-A1A      | ☆    | 102           | 35    | 55    | 151           | 84    | 101   |
| 11.60    | 12.0   | 1160-x0-A1A      | ☆    | 102           | 35    | 55    | 151           | 84    | 101   |
| 11.70    | 12.0   | 1170-x0-A1A      | ☆    | —             | —     | —     | 151           | 84    | 101   |
| 11.80    | 12.0   | 1180-x0-A1A      | ☆    | 102           | 35    | 55    | 151           | 84    | 101   |
| 11.90    | 12.0   | 1190-x0-A1A      | ☆    | 102           | 35    | 55    | 151           | 84    | 101   |
| 12.00    | 12.0   | R850-1200-x0-A1A | ☆    | 102           | 35    | 55    | 151           | 84    | 101   |
| 12.10    | 14.0   | 1210-x0-A1A      | ☆    | 107           | 38    | 60    | 160           | 89    | 107   |
| 12.20    | 14.0   | 1220-x0-A1A      | ☆    | 107           | 38    | 60    | 160           | 89    | 107   |
| 12.30    | 14.0   | 1230-x0-A1A      | ☆    | 107           | 38    | 60    | 160           | 89    | 107   |
| 12.40    | 14.0   | 1240-x0-A1A      | ☆    | 107           | 38    | 60    | —             | —     | —     |
| 12.50    | 14.0   | 1250-x0-A1A      | ☆    | 107           | 38    | 60    | 160           | 89    | 107   |
| 12.60    | 14.0   | 1260-x0-A1A      | ☆    | 107           | 38    | 60    | —             | —     | —     |
| 12.70    | 14.0   | 1270-x0-A1A      | ☆    | 107           | 38    | 60    | 160           | 89    | 107   |
| 12.80    | 14.0   | 1280-x0-A1A      | ☆    | 107           | 38    | 60    | —             | —     | —     |
| 13.00    | 14.0   | 1300-x0-A1A      | ☆    | 107           | 39    | 60    | 160           | 89    | 107   |
| 13.10    | 14.0   | 1310-x0-A1A      | ☆    | 107           | 39    | 60    | —             | —     | —     |
| 13.25    | 14.0   | 1325-x0-A1A      | ☆    | 107           | 39    | 60    | 160           | 89    | 107   |
| 13.50    | 14.0   | 1350-x0-A1A      | ☆    | 107           | 39    | 60    | 160           | 89    | 107   |
| 13.80    | 14.0   | 1380-x0-A1A      | ☆    | 107           | 39    | 60    | —             | —     | —     |
| 14.00    | 14.0   | 1400-x0-A1A      | ☆    | 107           | 39    | 60    | 160           | 89    | 107   |



CoroDrill® Delta C

Datos de corte (valores base)

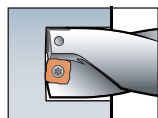
ISO/ANSI



| ISO/ANSI | Material |                                    |        | Diámetro de broca | Calidad | Velocidad de corte m/min | Avance mm/rev. |
|----------|----------|------------------------------------|--------|-------------------|---------|--------------------------|----------------|
|          | CMC      |                                    | HB     | $D_c$ mm          |         | $v_c$                    | $f_n$          |
| P        | 02.1     | Acero de baja aleación             | 180    | 3.00- 6.00        | GC1220  | 70-120                   | 0.10-0.20      |
|          |          |                                    |        | 6.01-10.00        |         |                          | 0.14-0.30      |
|          |          |                                    |        | 10.01-14.00       |         |                          | 0.18-0.35      |
|          |          |                                    |        | 14.01-20.00       |         |                          | 0.20-0.40      |
| M        | 05.21    | Acero inoxidable                   | 180    | 3.00- 6.00        | GC1220  | 40-80                    | 0.08-0.14      |
|          |          |                                    |        | 6.01-10.00        |         |                          | 0.08-0.20      |
|          |          |                                    |        | 10.01-14.00       |         |                          | 0.12-0.22      |
|          |          |                                    |        | 14.01-20.00       |         |                          | 0.14-0.24      |
| K        | 08.2     | Fundición gris                     | 260    | 3.00- 6.00        | GC1220  | 70-130                   | 0.15-0.25      |
|          |          |                                    |        | 6.01-10.00        |         |                          | 0.20-0.35      |
|          |          |                                    |        | 10.01-14.00       |         |                          | 0.30-0.55      |
|          |          |                                    |        | 14.01-20.00       |         |                          | 0.35-0.55      |
|          |          |                                    |        | 3.00- 6.00        | GC1210  | 100-140                  | 0.15-0.25      |
|          |          |                                    |        | 6.01-10.00        |         |                          | 0.20-0.35      |
|          |          |                                    |        | 10.01-14.00       |         |                          | 0.30-0.55      |
|          |          |                                    |        |                   |         |                          |                |
| N        | 30.21    | Aleaciones de aluminio             | 75     | 3.00- 6.00        | GC1220  | 120-230                  | 0.15-0.25      |
|          |          |                                    |        | 6.01-10.00        |         |                          | 0.20-0.40      |
|          |          |                                    |        | 10.01-14.00       |         |                          | 0.30-0.50      |
|          |          |                                    |        | 14.01-20.00       |         |                          | 0.40-0.60      |
|          |          |                                    |        | 3.00- 6.00        | N20D    | 120-230                  | 0.15-0.25      |
|          |          |                                    |        | 6.01-10.00        |         |                          | 0.20-0.40      |
|          |          |                                    |        | 10.01-14.00       |         |                          | 0.30-0.50      |
|          |          |                                    |        | 14.01-20.00       |         |                          | 0.40-0.60      |
| S        | 20.22    | Super-aleaciones termorresistentes | 350    | 3.00- 6.00        | GC1220  | 10-25                    | 0.06-0.12      |
|          |          |                                    |        | 6.01-10.00        |         |                          | 0.08-0.15      |
|          |          |                                    |        | 10.01-14.00       |         |                          | 0.08-0.15      |
|          |          |                                    |        | 14.01-20.00       |         |                          | 0.10-0.16      |
| H        | 04.1     | Acero extra-duro                   | 50 HRC | 3.00- 6.00        | GC1220  | 15-25                    | 0.06-0.10      |
|          |          |                                    |        | 6.01-10.00        |         |                          | 0.08-0.12      |
|          |          |                                    |        | 10.01-14.00       |         |                          | 0.10-0.15      |
|          |          |                                    |        | 14.01-20.00       |         |                          | 0.12-0.18      |



CoroDrill® 880



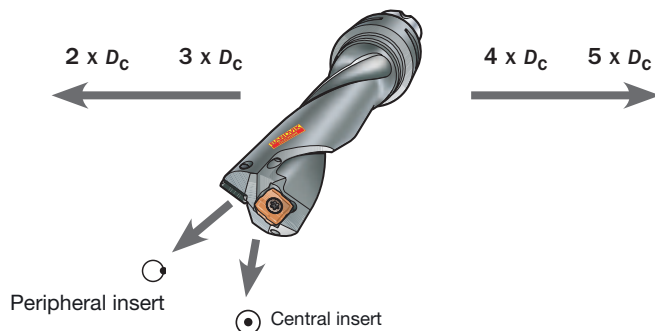
# Broca de plaquita intercambiable CoroDrill® 880

Selección de broca

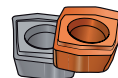
ISO/ANSI



## Profundidad de taladrado



**Dos filos**  
12.00-13.99 mm



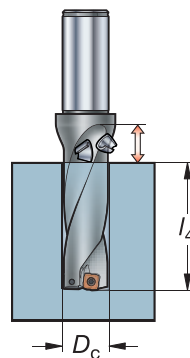
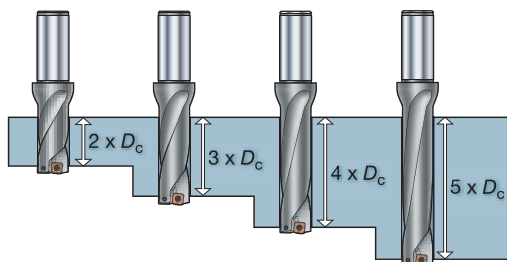
**Cuatro filos**  
14.00-63.00 mm



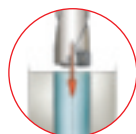
Para conseguir la mejor estabilidad y tolerancia de agujero, seleccione la longitud de broca más corta posible  $l_4$ .

La profundidad máxima del agujero se calcula en función del diámetro  $D_c$  y de la profundidad  $l_4$  del agujero.

## Definición de profundidad de taladrado, $l_4$



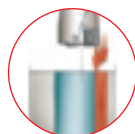
## Operaciones:



Taladrado  
convencional



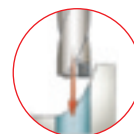
Interpolación  
helicoidal



Taladrado con ajuste  
radial

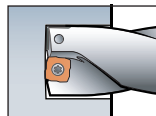


Bidiametral y con  
chaflán

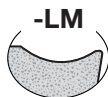


Superficie en ángulo



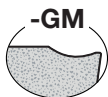


## Avance/geometría

**Geometrías optimizadas**

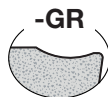
La geometría -LM es la primera elección para materiales de viruta larga. Avance de bajo a medio.

La geometría -MS tiene filo agudo y está optimizada para materiales ISO-M. Avance de bajo a medio.

**Corte ligero**

Primera elección para corte ligero. Rompevirutas corto y superficial que ofrece excelente control de viruta en el área de avance.

Radio de punta pequeño que garantiza una desviación reducida de la broca. Avance de bajo a medio.

**Condiciones generales y desbaste**

Primera elección para acero y fundición. Filos resistentes y reforzados, con amplio radio de punta. Avance de bajo a alto.

**Condiciones tenaces**

Para cualquier material en condiciones tenaces. Filo muy robusto, reforzado.

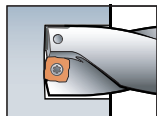
Primera elección en condiciones inestables y cortes intermitentes. Avance de bajo a alto.

## Áreas de aplicación, geometría/calidades

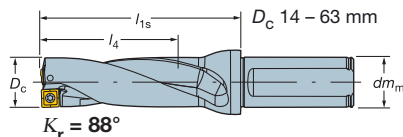
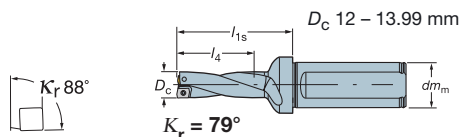
|   | ISO/ANSI                                                        | Tamaño | Diameter    | Primera elección |             |
|---|-----------------------------------------------------------------|--------|-------------|------------------|-------------|
|   |                                                                 |        |             | ⦿                | ●           |
| P | Acero<br>Bajo contenido en carbono<br>Alto contenido en carbono | 01-03  | 12.00-19.99 | LM / GC4044      | LM / GC1044 |
|   |                                                                 | 04-09  | 20.00-63.00 | LM / GC4024      |             |
|   |                                                                 | 01-03  | 12.00-19.99 | GR / GC4044      | GR / GC1044 |
|   |                                                                 | 04-09  | 20.00-63.00 | GR / GC4024      |             |
| M | Acero inoxidable                                                | 01     | 12.00-13.99 | LM / GC4044      | LM / GC1044 |
|   |                                                                 | 02-06  | 14.00-35.99 | MS / GC2044      | LM / GC1144 |
|   |                                                                 | 07-09  | 36.00-63.00 | LM / GC4024      | LM / GC1044 |
| K | Fundición                                                       | 01-03  | 12.00-19.99 | GR / GC4044      | GR / GC1044 |
|   |                                                                 | 04-09  | 20.00-63.00 | GR / GC4024      |             |
| N | Material no férreo                                              | 01-02  | 12.00-16.49 | LM / GC4044      | LM / GC1044 |
|   |                                                                 | 03-09  | 16.50-63.00 | LM / H13A        | LM / H13A   |
| S | Material termorresistente                                       | 01-02  | 12.00-16.49 | LM / GC4044      | LM / GC1044 |
|   |                                                                 | 03-09  | 16.50-63.00 | LM / H13A        | LM / H13A   |
| H | Material templado                                               | 01     | 12.00-13.99 | GR / GC4044      | GR / GC1044 |
|   |                                                                 | 02-09  | 14.00-63.00 | GM / GC4044      | GR / GC1044 |

⦿ Plaquita periférica

● Plaquita central

**CoroDrill® 880**

Diámetro de la broca 12 – 29,5 mm

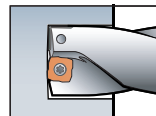
Profundidad máx del agujero: 2-3-4-5 x diámetro de la broca ( $D_c$ )

