

MiCROCUT
THE CHALLENGER



LT Series

CNC Slant Bed Lathe



National Award
of Outstanding



ISO 9001:2015
FM 538421



ISO 14001:2015
EMS 546518



ISO 50001:2011
ENMS 642457

LT Series

The MICROCUT LT series CNC Lathe offers an exceptional combination of standard features in a rugged, affordable compact package. This machine with greater **Speed, Power, Accuracy and Durability** over competitors provides you the highest possible return on investment.

The LT series features a 15hp (11kW) spindle drive (with Fanuc Control) and includes a high quality 3-jaw power chuck as standard equipment. Three models of this line for selection – LT-42, LT-52, and LT-65. A great range to cover **small parts cutting technology**.

A fast turret with 12 or 8 station provides quick rotation time of 0.79 second (incl. unclamp/index/clamp) to adjacent station. Living tool, C-axis and parts catcher are available for complex parts and automatic production.



- One-piece 30°slanted bed
- Linear way ensures faster movement
- A much higher spindle speed- 4000/5000/6000 rpm & heat dissipation
- Clear machining room and easy chip removing
- Mechanical hydraulic chuck interface
- 8 or 12 positions hydraulic turret with fast indexing structure
- Complete CNC Control Package ensures service quality
- Oil leakage detective device
- Hydraulic oil pressure detection device
- Waste Oil / Coolant separator
- Chip conveyor can be retrofitted easily
- Laser Calibration on X- and Z- axes Accuracy
- Wide selection of tooling system available

High Rigidity and Durability

The heavily-ribbed 30-degree slanted bed base provides superior rigidity and durability. All structural component & castings are simulated by Finite Element Analysis (FEA) that ensures a stiff, structurally-sound production performance.

High Productivity

Designed and built for mass volume production and long life

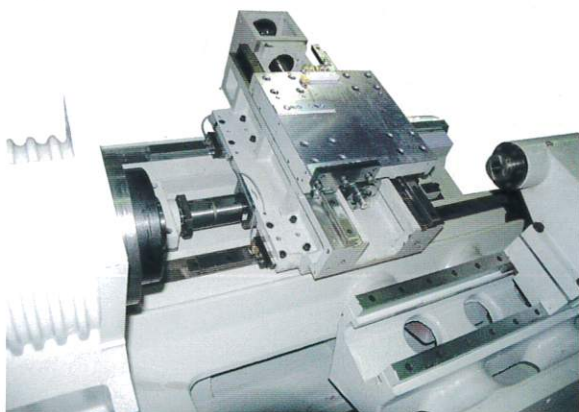
- Powerful 11kW spindle drive
- Fast spindle speed 6000rpm (LT-42 model)
- 30 m/min X- and Z- axis rapid traverse
- Fast 0.79 second tool change time (incl. unclamp/index/clamp)
- Large 65mm bar capacity (LT-65 model)
- 30-degree, 1650kg base offers extra cutting area.
- Designed for easy chip flow into the chip tray

High Reliability

- Mechanical hydraulic chuck interface
- One-piece Meehanite cast iron bed
- Heavy duty linear guideways with double nut ballscrews
- Precision ground class C3 ballscrew
- 4 angular bearings support spindle
- Designed to work in automation mode. No extra job required for retrofit of these equipment.



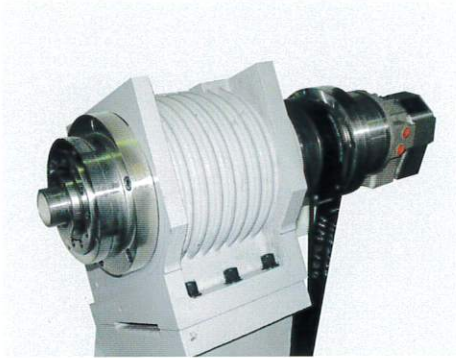
Key Features



Transmission System

- Rigid linear-guideways provides maximum static and dynamic stiffness for long life and overall machining consistency
- Double-nut, hardened & ground ballscrew for added stiffness and rigidity
- Fanuc, Fagor or Siemens servo motors for spindle and X- / Z- axes
- Encoder is built into each motor for precision accuracy
- Direct driving on each axis