Mango cilíndrico – Plano de apriete según ISO 9766

 $l_{1s}$  = longitud de programación

| $D_c$<br>mm | máx.<br>$D_c^{2)}$ | $dm_m$ | <b>2 x <math>D_c</math></b> |          |            | <b>3 x <math>D_c</math></b> |          |            | <b>4 x <math>D_c</math></b> |          |            |
|-------------|--------------------|--------|-----------------------------|----------|------------|-----------------------------|----------|------------|-----------------------------|----------|------------|
|             |                    |        | Código de pedido            | $l_{1s}$ | $l_4^{1)}$ | Código de pedido            | $l_{1s}$ | $l_4^{1)}$ | Código de pedido            | $l_{1s}$ | $l_4^{1)}$ |
| 12          | 12.5               | 20     | 880-D1200L20-02             | 39       | 24         | 880-D1200L20-03             | 51       | 36         | 880-D1200L20-04             | 63       | 48         |
| 12.5        | 13.0               |        | D1250L20-02                 | 41       | 25         | D1250L20-03                 | 53       | 38         | D1250L20-04                 | 66       | 50         |
| 12.7        | 13.2               |        | D1270L20-02                 | 41       | 25         | D1270L20-03                 | 54       | 38         | D1270L20-04                 | 66       | 51         |
| 13          | 13.5               |        | D1300L20-02                 | 42       | 26         | D1300L20-03                 | 55       | 39         | D1300L20-04                 | 68       | 52         |
| 13.5        | 14.0               |        | D1350L20-02                 | 43       | 27         | D1350L20-03                 | 56       | 41         | D1350L20-04                 | 70       | 54         |
| 14          | 15                 | 20     | 880-D1400L20-02             | 44       | 28         | 880-D1400L20-03             | 58       | 42         | 880-D1400L20-04             | 72       | 56         |
| 14.5        | 15.4               |        | D1450L20-02                 | 46       | 29         | D1450L20-03                 | 60       | 44         | D1450L20-04                 | 75       | 58         |
| 15          | 15.8               |        | D1500L20-02                 | 47       | 30         | D1500L20-03                 | 62       | 45         | D1500L20-04                 | 77       | 60         |
| 15.5        | 16.1               |        | D1550L20-02                 | 49       | 31         | D1550L20-03                 | 64       | 47         | D1550L20-04                 | 79       | 62         |
| 16          | 16.6               |        | D1600L20-02                 | 51       | 32         | D1600L20-03                 | 66       | 48         | D1600L20-04                 | 82       | 64         |
| 16.5        | 17.7               | 20     | 880-D1650L20-02             | 52       | 33         | 880-D1650L20-03             | 68       | 50         | 880-D1650L20-04             | 84       | 66         |
| 17          | 18.2               |        | D1700L20-02                 | 53       | 34         | D1700L20-03                 | 69       | 51         | D1700L20-04                 | 86       | 68         |
| 17.5        | 18.5               | 25     | 880-D1750L25-02             | 55       | 35         | 880-D1750L25-03             | 72       | 53         | 880-D1750L25-04             | 89       | 70         |
| 18          | 18.8               |        | D1800L25-02                 | 56       | 36         | D1800L25-03                 | 73       | 54         | D1800L25-04                 | 91       | 72         |
| 18.5        | 19.3               |        | D1850L25-02                 | 57       | 37         | D1850L25-03                 | 75       | 56         | D1850L25-04                 | 93       | 74         |
| 19          | 19.6               |        | D1900L25-02                 | 58       | 38         | D1900L25-03                 | 76       | 57         | D1900L25-04                 | 95       | 76         |
| 19.5        | 20.1               |        | D1950L25-02                 | 60       | 39         | D1950L25-03                 | 79       | 59         | D1950L25-04                 | 99       | 78         |
| 20          | 21.8               | 25     | 880-D2000L25-02             | 61       | 40         | 880-D2000L25-03             | 81       | 60         | 880-D2000L25-04             | 101      | 80         |
| 20.5        | 22.1               |        | –                           | –        | –          | D2050L25-03                 | 82       | 62         | –                           | –        | –          |
| 20.9        | 22.5               |        | –                           | –        | –          | D2090L25-03                 | 84       | 63         | –                           | –        | –          |
| 21          | 22.6               |        | D2100L25-02                 | 64       | 42         | D2100L25-03                 | 84       | 63         | D2100L25-04                 | 105      | 84         |
| 21.5        | 22.9               |        | –                           | –        | –          | D2150L25-03                 | 86       | 65         | –                           | –        | –          |
| 22          | 23.2               | 25     | 880-D2200L25-02             | 66       | 44         | 880-D2200L25-03             | 87       | 66         | 880-D2200L25-04             | 109      | 88         |
| 22.5        | 23.5               |        | –                           | –        | –          | D2250L25-03                 | 90       | 68         | –                           | –        | –          |
| 23          | 24.0               |        | D2300L25-02                 | 69       | 46         | D2300L25-03                 | 91       | 69         | D2300L25-04                 | 114      | 92         |
| 23.5        | 24.3               |        | –                           | –        | –          | D2350L25-03                 | 93       | 71         | –                           | –        | –          |
| 23.9        | 24.5               |        | –                           | –        | –          | D2390L25-03                 | 95       | 72         | –                           | –        | –          |
| 24          | 26.2               | 25     | 880-D2400L25-02             | 71       | 48         | 880-D2400L25-03             | 95       | 72         | 880-D2400L25-04             | 119      | 96         |
| 24.5        | 26.5               |        | –                           | –        | –          | D2450L25-03                 | 97       | 74         | –                           | –        | –          |
| 25          | 27.0               |        | D2500L25-02                 | 74       | 50         | D2500L25-03                 | 99       | 75         | D2500L25-04                 | 124      | 100        |
| 25.5        | 27.4               |        | –                           | –        | –          | D2550L25-03                 | 100      | 77         | –                           | –        | –          |
| 26          | 27.8               | 32     | 880-D2600L32-02             | 77       | 52         | 880-D2600L32-03             | 102      | 78         | 880-D2600L32-04             | 128      | 104        |
| 26.4        | 28.0               |        | –                           | –        | –          | D2640L32-03                 | 104      | 79         | –                           | –        | –          |
| 26.5        | 28.1               |        | –                           | –        | –          | D2650L32-03                 | 104      | 80         | –                           | –        | –          |
| 27          | 28.4               |        | D2700L32-02                 | 79       | 54         | D2700L32-03                 | 105      | 81         | D2700L32-04                 | 132      | 108        |
| 27.5        | 28.7               |        | –                           | –        | –          | D2750L32-03                 | 108      | 83         | –                           | –        | –          |
| 28          | 29.2               | 32     | 880-D2800L32-02             | 82       | 56         | 880-D2800L32-03             | 109      | 84         | 880-D2800L32-04             | 137      | 112        |
| 28.5        | 29.5               |        | –                           | –        | –          | D2850L32-03                 | 111      | 86         | –                           | –        | –          |
| 29          | 30.0               |        | D2900L32-02                 | 84       | 58         | D2900L32-03                 | 112      | 87         | D2900L32-04                 | 141      | 116        |
| 29.4        | 30.2               |        | –                           | –        | –          | D2940L32-03                 | 115      | 88         | –                           | –        | –          |
| 29.5        | 30.3               |        | –                           | –        | –          | D2950L32-03                 | 115      | 89         | –                           | –        | –          |

<sup>1)</sup> Profundidad máx. del agujero.<sup>2)</sup> Valor después de ajuste radial máx.5 x  $D_c$ , ver catálogo principal.

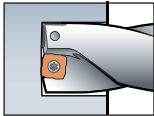


## Plaquitas

⊙ = plaquita central  
○ = plaquita periférica



|                      |        |                   | P |      |      |      | M    |      |      |      | K    |      |      |      | N    |      | S    |      |      |      | H    |      |      |      |      |      |      |      |      |      |
|----------------------|--------|-------------------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| D <sub>c</sub><br>mm | Tamaño | Código de pedido  |   | 1044 | 4014 | 4024 | 4034 | 4044 | 1044 | 1144 | 2044 | 4024 | 4034 | 4044 | 1044 | 4014 | 4024 | 4034 | 4044 | H13A | 1044 | 4044 | H13A | 1044 | 2044 | 4044 | H13A | 1044 | 4024 | 4044 |
| → 12                 | 01     | 880-010203H-C-GR  | ⊙ | ★    |      |      |      |      | ☆    |      |      |      |      |      | ★    |      |      |      |      |      | ☆    |      |      | ☆    |      |      |      | ★    |      |      |
| 12.5                 |        | 010203H-C-LM      | ⊙ | ★    |      |      |      |      | ★    |      |      |      |      |      | ☆    |      |      |      |      |      | ★    |      |      | ☆    |      |      |      | ☆    |      |      |
| 12.7                 |        | 880-0102W04H-P-GR | ○ |      |      | ☆    | ☆    |      |      |      |      |      | ☆    | ☆    | ☆    |      |      | ☆    | ☆    | ★    |      | ★    |      |      |      |      | ☆    |      |      | ★    |
| 13                   |        | 0102W04H-P-LM     | ○ |      |      | ☆    | ☆    | ★    |      |      |      | ☆    | ☆    | ☆    | ★    |      |      | ☆    | ☆    | ☆    |      | ★    |      |      |      | ★    |      |      | ☆    | ☆    |
| 13.5                 |        |                   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| → 14                 | 02     | 880-020204H-C-GR  | ⊙ | ★    |      |      |      |      | ☆    |      |      |      |      |      | ★    |      |      |      |      |      | ☆    |      |      | ☆    |      |      |      | ☆    |      |      |
| 14.5                 |        | 020204H-C-GM      | ⊙ | ☆    |      |      |      |      | ☆    |      |      |      |      |      | ☆    |      |      |      |      |      | ☆    |      |      | ☆    |      |      |      | ★    |      |      |
| 15                   |        | 020204H-C-LM      | ⊙ | ★    |      |      |      |      | ☆    | ★    |      |      |      |      | ☆    |      |      |      |      |      | ★    |      |      | ☆    |      | ☆    |      | ☆    |      | ☆    |
| 15.5                 |        | 880-0202W05H-P-GR | ○ |      |      |      | ☆    | ★    |      |      |      |      | ☆    |      |      |      |      | ☆    | ★    |      |      | ☆    |      |      |      |      | ☆    |      | ☆    | ☆    |
| → 16                 |        | 0202W04H-P-GM     | ○ |      |      | ☆    |      |      |      |      |      | ☆    |      |      |      |      |      | ☆    | ☆    | ★    |      | ☆    |      |      |      |      | ☆    |      | ☆    | ★    |
|                      |        | 0202W05H-P-GT     | ○ |      |      | ☆    | ☆    | ★    |      |      |      | ☆    | ☆    | ☆    | ☆    |      |      | ☆    | ☆    | ☆    |      | ☆    |      |      |      | ☆    |      | ☆    | ☆    | ☆    |
|                      |        | 0202W05H-P-LM     | ○ |      |      | ☆    | ☆    | ★    |      |      |      | ☆    | ☆    | ☆    | ☆    |      |      | ☆    | ☆    | ☆    |      | ★    |      |      |      | ☆    |      | ☆    | ☆    | ☆    |
| → 16.5               | 03     | 880-030305H-C-GR  | ⊙ | ★    |      |      |      |      | ☆    |      |      |      |      |      | ★    |      |      |      |      |      | ☆    |      |      | ☆    |      |      |      | ★    |      |      |
| 17                   |        | 030305H-C-GM      | ⊙ | ★    |      |      |      |      | ☆    | ★    |      |      |      |      | ☆    |      |      |      |      |      | ☆    |      |      | ☆    |      |      |      | ☆    |      |      |
| → 17.5               |        | 030305H-C-LM      | ⊙ | ★    |      |      |      |      | ☆    |      |      |      |      |      | ☆    |      |      |      |      |      | ☆    |      |      | ☆    |      | ☆    |      | ★    |      |      |
| 18                   |        | 880-0303W06H-P-GR | ○ |      |      |      | ☆    | ★    |      |      |      |      | ☆    | ☆    | ☆    |      |      | ☆    | ☆    | ★    |      | ☆    |      |      |      |      | ☆    |      | ☆    | ★    |
| → 18.5               |        | 0303W05H-P-GM     | ○ |      | ☆    | ☆    |      |      |      |      |      | ☆    | ☆    | ☆    | ☆    |      |      | ☆    | ☆    | ☆    |      | ☆    |      |      |      |      | ☆    |      | ☆    | ☆    |
| 19                   |        | 0303W06H-P-GT     | ○ |      | ☆    | ☆    | ☆    | ☆    |      |      |      | ☆    | ☆    | ☆    | ☆    |      |      | ☆    | ☆    | ☆    |      | ☆    |      |      |      | ☆    |      | ☆    | ☆    | ☆    |
| → 19.5               |        | 0303W06H-P-LM     | ○ |      | ☆    | ☆    | ★    |      |      |      | ☆    | ☆    | ☆    | ☆    |      |      | ☆    | ☆    | ☆    |      | ☆    |      |      |      | ☆    |      | ☆    | ☆    | ☆    |      |
|                      |        | 0303W06H-P-MS     | ○ |      |      |      |      |      |      | ★    |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ☆    |      |      |      | ☆    | ☆    |
| → 20                 | 04     | 880-040305H-C-GR  | ⊙ | ★    |      |      |      |      | ☆    |      |      |      |      |      | ★    |      |      |      |      |      | ☆    |      |      | ☆    |      |      |      | ★    |      |      |
| 20.5                 |        | 040305H-C-GM      | ⊙ | ★    |      |      |      |      | ☆    | ☆    |      |      |      |      | ☆    |      |      |      |      |      | ☆    |      |      | ☆    |      |      |      | ★    |      |      |
| → 20.9               |        | 040305H-C-LM      | ⊙ | ★    |      |      |      |      | ☆    | ★    |      |      |      |      | ☆    |      |      |      |      |      | ☆    |      |      | ☆    |      | ☆    |      | ★    |      |      |
| 21                   |        | 880-0403W07H-P-GR | ○ |      |      |      | ☆    | ☆    |      |      |      |      | ☆    | ☆    | ☆    |      |      | ☆    | ☆    | ☆    |      | ☆    |      |      |      |      | ☆    |      | ☆    | ☆    |
| → 21.5               |        | 0403W05H-P-GM     | ○ |      | ☆    |      | ☆    | ☆    |      |      |      | ☆    | ☆    | ☆    | ☆    |      |      | ☆    | ☆    | ☆    |      | ☆    |      |      |      |      | ☆    |      | ☆    | ☆    |
| 22                   |        | 0403W07H-P-GT     | ○ |      | ☆    | ★    | ☆    | ☆    |      |      |      | ☆    | ☆    | ☆    | ☆    |      |      | ☆    | ☆    | ☆    |      | ☆    |      |      |      | ☆    |      | ☆    | ☆    | ★    |
| → 22.5               |        | 0403W07H-P-LM     | ○ |      | ☆    | ★    | ☆    | ☆    |      |      |      | ☆    | ☆    | ☆    | ☆    |      |      | ☆    | ☆    | ☆    |      | ☆    |      |      |      | ☆    |      | ☆    | ☆    | ☆    |
| 23                   |        | 0403W07H-P-MS     | ○ |      |      |      |      |      |      | ★    |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ☆    |      |      |      | ☆    | ☆    |
| → 23.5               |        |                   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 23.9                 |        |                   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| → 24                 | 05     | 880-050305H-C-GR  | ⊙ | ★    |      |      |      |      | ☆    |      |      |      |      |      | ★    |      |      |      |      |      | ☆    |      |      | ☆    |      |      |      | ☆    |      |      |
| 24.5                 |        | 050305H-C-GM      | ⊙ | ☆    |      |      |      |      | ☆    |      |      |      |      |      | ☆    |      |      |      |      |      | ☆    |      |      | ☆    |      |      |      | ★    |      |      |
| → 25                 |        | 050305H-C-LM      | ⊙ | ★    |      |      |      |      | ☆    | ★    |      |      |      |      | ☆    |      |      |      |      |      | ★    |      |      | ★    |      | ☆    |      | ★    |      |      |
| 25.5                 |        | 880-0503W08H-P-GR | ○ |      |      |      | ☆    | ☆    |      |      |      |      | ☆    | ☆    | ☆    |      |      | ☆    | ☆    | ☆    |      | ☆    |      |      |      |      | ★    |      | ☆    | ☆    |
| → 26                 |        | 0503W05H-P-GM     | ○ |      | ☆    | ☆    |      | ☆    |      |      |      | ☆    | ☆    | ☆    | ☆    |      |      | ☆    | ☆    | ☆    |      | ☆    |      |      |      |      | ☆    |      | ☆    | ★    |
| 26.4                 |        | 0503W08H-P-GT     | ○ |      | ☆    | ☆    | ☆    | ☆    |      |      |      | ☆    | ☆    | ☆    | ☆    |      |      | ☆    | ☆    | ☆    |      | ☆    |      |      |      |      | ☆    |      | ☆    | ☆    |
| → 26.5               |        | 0503W08H-P-LM     | ○ |      | ☆    | ★    | ☆    | ☆    |      |      |      | ☆    | ☆    | ☆    | ☆    |      |      | ☆    | ☆    | ☆    |      | ★    |      |      |      | ☆    |      | ☆    | ☆    | ☆    |
| 27                   |        | 0503W08H-P-MS     | ○ |      |      |      |      |      |      |      | ★    |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ☆    |      |      | ☆    | ☆    |
| → 27.5               |        |                   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 28                   |        |                   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| → 28.5               |        |                   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 29                   |        |                   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 29.4                 |        |                   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 29.5                 |        |                   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |



# CoroDrill® 880

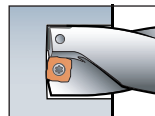
Diámetro de la broca 30 – 63 mm

Profundidad máx del agujero: 2-3-4-5 x diámetro de la broca ( $D_c$ )

| <div><div><div><div><div><math>K_r</math></div><div>88°</div></div></div><div><div><div><math>D_c</math></div><div><math>l_{1s}</math></div><div><math>l_4</math></div><div><math>dm_m</math></div></div></div></div></div> |                    |                                                                                                                                   |                             |          |            |                             |          |            |                             |          |            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------|----------|------------|-----------------------------|----------|------------|-----------------------------|----------|------------|
| Mango cilíndrico – Plano de apriete según ISO 9766 <span style="float:right"><math>l_{1s}</math> = longitud de programación</span>                                                                                          |                    |                                                                                                                                   |                             |          |            |                             |          |            |                             |          |            |
| $D_c$<br>mm                                                                                                                                                                                                                 | máx.<br>$D_c^{2)}$ | $dm_m$                                                                                                                            | <b>2 x <math>D_c</math></b> |          |            | <b>3 x <math>D_c</math></b> |          |            | <b>4 x <math>D_c</math></b> |          |            |
|                                                                                                                                                                                                                             |                    |                                                                                                                                   | Código de pedido            | $l_{1s}$ | $l_4^{1)}$ | Código de pedido            | $l_{1s}$ | $l_4^{1)}$ | Código de pedido            | $l_{1s}$ | $l_4^{1)}$ |
| 30                                                                                                                                                                                                                          | 32.2               | <b>32</b>                                                                                                                         | 880-D3000L32-02             | 87       | 60         | 880-D3000L32-03             | 117      | 90         | 880-D3000L32-04             | 147      | 120        |
| 30.5                                                                                                                                                                                                                        | 32.6               |                                                                                                                                   | –                           |          |            | D3050L32-03                 | 118      | 92         | –                           |          |            |
| 31                                                                                                                                                                                                                          | 33.0               | <b>40</b>                                                                                                                         | 880-D3100L40-02             | 90       | 62         | 880-D3100L40-03             | 121      | 93         | 880-D3100L40-04             | 152      | 124        |
| 31.5                                                                                                                                                                                                                        | 33.4               |                                                                                                                                   | –                           |          |            | D3150L40-03                 | 122      | 95         | –                           |          |            |
| 32                                                                                                                                                                                                                          | 33.7               |                                                                                                                                   | D3200L40-02                 | 92       | 64         | D3200L40-03                 | 124      | 96         | D3200L40-04                 | 156      | 128        |
| 32.5                                                                                                                                                                                                                        | 34.1               |                                                                                                                                   | –                           |          |            | D3250L40-03                 | 126      | 98         | –                           |          |            |
| 33                                                                                                                                                                                                                          | 34.5               |                                                                                                                                   | D3300L40-02                 | 95       | 66         | D3300L40-03                 | 128      | 99         | D3300L40-04                 | 161      | 132        |
| 33.5                                                                                                                                                                                                                        | 34.9               | <b>40</b>                                                                                                                         | 880-D3400L40-02             | 98       | 68         | 880-D3350L40-03             | 130      | 101        | –                           |          |            |
| 34                                                                                                                                                                                                                          | 35.3               |                                                                                                                                   |                             |          |            | D3400L40-03                 | 131      | 102        | 880-D3400L40-04             | 165      | 136        |
| 34.5                                                                                                                                                                                                                        | 35.6               |                                                                                                                                   |                             |          |            | D3450L40-03                 | 134      | 104        | –                           |          |            |
| 35                                                                                                                                                                                                                          | 36.0               |                                                                                                                                   |                             |          |            | D3500L40-03                 | 135      | 105        | D3500L40-04                 | 170      | 140        |
| 35.5                                                                                                                                                                                                                        | 36.4               |                                                                                                                                   |                             |          |            | D3550L40-03                 | 137      | 107        | –                           |          |            |
| 36                                                                                                                                                                                                                          | 38.8               | <b>40</b>                                                                                                                         | 880-D3600L40-02             | 104      | 72         | 880-D3600L40-03             | 139      | 108        | 880-D3600L40-04             | 175      | 144        |
| 37                                                                                                                                                                                                                          | 39.5               |                                                                                                                                   | D3700L40-02                 | 105      | 74         | D3700L40-03                 | 142      | 111        | D3700L40-04                 | 179      | 148        |
| 38                                                                                                                                                                                                                          | 40.3               |                                                                                                                                   | D3800L40-02                 | 108      | 76         | D3800L40-03                 | 146      | 114        | D3800L40-04                 | 184      | 152        |
| 39                                                                                                                                                                                                                          | 41.0               |                                                                                                                                   | D3900L40-02                 | 110      | 78         | D3900L40-03                 | 149      | 117        | D3900L40-04                 | 188      | 156        |
| 40                                                                                                                                                                                                                          | 41.8               |                                                                                                                                   | D4000L40-02                 | 113      | 80         | D4000L40-03                 | 153      | 120        | D4000L40-04                 | 193      | 160        |
| 41                                                                                                                                                                                                                          | 42.5               |                                                                                                                                   | D4100L40-02                 | 117      | 82         | D4100L40-03                 | 157      | 123        | D4100L40-04                 | 198      | 164        |
| 42                                                                                                                                                                                                                          | 43.3               |                                                                                                                                   | 880-D4200L40-02             | 119      | 84         | 880-D4200L40-03             | 160      | 126        | 880-D4200L50-04             | 202      | 168        |
| 43                                                                                                                                                                                                                          | 44.0               | <b>2 x <math>D_c</math>, 3 x <math>D_c</math>, 4 x <math>D_c</math>, 5 x <math>D_c</math>, <math>\rightarrow dm_m = 50</math></b> | D4300L40-02                 | 122      | 86         | D4300L40-03                 | 164      | 129        | D4300L50-04                 | 207      | 172        |
| 44                                                                                                                                                                                                                          | 47.0               |                                                                                                                                   | 880-D4400L40-02             | 124      | 88         | 880-D4400L40-03             | 167      | 132        | 880-D4400L50-04             | 211      | 176        |
| 45                                                                                                                                                                                                                          | 47.8               |                                                                                                                                   | D4500L40-02                 | 127      | 90         | D4500L40-03                 | 172      | 135        | D4500L50-04                 | 217      | 180        |
| 46                                                                                                                                                                                                                          | 48.6               |                                                                                                                                   | D4600L40-02                 | 130      | 92         | D4600L40-03                 | 176      | 138        | D4600L50-04                 | 222      | 184        |
| 47                                                                                                                                                                                                                          | 49.2               |                                                                                                                                   | D4700L40-02                 | 132      | 94         | D4700L40-03                 | 179      | 141        | D4700L50-04                 | 226      | 188        |
| 48                                                                                                                                                                                                                          | 50.0               |                                                                                                                                   | D4800L40-02                 | 135      | 96         | D4800L40-03                 | 183      | 144        | D4800L50-04                 | 231      | 192        |
| 49                                                                                                                                                                                                                          | 50.8               |                                                                                                                                   | D4900L40-02                 | 137      | 98         | D4900L40-03                 | 186      | 147        | D4900L50-04                 | 235      | 196        |
| 50                                                                                                                                                                                                                          | 51.6               |                                                                                                                                   | D5000L40-02                 | 140      | 100        | D5000L40-03                 | 190      | 150        | D5000L50-04                 | 240      | 200        |
| 51                                                                                                                                                                                                                          | 52.2               |                                                                                                                                   | D5100L40-02                 | 144      | 102        | D5100L40-03                 | 194      | 153        | D5100L50-04                 | 245      | 204        |
| 52                                                                                                                                                                                                                          | 53.0               |                                                                                                                                   | D5200L40-02                 | 146      | 104        | D5200L40-03                 | 197      | 156        | D5200L50-04                 | 249      | 208        |
| 53                                                                                                                                                                                                                          | 57.0               |                                                                                                                                   | 880-D5300L40-02             | 149      | 106        | 880-D5300L40-03             | 201      | 159        | 880-D5300L50-04             | 254      | 212        |
| 54                                                                                                                                                                                                                          | 57.8               | <b>2 x <math>D_c</math>, 3 x <math>D_c</math>, 4 x <math>D_c</math>, 5 x <math>D_c</math>, <math>\rightarrow dm_m = 50</math></b> | D5400L40-02                 | 151      | 108        | D5400L40-03                 | 204      | 162        | D5400L50-04                 | 258      | 216        |
| 55                                                                                                                                                                                                                          | 58.4               |                                                                                                                                   | D5500L40-02                 | 154      | 110        | D5500L40-03                 | 209      | 165        | D5500L50-04                 | 264      | 220        |
| 56                                                                                                                                                                                                                          | 59.2               |                                                                                                                                   | D5600L40-02                 | 157      | 112        | D5600L40-03                 | 213      | 168        | D5600L50-04                 | 269      | 224        |
| 57                                                                                                                                                                                                                          | 60.0               |                                                                                                                                   | D5700L40-02                 | 159      | 114        | D5700L40-03                 | 216      | 171        | D5700L50-04                 | 273      | 228        |
| 58                                                                                                                                                                                                                          | 60.8               |                                                                                                                                   | D5800L40-02                 | 162      | 116        | D5800L40-03                 | 220      | 174        | D5800L50-04                 | 278      | 232        |
| 59                                                                                                                                                                                                                          | 61.4               |                                                                                                                                   | D5900L40-02                 | 164      | 118        | D5900L40-03                 | 223      | 177        | –                           |          |            |
| 60                                                                                                                                                                                                                          | 62.2               |                                                                                                                                   | D6000L40-02                 | 167      | 120        | D6000L40-03                 | 227      | 180        | –                           |          |            |
| 61                                                                                                                                                                                                                          | 63.0               |                                                                                                                                   | D6100L40-02                 | 171      | 122        | D6100L40-03                 | 232      | 183        | –                           |          |            |
| 62                                                                                                                                                                                                                          | 63.6               |                                                                                                                                   | D6200L40-02                 | 173      | 124        | D6200L40-03                 | 235      | 186        | –                           |          |            |
| 63                                                                                                                                                                                                                          | 64.4               |                                                                                                                                   | D6300L40-02                 | 176      | 126        | D6300L40-03                 | 239      | 189        | –                           |          |            |

<sup>1)</sup> Profundidad máx. del agujero.

<sup>2)</sup> Valor después de ajuste radial máx.  
5 x  $D_c$ , ver catálogo principal.

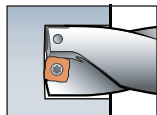


## Plaquitas

⊙ = plaquita central  
○ = plaquita periférica



|   |                                                                |        |                                                                                                                              | P |                                      |   |                                              | M |                                              |   |                      | K |                                      |   |                      | N |                      | S |   |  |  | H |  |  |  |
|---|----------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------------------------------------|---|--------------------------------------|---|----------------------------------------------|---|----------------------------------------------|---|----------------------|---|--------------------------------------|---|----------------------|---|----------------------|---|---|--|--|---|--|--|--|
|   | D <sub>c</sub><br>mm                                           | Tamaño | Código de pedido                                                                                                             |   | 1044<br>4014<br>4024<br>4034<br>4044 |   | 1044<br>1144<br>2044<br>4024<br>4034<br>4044 |   | 1044<br>4014<br>4024<br>4034<br>4044<br>H13A |   | 1044<br>4044<br>H13A |   | 1044<br>1144<br>2044<br>4044<br>H13A |   | 1044<br>4024<br>4044 |   | 1044<br>4024<br>4044 |   |   |  |  |   |  |  |  |
| → | 30<br>30.5                                                     | 06     | 880-060406H-C-GR<br>060406H-C-GM<br>060406H-C-LM<br><br>880-0604W10H-P-GR<br>0604W06H-P-GM<br>0604W08H-P-LM<br>0604W08H-P-MS |   |                                      |   |                                              |   |                                              |   |                      |   |                                      |   |                      |   |                      |   |   |  |  |   |  |  |  |
|   | 31<br>31.5                                                     |        |                                                                                                                              | ⊙ | ★                                    |   |                                              |   |                                              | ★ |                      |   |                                      |   |                      |   |                      |   |   |  |  |   |  |  |  |
| → | 32<br>32.5                                                     |        |                                                                                                                              | ⊙ | ★                                    |   |                                              |   | ★                                            | ☆ |                      |   |                                      | ☆ |                      |   |                      |   |   |  |  |   |  |  |  |
|   | 33                                                             |        |                                                                                                                              | ⊙ |                                      |   | ★                                            |   |                                              |   |                      | ★ |                                      |   | ☆                    |   |                      |   |   |  |  |   |  |  |  |
|   | 33.5<br>34                                                     |        |                                                                                                                              | ⊙ | ☆                                    | ★ |                                              |   | ☆                                            |   | ☆                    | ☆ |                                      | ☆ | ★                    |   |                      | ☆ | ☆ |  |  |   |  |  |  |
| → | 34.5<br>35<br>35.5                                             |        |                                                                                                                              | ⊙ |                                      |   |                                              |   |                                              |   |                      |   |                                      |   |                      | ☆ |                      | ★ | ☆ |  |  |   |  |  |  |
| → | 36<br>37<br>38<br>39<br>40<br>41                               | 07     | 880-070406H-C-GR<br>070406H-C-GM<br>070406H-C-LM<br><br>880-0704W12H-P-GR<br>0704W06H-P-GM<br>0704W10H-P-LM                  |   | ★                                    |   |                                              | ☆ |                                              | ★ |                      |   |                                      |   |                      |   |                      |   |   |  |  |   |  |  |  |
|   | 42<br>43                                                       |        |                                                                                                                              | ⊙ | ☆                                    |   | ★                                            |   |                                              | ☆ |                      | ☆ |                                      | ☆ | ★                    |   |                      |   |   |  |  |   |  |  |  |
| → | 44<br>45<br>46<br>47<br>48<br>49<br>50<br>51<br>52             | 08     | 880-080508H-C-GR<br>080508H-C-GM<br>080508H-C-LM<br><br>880-0805W12H-P-GR<br>0805W08H-P-GM<br>0805W10H-P-LM                  |   | ★                                    |   |                                              | ☆ |                                              | ☆ |                      |   |                                      |   |                      |   |                      |   |   |  |  |   |  |  |  |
|   |                                                                |        |                                                                                                                              | ⊙ | ☆                                    |   | ★                                            |   |                                              | ☆ |                      | ☆ |                                      | ☆ | ★                    |   |                      |   |   |  |  |   |  |  |  |
| → | 53<br>54<br>55<br>56<br>57<br>58<br>59<br>60<br>61<br>62<br>63 | 09     | 880-090608H-C-GR<br>090608H-C-GM<br>090608H-C-LM<br><br>880-0906W12H-P-GR<br>0906W08H-P-GM<br>0906W10H-P-LM                  |   | ★                                    |   |                                              | ☆ |                                              | ★ |                      |   |                                      |   |                      |   |                      |   |   |  |  |   |  |  |  |
|   |                                                                |        |                                                                                                                              | ⊙ | ☆                                    |   | ★                                            |   |                                              | ☆ |                      | ☆ |                                      | ☆ | ★                    |   |                      |   |   |  |  |   |  |  |  |

**CoroDrill® 880**

Datos de corte (valores base)

El texto en negrita son las calidades, geometrías y datos de corte recomendados



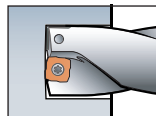
| ISO/ANSI | CMC          | HB    | Diámetro de broca<br>$D_c$ mm | Calidad<br>plaquita central | Calidad<br>plaquita periférica | Velocidad<br>de corte<br>$v_c$ m/min     | Geometría / Avance mm/rev.                |                                                               |                                                               |                                                  |                                                               |
|----------|--------------|-------|-------------------------------|-----------------------------|--------------------------------|------------------------------------------|-------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------|---------------------------------------------------------------|
|          |              |       |                               |                             |                                |                                          | Longitud de taladrado<br>$2-3 \times D_c$ |                                                               |                                                               |                                                  |                                                               |
|          |              |       |                               |                             |                                |                                          | -LM<br>$f_n$                              | -MS<br>$f_n$                                                  | -GM<br>$f_n$                                                  | -GT<br>$f_n$                                     | -GR<br>$f_n$                                                  |
| <b>P</b> | <b>02.1</b>  | 180   | 12.00-13.99                   | 1044                        | 4014*                          | 175-320                                  | 0.04-0.10                                 |                                                               | 0.04-0.10                                                     | 0.04-0.20                                        | 0.04-0.15                                                     |
|          |              |       | 14.00-16.49                   |                             |                                |                                          | 0.04-0.10                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 16.50-19.99                   |                             |                                |                                          | 0.06-0.14                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 20.00-23.99                   |                             |                                |                                          | 0.06-0.18                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 24.00-29.99                   |                             |                                |                                          | 0.06-0.18                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 30.00-35.99                   |                             |                                |                                          | 0.06-0.24                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 36.00-43.99                   |                             |                                |                                          | 0.06-0.24                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 44.00-52.99                   |                             |                                |                                          | 0.10-0.24                                 |                                                               |                                                               |                                                  |                                                               |
| <b>M</b> | <b>05.21</b> | 180   | 53.00-63.50                   | 1144                        | 4024<br>4034<br>4044<br>2044   | 120-250<br>115-215<br>115-180<br>115-180 | 0.04-0.12                                 | 0.04-0.14<br>0.06-0.14<br>0.06-0.16<br>0.06-0.18              | 0.04-0.08<br>0.04-0.08<br>0.06-0.12<br>0.06-0.12              | 0.04-0.14<br>0.06-0.14<br>0.06-0.16<br>0.06-0.16 | 0.04-0.08<br>0.04-0.08<br>0.06-0.12<br>0.06-0.12              |
|          |              |       | 14.00-16.49                   |                             |                                |                                          | 0.04-0.14                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 16.50-19.99                   |                             |                                |                                          | 0.06-0.16                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 20.00-23.99                   |                             |                                |                                          | 0.06-0.16                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 24.00-29.99                   |                             |                                |                                          | 0.06-0.16                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 30.00-35.99                   |                             |                                |                                          | 0.06-0.18                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 36.00-43.99                   |                             |                                |                                          | 0.06-0.20                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 44.00-52.99                   |                             |                                |                                          | 0.10-0.20                                 |                                                               |                                                               |                                                  |                                                               |
| <b>K</b> | <b>08.2</b>  | 220   | 53.00-63.50                   | 1044                        | 4014*<br>4024<br>4034<br>4044  | 110-250<br>125-230<br>100-185<br>75-140  | 0.06-0.10                                 |                                                               | 0.06-0.12<br>0.08-0.14<br>0.10-0.16<br>0.10-0.18              | 0.06-0.16<br>0.08-0.18<br>0.10-0.24<br>0.10-0.28 | 0.06-0.15<br>0.06-0.16<br>0.08-0.18<br>0.10-0.24              |
|          |              |       | 12.00-13.99                   |                             |                                |                                          | 0.06-0.10                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 14.00-16.49                   |                             |                                |                                          | 0.06-0.12                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 16.50-19.99                   |                             |                                |                                          | 0.08-0.14                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 20.00-23.99                   |                             |                                |                                          | 0.10-0.16                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 24.00-29.99                   |                             |                                |                                          | 0.10-0.16                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 30.00-35.99                   |                             |                                |                                          | 0.10-0.16                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 36.00-43.99                   |                             |                                |                                          | 0.10-0.16                                 |                                                               |                                                               |                                                  |                                                               |
| <b>N</b> | <b>30.21</b> | 75    | 53.00-63.50                   | 1044                        | 4044<br>H13A                   | 300-385<br>300-400                       | 0.04-0.12                                 |                                                               | 0.04-0.14<br>0.04-0.16<br>0.06-0.18<br>0.10-0.20              | 0.04-0.12<br>0.04-0.14<br>0.06-0.16<br>0.10-0.18 | 0.04-0.12<br>0.04-0.12<br>0.06-0.16<br>0.10-0.18              |
|          |              |       | 12.00-13.99                   |                             |                                |                                          | 0.04-0.12                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 14.00-16.49                   |                             |                                |                                          | 0.04-0.14                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 16.50-19.99                   |                             |                                |                                          | 0.06-0.16                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 20.00-23.99                   |                             |                                |                                          | 0.10-0.18                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 24.00-29.99                   |                             |                                |                                          | 0.10-0.20                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 30.00-35.99                   |                             |                                |                                          | 0.10-0.20                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 36.00-43.99                   |                             |                                |                                          | 0.12-0.22                                 |                                                               |                                                               |                                                  |                                                               |
| <b>S</b> | <b>20.22</b> | 350   | 53.00-63.50                   | 1044                        | 4044<br>H13A<br>2044           | 20-90<br>15-90<br>20-90                  | 0.04-0.08                                 | 0.04-0.08<br>0.05-0.08<br>0.05-0.08<br>0.06-0.10<br>0.06-0.12 | 0.04-0.10<br>0.05-0.10<br>0.05-0.10<br>0.06-0.12<br>0.06-0.12 | 0.04-0.08<br>0.05-0.08<br>0.05-0.08<br>0.05-0.08 | 0.04-0.08<br>0.04-0.08<br>0.05-0.08<br>0.06-0.08<br>0.06-0.12 |
|          |              |       | 12.00-13.99                   |                             |                                |                                          | 0.04-0.08                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 14.00-16.49                   |                             |                                |                                          | 0.05-0.08                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 16.50-19.99                   |                             |                                |                                          | 0.05-0.08                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 20.00-23.99                   |                             |                                |                                          | 0.06-0.10                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 24.00-29.99                   |                             |                                |                                          | 0.06-0.12                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 30.00-35.99                   |                             |                                |                                          | 0.06-0.12                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 36.00-43.99                   |                             |                                |                                          | 0.06-0.12                                 |                                                               |                                                               |                                                  |                                                               |
| <b>H</b> | <b>04.1</b>  | HRC60 | 53.00-63.50                   | 1044                        | 4014*<br>4024<br>4034<br>4044  | 40-100<br>30-80<br>30-80<br>30-80        | 0.04-0.08                                 |                                                               | 0.04-0.12<br>0.06-0.14<br>0.06-0.18<br>0.06-0.18              | 0.04-0.08<br>0.05-0.12<br>0.05-0.14<br>0.05-0.14 | 0.04-0.10<br>0.04-0.08<br>0.05-0.12<br>0.05-0.14              |
|          |              |       | 12.00-13.99                   |                             |                                |                                          | 0.04-0.08                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 14.00-16.49                   |                             |                                |                                          | 0.05-0.12                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 16.50-19.99                   |                             |                                |                                          | 0.05-0.14                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 20.00-23.99                   |                             |                                |                                          | 0.05-0.14                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 24.00-29.99                   |                             |                                |                                          | 0.06-0.16                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 30.00-35.99                   |                             |                                |                                          | 0.06-0.16                                 |                                                               |                                                               |                                                  |                                                               |
|          |              |       | 36.00-43.99                   |                             |                                |                                          | 0.10-0.16                                 |                                                               |                                                               |                                                  |                                                               |

\* Sólo en geometrías -GM y -LM.

**CoroDrill® 880**

Datos de corte (valores base)

El texto en negrita son las calidades, geometrías y datos de corte recomendados



| ISO/ANSI | CMC   | HB    | Diámetro de broca<br>$D_c$ mm | Calidad<br>plaquita central | Calidad<br>plaquita periférica | Velocidad<br>de corte<br>$v_c$<br>m/min | Geometría / Avance mm/rev.              |              |              |              |              |
|----------|-------|-------|-------------------------------|-----------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|--------------|--------------|--------------|--------------|
|          |       |       |                               |                             |                                |                                         | Longitud de taladrado<br>$4 \times D_c$ |              |              |              |              |
|          |       |       |                               |                             |                                |                                         | -LM<br>$f_n$                            | -MS<br>$f_n$ | -GM<br>$f_n$ | -GT<br>$f_n$ | -GR<br>$f_n$ |
| <b>P</b> | 02.1  | 180   | 12.00-13.99                   | 1044                        | 4014*                          | 175-320                                 | 0.04-0.10                               |              |              |              | 0.04-0.12    |
|          |       |       | 14.00-16.49                   |                             |                                |                                         | 0.04-0.10                               |              | 0.04-0.10    | 0.06-0.14    | 0.04-0.14    |
|          |       |       | 16.50-19.99                   |                             |                                |                                         | 0.06-0.14                               |              | 0.06-0.14    | 0.06-0.16    | 0.06-0.16    |
|          |       |       | 20.00-23.99                   |                             |                                |                                         | 0.06-0.18                               |              | 0.06-0.18    | 0.06-0.20    | 0.06-0.20    |
|          |       |       | 24.00-29.99                   |                             |                                |                                         | 0.06-0.18                               |              | 0.08-0.18    | 0.06-0.22    | 0.08-0.22    |
|          |       |       | 30.00-35.99                   |                             |                                |                                         | 0.06-0.20                               |              | 0.08-0.20    |              | 0.08-0.24    |
|          |       |       | 36.00-43.99                   |                             |                                |                                         | 0.06-0.24                               |              | 0.08-0.24    |              | 0.08-0.24    |
|          |       |       | 44.00-52.99                   |                             |                                |                                         | 0.10-0.20                               |              | 0.10-0.24    |              | 0.10-0.24    |
|          |       |       | 53.00-63.50                   |                             |                                |                                         | 0.10-0.20                               |              | 0.10-0.24    |              | 0.10-0.24    |
| <b>M</b> | 05.21 | 180   | 12.00-13.99                   | 1144                        | 4024                           | 120-250                                 | 0.04-0.10                               |              |              |              | 0.04-0.08    |
|          |       |       | 14.00-16.49                   |                             |                                |                                         | 0.04-0.12                               | 0.04-0.12    | 0.04-0.08    | 0.04-0.12    | 0.04-0.08    |
|          |       |       | 16.50-19.99                   |                             |                                |                                         | 0.06-0.12                               | 0.06-0.12    | 0.04-0.08    | 0.06-0.12    | 0.04-0.08    |
|          |       |       | 20.00-23.99                   |                             |                                |                                         | 0.06-0.14                               | 0.06-0.14    | 0.06-0.12    | 0.06-0.14    | 0.06-0.12    |
|          |       |       | 24.00-29.99                   |                             |                                |                                         | 0.06-0.14                               | 0.06-0.14    | 0.06-0.12    | 0.06-0.14    | 0.06-0.12    |
|          |       |       | 30.00-35.99                   |                             |                                |                                         | 0.06-0.16                               | 0.06-0.16    | 0.06-0.16    |              | 0.06-0.16    |
|          |       |       | 36.00-43.99                   |                             |                                |                                         | 0.06-0.16                               | 0.06-0.16    | 0.06-0.16    |              | 0.06-0.16    |
|          |       |       | 44.00-52.99                   |                             |                                |                                         | 0.10-0.16                               | 0.10-0.16    | 0.10-0.16    |              | 0.10-0.16    |
|          |       |       | 53.00-63.50                   |                             |                                |                                         | 0.10-0.16                               | 0.10-0.16    | 0.10-0.16    |              | 0.10-0.16    |
| <b>K</b> | 08.2  | 220   | 12.00-13.99                   | 1044                        | 4014*                          | 110-250                                 | 0.06-0.10                               |              |              |              | 0.06-0.12    |
|          |       |       | 14.00-16.49                   |                             |                                |                                         | 0.06-0.10                               |              | 0.06-0.12    | 0.06-0.12    | 0.06-0.12    |
|          |       |       | 16.50-19.99                   |                             |                                |                                         | 0.06-0.12                               |              | 0.08-0.14    | 0.08-0.14    | 0.08-0.14    |
|          |       |       | 20.00-23.99                   |                             |                                |                                         | 0.08-0.14                               |              | 0.10-0.16    | 0.10-0.19    | 0.10-0.19    |
|          |       |       | 24.00-29.99                   |                             |                                |                                         | 0.08-0.14                               |              | 0.10-0.18    | 0.10-0.22    | 0.10-0.22    |
|          |       |       | 30.00-35.99                   |                             |                                |                                         | 0.10-0.16                               |              | 0.10-0.20    |              | 0.10-0.24    |
|          |       |       | 36.00-43.99                   |                             |                                |                                         | 0.10-0.16                               |              | 0.10-0.20    |              | 0.10-0.26    |
|          |       |       | 44.00-52.99                   |                             |                                |                                         | 0.10-0.16                               |              | 0.10-0.20    |              | 0.10-0.26    |
|          |       |       | 53.00-63.50                   |                             |                                |                                         | 0.10-0.16                               |              | 0.10-0.20    |              | 0.10-0.26    |
| <b>N</b> | 30.21 | 75    | 12.00-13.99                   | 1044                        | 4044                           | 300-385                                 | 0.04-0.10                               |              |              |              | 0.04-0.10    |
|          |       |       | 14.00-16.49                   |                             |                                |                                         | 0.04-0.10                               |              | 0.04-0.12    | 0.04-0.10    | 0.04-0.10    |
|          |       |       | 16.50-19.99                   |                             |                                |                                         | 0.04-0.12                               |              | 0.04-0.14    | 0.04-0.12    | 0.04-0.12    |
|          |       |       | 20.00-23.99                   |                             |                                |                                         | 0.06-0.14                               |              | 0.06-0.16    | 0.06-0.16    | 0.06-0.14    |
|          |       |       | 24.00-29.99                   |                             |                                |                                         | 0.10-0.16                               |              | 0.10-0.18    | 0.10-0.16    | 0.10-0.16    |
|          |       |       | 30.00-35.99                   |                             |                                |                                         | 0.10-0.18                               |              | 0.10-0.20    |              | 0.10-0.18    |
|          |       |       | 36.00-43.99                   |                             |                                |                                         | 0.10-0.18                               |              | 0.10-0.22    |              | 0.10-0.18    |
|          |       |       | 44.00-52.99                   |                             |                                |                                         | 0.12-0.20                               |              | 0.12-0.24    |              | 0.12-0.20    |
|          |       |       | 53.00-63.50                   |                             |                                |                                         | 0.12-0.20                               |              | 0.12-0.24    |              | 0.12-0.20    |
| <b>S</b> | 20.22 | 350   | 12.00-13.99                   | 1044                        | 4044                           | 20-90                                   | 0.04-0.08                               |              |              |              | 0.04-0.08    |
|          |       |       | 14.00-16.49                   |                             |                                |                                         | 0.04-0.08                               | 0.04-0.08    | 0.04-0.08    | 0.04-0.08    | 0.04-0.08    |
|          |       |       | 16.50-19.99                   |                             |                                |                                         | 0.05-0.08                               | 0.05-0.08    | 0.05-0.08    | 0.05-0.08    | 0.05-0.08    |
|          |       |       | 20.00-23.99                   |                             |                                |                                         | 0.05-0.08                               | 0.05-0.08    | 0.05-0.08    | 0.05-0.08    | 0.05-0.08    |
|          |       |       | 24.00-29.99                   |                             |                                |                                         | 0.05-0.10                               | 0.05-0.10    | 0.06-0.10    | 0.06-0.08    | 0.06-0.08    |
|          |       |       | 30.00-35.99                   |                             |                                |                                         | 0.06-0.12                               | 0.06-0.12    | 0.06-0.12    |              | 0.06-0.12    |
|          |       |       | 36.00-43.99                   |                             |                                |                                         | 0.06-0.12                               |              | 0.06-0.12    |              | 0.06-0.12    |
|          |       |       | 44.00-52.99                   |                             |                                |                                         | 0.06-0.12                               |              | 0.06-0.12    |              | 0.08-0.12    |
|          |       |       | 53.00-63.50                   |                             |                                |                                         | 0.08-0.14                               |              | 0.08-0.14    |              | 0.08-0.12    |
| <b>H</b> | 04.1  | HRC60 | 12.00-13.99                   | 1044                        | 4014*                          | 40-100                                  | 0.04-0.08                               |              |              |              | 0.04-0.10    |
|          |       |       | 14.00-16.49                   |                             |                                |                                         | 0.04-0.08                               |              | 0.05-0.10    | 0.04-0.08    | 0.04-0.08    |
|          |       |       | 16.50-19.99                   |                             |                                |                                         | 0.05-0.10                               |              | 0.06-0.12    | 0.05-0.10    | 0.05-0.10    |
|          |       |       | 20.00-23.99                   |                             |                                |                                         | 0.05-0.12                               |              | 0.06-0.15    | 0.05-0.12    | 0.05-0.12    |
|          |       |       | 24.00-29.99                   |                             |                                |                                         | 0.05-0.12                               |              | 0.06-0.15    | 0.05-0.12    | 0.05-0.12    |
|          |       |       | 30.00-35.99                   |                             |                                |                                         | 0.06-0.16                               |              | 0.06-0.18    |              | 0.06-0.16    |
|          |       |       | 36.00-43.99                   |                             |                                |                                         | 0.06-0.16                               |              | 0.06-0.18    |              | 0.06-0.16    |
|          |       |       | 44.00-52.99                   |                             |                                |                                         | 0.10-0.16                               |              | 0.10-0.18    |              | 0.10-0.16    |
|          |       |       | 53.00-63.50                   |                             |                                |                                         | 0.10-0.16                               |              | 0.10-0.18    |              | 0.10-0.16    |

\* Sólo en geometrías -GM y -LM.



## El sistema de herramientas modulares

Coromant Capto®

Norma ISO 26623

### El mismo acoplamiento se adapta a todas sus máquinas

Coromant Capto® es un sistema de herramientas modulares que permite tener un equipamiento intercambiable entre todas las máquinas del taller. ¡Se utiliza siempre el mismo acoplamiento básico!

Grandes ahorros en costes de herramientas mediante la selección de Coromant Capto. El capital invertido en este sistema se puede utilizar en todas sus herramientas de mecanizado presentes y futuras.

Desestime la idea de invertir en portas para herramientas especiales caros. La herramienta que necesita puede montarse fácilmente utilizando la modularidad del sistema Coromant Capto.

### Coromant Capto® – su única elección

De nuevo, Coromant Capto ha demostrado cumplir los requisitos para una gran variedad de exigencias operativas en máquinas antiguas, así como máquinas modernas multi-tarea.

Coromant Capto es el único y verdadero sistema universal de herramientas que cubre todas las operaciones de mecanizado - independientemente del tipo de máquina y husillo. Sin embargo, con Coromant Capto en el husillo obtendrá una ayuda extra.

### El mismo acoplamiento igualmente efectivo para...



**FRESADO**

**TALADRADO**

### El ingenioso acoplamiento con forma de cono poligonal

El par torsor se distribuye de forma simétrica en toda su superficie, sin variaciones de rotación, dando un efecto de autocentrado.

**TORNEADO**



## El sistema de herramientas modulares

Coromant Capto®

Norma ISO 26623



### Coromant Capto® – posibilidades en herramientas

Una amplia gama de herramientas es parte importante del concepto Coromant Capto. Se han utilizado todo el conocimiento y recursos de Sandvik Coromant (proveedor número uno mundial) para desarrollar y producir las mejores herramientas de mecanizado disponibles para todos los tipos de máquinas.

#### Herramientas para torneado

Recomendamos para un torneado de alta productividad el sistema T-Max P con plaquitas negativas y CoroTurn 107 con plaquitas positivas.

Si se trata de incrementar la productividad en trozado y ranurado la primera elección es el sistema CoroCut®, y si necesita un sistema de roscado moderno, la elección directa es el sistema CoroThread® 266.



#### Herramientas para taladrar

Los programas de herramientas para taladrar y mandrinar de Sandvik Coromant, CoroDrill® y CoroBore® ofrecen una amplia gama de productos con alto rendimiento.

Independientemente del tipo de agujero a realizar, podemos ofrecerle la herramienta correcta para la mejor productividad en una gran variedad de diámetros. Están disponibles tanto brocas enterizas de metal duro como de plaquita intercambiable.



#### Herramientas para fresar

Sandvik Coromant ofrece una gama completa de herramientas para fresar. Dentro de la familia CoroMill® siempre existe una fresa que se adapta a la perfección a sus necesidades. Se trata de un sistema de tipo universal para aplicaciones como planeado, fresado en escuadra, acanalado y perfilado.

#### Portaherramientas y adaptadores

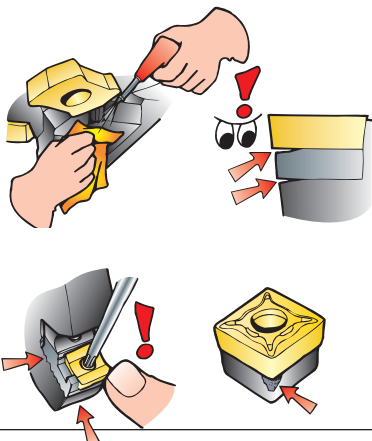
Las máquinas y herramientas modernas son muy exigentes con los portaherramientas. Particularmente si se utilizan fresas y brocas de metal duro integral a velocidades muy altas, donde se requiere una desviación radial mínima para obtener una larga vida de herramienta. Hydro Grip satisface todas las exigencias puestas en un portaherramientas. Están disponibles diferentes tipos de adaptadores para ayudar a construir la longitud de herramienta correcta.

Para más información acerca de nuestro amplio programa Coromant Capto, rogamos contacte con su representante local de Sandvik Coromant, consulte nuestro material impreso o visite nuestra página web [www.sandvik.coromant.com](http://www.sandvik.coromant.com)



## Consejos prácticos

### Mantenimiento de las herramientas



#### La placa de apoyo y el asiento de la plaquita

Compruebe si la placa de apoyo está dañada.

Limpie los puntos de apoyo del asiento de la plaquita y del filo de corte.

Si fuera necesario, cambie la placa de apoyo.

Colocación apropiada de la plaquita contra los puntos de apoyo.

Es **IMPORTANTE** que las esquinas de la placa de apoyo no se hayan astillado durante el mecanizado o la manipulación.

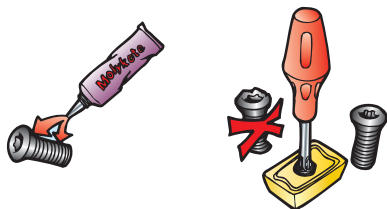
#### Tornillos de fijación

Par de apriete correcto de los tornillos.

Lubrique con cuidado los tornillos para evitar que se agarroten. El lubricante debe aplicarse tanto en las roscas como en la superficie de la cabeza de los tornillos.

Cambie los tornillos usados o gastados.

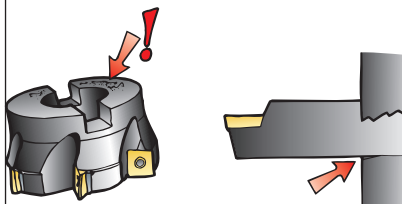
Utilice las llaves correctas.



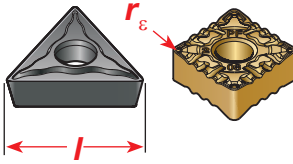
#### Superficies de contacto

Revise siempre las superficies de apoyo y de contacto de los portaherramientas, fresas y brocas, con el fin de comprobar la ausencia de deterioro o suciedad.

En las operaciones de mandrinado, es especialmente importante que la fijación sea la mejor posible. Si la barra no está sujeta en toda su longitud hasta el extremo del mango, ello añadirá un mayor voladizo a la herramienta, incrementado la posibilidad de vibraciones.



## Consejos prácticos



$l$  = longitud de la arista de corte  
(tamaño de plaquita)

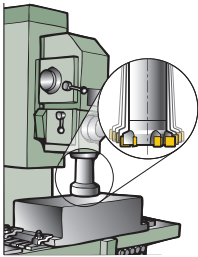
$l_a$  = Arista de corte efectiva

$r_\epsilon$  = radio de la punta

### Seguridad durante la producción

Es importante seleccionar correctamente el tamaño, forma, geometría y radio de punta de la plaquita para asegurar un buen flujo de las virutas.

- Seleccione el mayor ángulo de punta posible en la plaquita para una mayor robustez y economía.
- Seleccione el mayor radio de punta posible para una mayor resistencia de la plaquita.
- Seleccione un radio de punta más pequeño si existe tendencia a las vibraciones.



### Estabilidad

La estabilidad es un factor clave para lograr un mecanizado satisfactorio, ya que afecta a los costes de mecanizado y a la productividad.

Asegúrese que se haya eliminado cualquier holgura innecesaria, voladizo o punto débil y que se utilicen los tipos y tamaños de herramienta correctos para el trabajo a realizar.

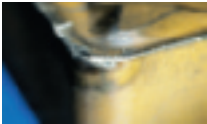
## Resumen de los puntos de mantenimiento:

- ☐ Compruebe el desgaste de la herramienta, así como el deterioro de la placa de apoyo.
- ☐ Asegúrese que el asiento de la plaquita está limpio.
- ☐ Compruebe que la plaquita esté bien colocada.
- ☐ Asegúrese de utilizar las llaves y chavetas correctas.
- ☐ Los tornillos de las plaquitas deben estar correctamente apretados.
- ☐ Aplique lubricante en los tornillos antes de montar la herramienta.
- ☐ Compruebe que las superficies de contacto en las herramientas, útiles de sujeción y husillo de la máquina estén limpias y sin señales de deterioro.
- ☐ Asegúrese de que las barras para mandrinar estén bien sujetas y que el extremo del portaherramientas no esté dañado.
- ☐ Un inventario de herramientas bien organizado, actualizado y documentado es un factor esencial para el ahorro en la producción.
- ☐ La estabilidad es siempre un factor crítico en cualquier operación de mecanizado.



Consejos prácticos

Clasificación de tipos de desgaste de las herramientas

|                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Desgaste de incidencia y por entalladura</p>  <p>Desgaste de incidencia rápido, que provoca un acabado superficial deficiente o a la pérdida de las tolerancias.</p>  <p>Desgaste por entalladura que provoca un acabado superficial deficiente, con riesgo de rotura del filo.</p> | <p>Fisuras térmicas</p>  <p>Pequeñas fisuras perpendiculares al filo de corte, que provocan astillamiento y un acabado superficial deficiente.</p>                                                                                                               |
| <p>Craterización</p>  <p>Provoca un debilitamiento del filo.</p>                                                                                                                                                                                                                                                                                                       | <p>Rotura de la plaquita</p>  <p>Daños no sólo en la plaquita, sino también en la placa de apoyo y la pieza a trabajar.</p>                                                                                                                                      |
| <p>Filo de aportación (B.U.E.)</p>  <p>Provoca un acabado superficial deficiente y el astillamiento del filo de corte al desprenderse el filo de aportación.</p>                                                                                                                                                                                                      | <p>Deformación plástica</p>  <p>Depresión en el filo o impresión en el flanco que provocan un control de virutas deficiente y un acabado superficial de baja calidad. Riesgo de desgaste excesivo en el flanco que puede provocar la rotura de la plaquita.</p> |
| <p>Astillamiento</p>  <p>Pequeña fisura en el filo de corte que provoca un acabado superficial deficiente y un desgaste de incidencia excesivo.</p>                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                   |

## Consejos prácticos

En el caso de tener problemas:



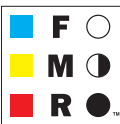
Algunas soluciones para resolver los problemas más comunes durante:

### Cilindrado

#### Remedios y soluciones

#### Problemas

|                                                      | Reduzca la velocidad de corte | Incremente la velocidad de corte | Reduzca el avance | Incremente el avance | Reduzca la profundidad de corte | Aumente la profundidad de corte | Seleccione una calidad con mayor resistencia al desgaste | Seleccione una calidad más tenaz | Seleccione un radio de punta pequeño | Seleccione una geometría positiva |
|------------------------------------------------------|-------------------------------|----------------------------------|-------------------|----------------------|---------------------------------|---------------------------------|----------------------------------------------------------|----------------------------------|--------------------------------------|-----------------------------------|
| Desgaste del flanco                                  | X                             |                                  |                   |                      |                                 |                                 | X                                                        |                                  |                                      |                                   |
| Desgaste en entalla                                  | X                             |                                  |                   |                      |                                 |                                 | X                                                        |                                  |                                      |                                   |
| Craterización                                        | X                             |                                  | X                 |                      |                                 |                                 | X                                                        |                                  |                                      | X                                 |
| Deformación plástica                                 | X                             |                                  | X                 |                      |                                 |                                 | X                                                        |                                  |                                      |                                   |
| Formación del filo de aportación (BUE)               |                               | X                                |                   |                      |                                 |                                 |                                                          |                                  |                                      | X                                 |
| Pequeñas fisuras perpendiculares al filo de corte    |                               |                                  |                   |                      |                                 |                                 |                                                          | X                                |                                      |                                   |
| Pequeñas fracturas (astillamiento) del filo de corte |                               | X                                |                   |                      |                                 |                                 |                                                          | X                                |                                      | X                                 |
| Rotura de la plaquita                                |                               |                                  | X                 |                      | X                               |                                 |                                                          | X                                |                                      |                                   |
| Virutas rizadas largas                               |                               |                                  |                   | X                    |                                 | X                               |                                                          |                                  | X                                    |                                   |
| Vibración                                            | X                             |                                  |                   | X                    | X                               |                                 |                                                          |                                  | X                                    | X                                 |



Consejos prácticos  
En el caso de tener problemas:

Algunas soluciones para los problemas más comunes durante:

Fresado

Remedios y soluciones

| Problemas                                            | Reduzca la velocidad de corte | Incremente la velocidad de corte | Reduzca el avance/diente | Incremente el avance/diente | Seleccione una calidad con mayor resistencia al desgaste | Seleccione una calidad más tenaz | Utilice una fresa de paso grande | Cambie la posición de la fresa | No utilice refrigerante |
|------------------------------------------------------|-------------------------------|----------------------------------|--------------------------|-----------------------------|----------------------------------------------------------|----------------------------------|----------------------------------|--------------------------------|-------------------------|
| Desgaste del flanco                                  | X                             |                                  |                          | X                           | X                                                        |                                  |                                  |                                |                         |
| Desgaste en entalla                                  | X                             |                                  |                          | X                           | X                                                        |                                  |                                  |                                | X                       |
| Craterización                                        | X                             |                                  |                          |                             | X                                                        |                                  |                                  |                                |                         |
| Deformación plástica                                 | X                             |                                  | X                        |                             | X                                                        |                                  |                                  |                                |                         |
| Formación del filo de aportación (BUE)               |                               | X                                |                          | X                           |                                                          |                                  |                                  |                                | X                       |
| Pequeñas fisuras perpendiculares al filo de corte    | X                             |                                  |                          |                             |                                                          | X                                |                                  |                                | X                       |
| Pequeñas fracturas (astillamiento) del filo de corte |                               | X                                |                          |                             |                                                          | X                                |                                  |                                | X                       |
| Rotura de la plaquita                                |                               |                                  | X                        |                             |                                                          | X                                |                                  | X                              |                         |
| Vibración                                            |                               |                                  |                          | X                           |                                                          |                                  | X                                | X                              |                         |
| Acabado superficial deficiente                       |                               | X                                | X                        |                             | X                                                        |                                  |                                  |                                |                         |

## Consejos prácticos

En el caso de tener problemas:



Algunas soluciones para resolver los problemas más comunes durante:

### Taladrado

#### Remedios y soluciones

#### Problemas

|                                                      | Alinee de nuevo la broca | Aumente el flujo de refrigerante, limpie el filtro, limpie los agujeros del refrigerante de la broca | Seleccione una calidad más tenaz | Reduzca el avance | Mejore la estabilidad, vuelva a fijar la pieza, acorte el voladizo de la broca | Compruebe el fondo del agujero o el disco para el bloqueo central (sólo para brocas Coromant U) | Compruebe las recomendaciones de velocidad/avance | Compruebe la calidad de metal duro | Aumente la velocidad |
|------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------|----------------------------------|-------------------|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------|------------------------------------|----------------------|
| Rotura de la cara frontal de la broca                | X                        |                                                                                                      | X                                |                   | X                                                                              |                                                                                                 | X                                                 |                                    |                      |
| Desgaste en el diámetro exterior de la broca         | X                        |                                                                                                      |                                  |                   | X                                                                              |                                                                                                 | X                                                 | X                                  |                      |
| Agujero de tamaño excesivo/-insuficiente             | X                        |                                                                                                      |                                  | X                 |                                                                                | X                                                                                               | X                                                 |                                    |                      |
| Atasco de virutas en los canales de la broca         |                          | X                                                                                                    |                                  | X                 | X                                                                              |                                                                                                 | X                                                 |                                    | X                    |
| Vibraciones                                          |                          |                                                                                                      |                                  | X                 | X                                                                              |                                                                                                 | X                                                 |                                    |                      |
| Pequeñas fracturas (astillamiento) del filo de corte | X                        |                                                                                                      | X                                |                   |                                                                                | X                                                                                               |                                                   | X                                  | X                    |
| El agujero no está simétrico                         |                          |                                                                                                      |                                  | X                 | X                                                                              |                                                                                                 | X                                                 |                                    |                      |
| Vida de la herramienta demasiado corta               |                          | X                                                                                                    |                                  |                   | X                                                                              |                                                                                                 | X                                                 | X                                  |                      |

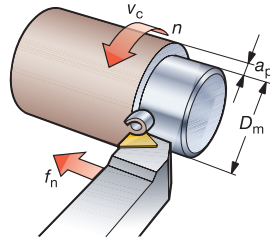


## Fórmulas y definiciones más importantes

Torneado, tronzado y ranurado, roscado

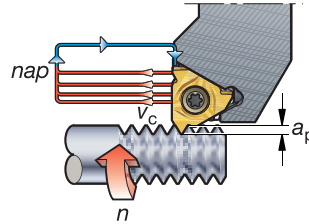
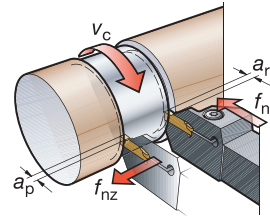
**Velocidad de corte ( $v_c$ )**  
(m/min)

$$v_c = \frac{D_m \times \pi \times n}{1000}$$



**Velocidad del husillo ( $n$ )**  
(rpm)

$$n = \frac{v_c \times 1000}{\pi \times D_m}$$



$a_p$  = profundidad de corte axial (mm)

$a_r$  = profundidad de corte (mm). Diám. exterior hasta el centro del fondo de la ranura.

$D_m$  = diámetro mecanizado (mm)

$f_n$  = avance por vuelta (mm/r)

$f_{nx}$  = avance radial por vuelta (mm/r)

$f_{nz}$  = avance axial por vuelta (mm/r)

$n$  = velocidad del husillo (rpm)

$nap$  = número de pasadas

$v_c$  = velocidad de corte (m/min)



# Fórmulas y definiciones más importantes



## Taladrado y fresado

**Velocidad de corte ( $v_c$ )**  
(m/min)

$$v_c = \frac{D_{cap} \times \pi \times n}{1000}$$

**Avance por vuelta ( $f_n$ )**  
(mm)

$$f_n = \frac{v_f}{n}$$

**Avance por diente ( $f_z$ )**  
(mm)

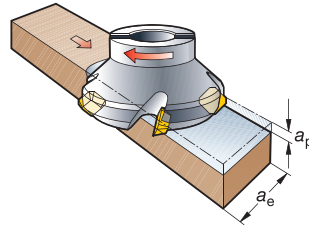
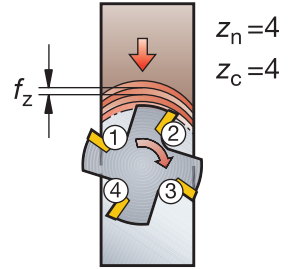
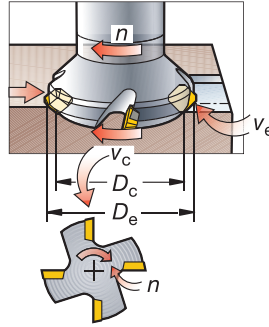
$$f_z = \frac{v_f}{n \times z_c}$$

**Velocidad del husillo ( $n$ )**  
(rpm)

$$n = \frac{v_c \times 1000}{\pi \times D_{cap}}$$

**Avance de mesa ( $v_f$ )**  
(mm/min)

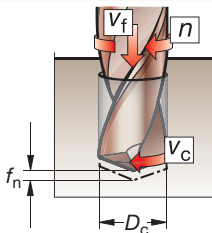
$$v_f = f_z \times n \times z_c$$



**Velocidad de penetración ( $v_f$ )**  
(mm/min)

Nota. En taladrado  $v_f$  = mm/r

$$v_f = f_n \times n$$



$a_e$  = profundidad de corte radial (mm) (empena)

$a_p$  = profundidad de corte axial (mm)

$D_{cap}$  = diámetro de mecanizado a la profundidad de corte real,  $a_p$  (mm)

$D_e$  =  $D_{cap}$  = diámetro de mecanizado a la profundidad de corte real

$f_n$  = avance por vuelta (mm/r)

$n$  = velocidad del husillo (rpm)

$v_c$  = velocidad de corte (m/min)

$v_f$  = avance de mesa (mm/min)

$z_c$  = Número efectivo de dientes en empena (piezas)



## Seguridad en el mecanizado

Información sobre seguridad durante el rectificado de metal duro

### Composición del material

Los productos de metal duro contienen carburo de tungsteno y cobalto. También pueden incluir otras sustancias, como carburo de titanio, carburo de tantalio, carburo de niobio, carburo de cromo, carburo de molibdeno o carburo de vanadio. Algunas calidades contienen carbonitruro de titanio y/o de níquel.

### Formas de exposición

El proceso de rectificar o calentar una pieza de metal duro o un producto fabricado con metal duro genera polvo o humos que contienen elementos peligrosos para la salud, en el caso de inhalarse, ingerirse o de entrar en contacto con la piel y los ojos.

### Toxicidad aguda

El polvo generado resulta tóxico por inhalación. La inhalación puede ocasionar irritación e inflamación de las vías respiratorias. La inhalación simultánea de carburo de cobalto y tungsteno ha dado lugar a una toxicidad por inhalación mucho más elevada que la inhalación sólo de cobalto. El contacto con la piel puede producir irritación y picores. Las personas especialmente sensibles pueden sufrir una reacción alérgica.

### Toxicidad crónica

La inhalación repetida de aerosoles con contenido en cobalto puede ocasionar obstrucción de las vías respiratorias. La inhalación prolongada de concentraciones crecientes puede producir fibrosis o cáncer de pulmón. Los estudios epidemiológicos indican que los trabajadores expuestos anteriormente a concentraciones elevadas de carburo de tungsteno/cobalto tienen mayor riesgo de desarrollar cáncer de pulmón. El cobalto y el níquel son sensibilizadores potenciales de la piel. Un contacto prolongado o repetido puede provocar irritación.

### Riesgos

Tóxico: riesgo de efectos graves para la salud en caso de exposición prolongada por inhalación  
Tóxico por inhalación

Tóxico: riesgo de daños graves para la salud por exposición prolongada a su inhalación Tóxico por inhalación Evidencia limitada de efecto carcinogénico Puede producir sensibilización por inhalación y contacto con la piel

Puede producir sensibilización por inhalación y en contacto con la piel

### Medidas preventivas

- Evite la formación de polvo y su inhalación. Utilice una salida de ventilación local adecuada para limitar la exposición de los trabajadores a valores bastante por debajo de los límites autorizados en su país.
- Si no se puede proveer de una buena ventilación, o ésta no es adecuada, utilice respiradores aprobados para este fin.
- Utilice gafas de seguridad con protectores laterales cuando sea necesario.
- Evite un contacto repetido con la piel. Utilice guantes de protección adecuados. Lávese a fondo la parte en contacto con el material después de su manipulación.
- Utilice equipo de protección adecuado. Lave la ropa siempre que sea necesario.
- No consuma alimentos ni bebidas ni fume en el área de trabajo. Lávese a fondo antes de comer, beber o fumar.

## Índice



|                |                |             |                |           |                |
|----------------|----------------|-------------|----------------|-----------|----------------|
| <b>A</b>       |                | CNMG -MM    | 35             | DCGX -AL  | 89             |
| A...DCLNR/L    | 64, 68         | CNMG -MR    | 37             | DCLNLR/L  | 58             |
| A...DDUNR/L    | 64, 68         | CNMG -PF    | 25             | DCMT -KF  | 83             |
| A...DSKNR/L    | 64, 68         | CNMG -PM    | 27             | DCMT -KM  | 85             |
| A...DTFNR/L    | 64, 68         | CNMG -PR    | 29             | DCMT -KR  | 87             |
| A...DVUNR/L    | 64             | CNMG -QM    | 55             | DCMT -MF  | 77, 91         |
| A...DWLNR/L    | 64             | CNMG -WF    | 25, 33, 41     | DCMT -MM  | 79, 93         |
| A...MWLNR/L    | 68             | CNMG -WMX   | 27, 35, 43, 45 | DCMT -MR  | 81             |
| A...SCLCR/L    | 102            | CNMM -MR    | 39             | DCMT -PF  | 71             |
| A...SDUCR/L    | 102            | CNMM -PR    | 31             | DCMT -PM  | 73             |
| A...SSKCR/L    | 102            | CNMM -WR    | 31             | DCMT -PR  | 75             |
| A...STFCR/L    | 104            | Cx-DCLNR/L  | 59, 65         | DCMW...FP | 89             |
| A...SVQBR/L    | 104            | Cx-DDJNR/L  | 59, 65         | DCMX -WF  | 71             |
| A...SVUBR/L    | 104            | Cx-DSKNR/L  | 61             | DCMX -WF  | 71, 77, 83, 91 |
|                |                | Cx-DSRNR/L  | 61             | DCMX -WM  | 73, 79, 85, 93 |
| <b>C</b>       |                | Cx-DSSNR/L  | 61             | DDJNR/L   | 58             |
| CCGT -UM       | 91, 93         | Cx-DTFNR/L  | 59, 65         | DNGA S... | 57             |
| CCGW...S       | 95             | Cx-DTJNR/L  | 59             | DNGP      | 51             |
| CCGW...S...FWH | 95             | Cx-DVJNR/L  | 63             | DNMA -KR  | 47             |
| CCGW...T...FWH | 95             | Cx-DWLNR/L  | 63, 65         | DNMG -23  | 53             |
| CCGX -AL       | 89             | Cx-MTJNR/L  | 63             | DNMG -KF  | 41             |
| CCMT -KF       | 83             | Cx-MWLNR/L  | 69             | DNMG -KM  | 43, 45         |
| CCMT -KM       | 85             | Cx-PCLNR/L  | 67             | DNMG -KR  | 49             |
| CCMT -KR       | 87             | Cx-PDUNR/L  | 67             | DNMG -MF  | 33, 51         |
| CCMT -MF       | 77, 91         | Cx-PSKNR/L  | 67             | DNMG -MM  | 35             |
| CCMT -MM       | 79, 93         | Cx-PTFNR/L  | 69             | DNMG -MR  | 37             |
| CCMT -MR       | 81             | Cx-266R/LFG | 135            | DNMG -PF  | 25             |
| CCMT -PF       | 71             | Cx-266R/LKF | 137            | DNMG -PM  | 27             |
| CCMT -PM       | 73             | Cx-R/L123   | 122, 126       | DNMG -PR  | 29             |
| CCMT -PR       | 75             | Cx-SCLCR/L  | 97, 103        | DNMG -QM  | 55             |
| CCMT -WF       | 71, 77, 83, 91 | Cx-SDJCR/L  | 97, 103        | DNMM -MR  | 39             |
| CCMT -WM       | 79, 85, 93     | Cx-SRDCN    | 97             | DNMM -PR  | 31             |
| CCMW...FP      | 89             | Cx-SRSCR/L  | 97             | DNMX -WF  | 25, 33, 41     |
| CNGA S...      | 57             | Cx-SSKCR/L  | 103            | DNMX -WMX | 27, 35, 43, 45 |
| CNGA T...      | 41, 43, 45     | Cx-STFCR/L  | 105            | DSBNR/L   | 60             |
| CNGA T...AWH   | 57             | Cx-STGCR/L  | 99             | DSKNR/L   | 60             |
| CNGP           | 51             | Cx-SVHBR/L  | 101            | DSSNR/L   | 60             |
| CNMA -KR       | 47             | Cx-SVJBR/L  | 101            | DTFNR/L   | 58             |
| CNMG -23       | 53             | Cx-SVQBR/L  | 105            | DTJNR/L   | 58             |
| CNMG -KF       | 41             | Cx-391.EH   | 175            | DVJNR/L   | 62             |
| CNMG -KM       | 43, 45         | <b>D</b>    |                | DWLNR/L   | 62             |
| CNMG -KR       | 49             | DCGT -UM    | 91, 93         |           |                |
| CNMG -MF       | 33, 51         | DCGW...S    | 95             |           |                |

|              |                   |          |                |             |            |
|--------------|-------------------|----------|----------------|-------------|------------|
| <b>E</b>     |                   |          |                |             |            |
| E10          | 176               | R245 -KM | 150            | <b>S</b>    |            |
| E12          | 176               | R245 -ML | 150            | SCGX -AL    | 89         |
| E16          | 176               | R245 -MM | 150            | SCLCR/L     | 96         |
| E20          | 176               | R245 -PH | 150            | SCMT -KF    | 83         |
| E25          | 176               | R245 -PL | 150            | SCMT -KM    | 85         |
|              |                   | R245 -PM | 150            | SCMT -KR    | 87         |
|              |                   | R300     | 167            | SCMT -MF    | 77, 91     |
| <b>M</b>     |                   | R300 -KH | 168            | SCMT -MM    | 79, 93     |
| MTJNR/L      | 62                | R300 -MH | 168            | SCMT -MR    | 81         |
|              |                   | R300 -MM | 168            | SCMT -PF    | 71         |
| <b>N</b>     |                   | R300 -PH | 168            | SCMT -PM    | 73         |
| N123         | 124               | R300 -PM | 168            | SCMT -PR    | 75         |
| N123 -AM     | 119               | R390     | 156-158        | SDJCR/L     | 96         |
| N123 -CF     | 111               | R390 -KH | 159            | SNGA S...   | 57         |
| N123 -CM     | 109, 111          | R390 -KL | 159, 162       | SNGA T...   | 41, 43, 45 |
| N123 -CR     | 111               | R390 -KM | 159, 162       | SNMA -KR    | 47         |
| N123 -CS     | 109               | R390 -ML | 162            | SNMG - MF   | 33         |
| N123 -GF     | 115               | R390 -MM | 159, 162       | SNMG - MM   | 35         |
| N123 -GM     | 115               | R390 -NL | 162            | SNMG -23    | 53         |
| N123 -RM     | 117               | R390 -PH | 162            | SNMG -KM    | 43, 45     |
| N123 -RO     | 117               | R390 -PL | 159, 162       | SNMG -KM    | 45         |
| N123 -RS     | 119               | R390 -PM | 159, 162       | SNMG -KR    | 49         |
| N123 -TF     | 121               | R590     | 170            | SNMG -MR    | 37         |
| N123 -TM     | 121               | R590 -KL | 169            | SNMG -PF    | 25         |
| N123...S     | 115, 117          | R590 -KW | 170            | SNMG -PM    | 27         |
| N151.2 -4E   | 113               | R590 -NL | 169            | SNMG -PR    | 29         |
| N151.2 -5E   | 113               | R590 -NW | 170            | SNMG -QM    | 55         |
| N151.2 -5F   | 113               | R840     | 183-186        | SNMM -MR    | 39         |
| N151.3 -4G   | 131               | R842     | 187-188        | SNMM -PR    | 31         |
| <b>R</b>     |                   | R846     | 189            | SRDCN       | 96         |
| R/L123 -CF   | 111               | R850     | 190-191        | SRSCR/L     | 96         |
| R/L123 -CM   | 111               | RCGX -AL | 89             | SSBCR/L     | 98         |
| R/L123 -CR   | 111               | RCHT -KL | 165            | SSDCR/L     | 98         |
| R/L151.2 -4E | 113               | RCHT -PL | 165            | STFCR/L     | 98         |
| R/L151.2 -5E | 113               | RCKT -KH | 165            | STGCR/L     | 98         |
| R/L151.2 -5F | 113               | RCKT -KM | 165            | SVHBR/L     | 100        |
| R/LAG123     | 130               | RCKT -ML | 165            | SVJBR/L     | 100        |
| R/LAG151.32  | 131               | RCKT -MM | 165            | S...PCLNR/L | 66         |
| R/LF123      | 123, 124, 127-129 | RCKT -PH | 165            | S...PDUNR/L | 66         |
| R200         | 164               | RCKT -PM | 165            | S...PSKNR/L | 66         |
| R245         | 149, 150          | RCKT -WM | 165            | S...PTFNR/L | 68         |
| R245 -AL     | 150               | RCMT     | 73, 79, 83, 85 |             |            |
| R245 -KH     | 150               | RCMT -SM | 91, 93         |             |            |
| R245 -KL     | 150               |          |                |             |            |

# Indice



|            |                |              |                |          |          |
|------------|----------------|--------------|----------------|----------|----------|
| <b>T</b>   |                | VBMT -KR     | 87             | 151.2    | 124, 125 |
| TCGT -UM   | 93             | VBMT -MF     | 77, 91         | 266R/LFG | 135      |
| TCGW...S   | 95             | VBMT -MM     | 79, 93         | 266R/LG  | 134      |
| TCGX -AL   | 89             | VBMT -MR     | 81             | 266R/LKF | 137      |
| TCMT -KF   | 83             | VBMT -PF     | 71             | 266R/LL  | 136      |
| TCMT -KM   | 85             | VBMT -PM     | 73             | 316      | 172-174  |
| TCMT -KR   | 87             | VBMT -PR     | 75             | 345      | 146      |
| TCMT -MF   | 77, 91         | VCGT -UM     | 91             | 345-KH   | 147      |
| TCMT -MM   | 79, 93         | VCGX -AL     | 89             | 345-KL   | 147      |
| TCMT -MR   | 81             | VCMW...FP    | 89             | 345-KM   | 147      |
| TCMT -PF   | 71             | VNGA S...    | 57             | 345-PH   | 147      |
| TCMT -PM   | 73             | VNGP         | 51             | 345-PL   | 147      |
| TCMT -PR   | 75             | VNMG -23     | 53             | 345-PM   | 147      |
| TCMW...FLP | 89             | VNMG -KM     | 43, 45         | 490      | 152-154  |
| TCMW...FP  | 89             | VNMG -MF     | 33, 51         | 490-KH   | 155      |
| TCMW...FRP | 89             | VNMG -MM     | 35             | 490-KM   | 155      |
| TCMX -WF   | 71, 77, 83, 91 | VNMG -PF     | 25             | 490-KL   | 155      |
| TCMX -WM   | 73, 79, 85, 93 | VNMG -PM     | 27             | 490-ML   | 155      |
| TNGA S...  | 57             | VNMG -QM     | 55             | 490-MM   | 155      |
| TNGA T...  | 41, 43, 45     | <b>W</b>     |                | 490-PH   | 155      |
| TNMA -KR   | 47             | WNGA S...    | 57             | 490-PL   | 155      |
| TNMG -23   | 53             | WNGA T...    | 43, 45         | 490-PM   | 155      |
| TNMG -KF   | 41             | WNGA T...AWH | 57             | 880      | 196, 198 |
| TNMG -KM   | 43, 45         | WNGP         | 51             | 880 -GM  | 197, 199 |
| TNMG -KR   | 49             | WNMA -KR     | 47             | 880 -GR  | 197, 199 |
| TNMG -MF   | 33             | WNMG -23     | 53             | 880-GT   | 197      |
| TNMG -MM   | 35             | WNMG -KF     | 41             | 880 -LM  | 197, 199 |
| TNMG -MR   | 37             | WNMG -KM     | 43, 45         | 880-MS   | 197, 199 |
| TNMG -PF   | 25             | WNMG -KR     | 49             |          |          |
| TNMG -PM   | 27             | WNMG -MF     | 33, 51         |          |          |
| TNMG -PR   | 29             | WNMG -MM     | 35             |          |          |
| TNMG -QM   | 55             | WNMG -MR     | 37             |          |          |
| TNMM -MR   | 39             | WNMG -PF     | 25             |          |          |
| TNMM -PR   | 31             | WNMG -PM     | 27             |          |          |
| TNMX -WF   | 25, 33, 41     | WNMG -PR     | 29             |          |          |
| TNMX -WMX  | 27, 35, 43, 45 | WNMG -QM     | 55             |          |          |
| TNMX -WR   | 31             | WNMG -WF     | 25, 33, 41     |          |          |
| <b>V</b>   |                | WNMG -WMX    | 27, 35, 43, 45 |          |          |
| VBGT -UM   | 91, 93         | WNMM -MR     | 39             |          |          |
| VBGW...S   | 95             |              |                |          |          |
| VBMT -KF   | 83             |              |                |          |          |
| VBMT -KM   | 85             |              |                |          |          |



# En beneficio del medio ambiente

## Haga suyo el Concepto Coromant para Reciclado (CRC)

El concepto Coromant para Reciclado (CRC) es un servicio completo ofrecido por Sandvik Coromant a todos sus clientes para las plaquitas y herramientas de metal duro usadas (incluyendo CBN y PCD si el "soporte" es metal duro)..

A la vista de la creciente tendencia de utilizar materias primas no renovables, es una obligación para todos los fabricantes el utilizar económicamente los recursos cada vez más escasos.

Sandvik Coromant pone su grano de arena al respecto con su oferta de recogida de plaquitas y herramientas de metal duro usadas y reciclado de las mismas de la manera más respetuosa con el medio ambiente.

Se pueden recoger todas las plaquitas de metal duro usadas en la caja situada en el lugar de trabajo. Cuando la caja de acopio esté llena, se traslada el contenido a la caja de transporte.

La caja para transporte una vez llena se envía a la oficina de Sandvik Coromant más cerca de usted o se entrega a su contacto Coromant habitual, quien también puede facilitarle más información.



Las ventajas del sistema CRC hablan por sí solas

- Un sistema de reciclado internacional unificado.
- Para clientes directos y comerciales.
- Un procedimiento sencillo con cajas de acopio y transporte.
- Menos desechos, más respetuoso con el medio ambiente.
- Un mejor uso de los recursos.
- Se aceptan también plaquitas de metal duro de otros fabricantes.

Solicite una caja de acopio para cada torno, máquina fresadora, taladradora o centro de mecanizado. Se recomienda que coloque una caja de acopio para plaquitas y otra para las herramientas de metal duro en cada puesto de trabajo.