Key Features



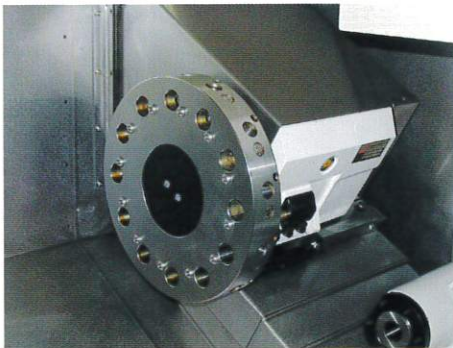
Spindle

- Supported by 4 angular bearing
- Powerful spindle drive 11kW(Fanuc) / 7.5kW(Fagor) / 12kW(Siemens)



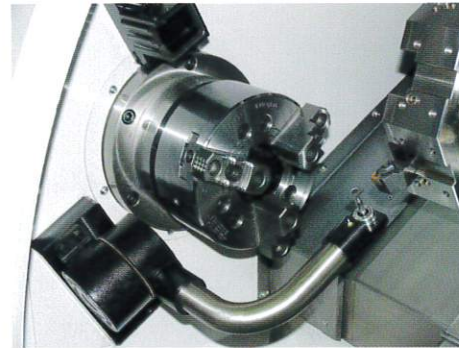
Regular turret top plate with tool holders supplied.

O.D. tooling holder 25 x 25mm, I.D. tooling holder Ø32mm. Through turret coolant capacity provides direct follow of coolant through Turret Port to the active cutting position.



8 or 12-Station Turret

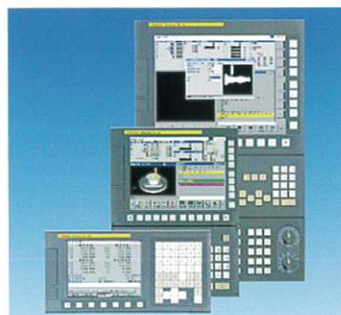
- Regular type or VDI(VDI30) top plate available
- Fast indexing time reduces cycle time
- Bidirectional shortest path indexing
- Hydraulic turret standard(Electric-servo turret on request)



Hydraulic 3-jaw chuck (includes hard & soft jaws)

6"/169mm on LT-42 8"/210mm on LT-52
8"/215mm on LT-65

Complete CNC Control Package



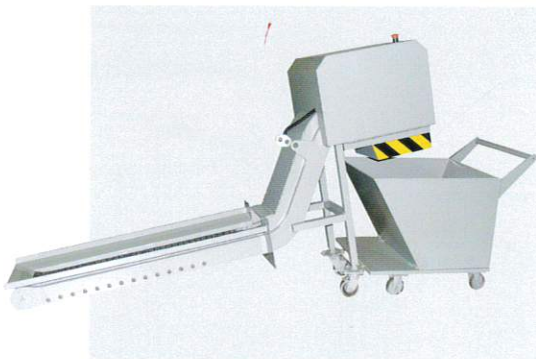
Full package includes spindle motor, axes motor, driver unit and CNC control unit. Fagor 8055i FL controller / Fanuc 0iTf with 8.4" LCD & Manual Guide 0i / Siemens 828D basic with 10.4" LCD / Siemens 828D with 10.4" LCD

Productivity Option



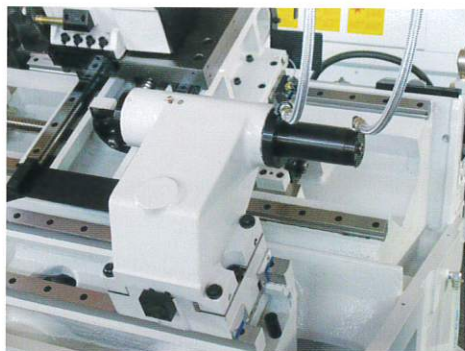
Safety automatic door

avoids foreign objects trapping and ensures work safety.



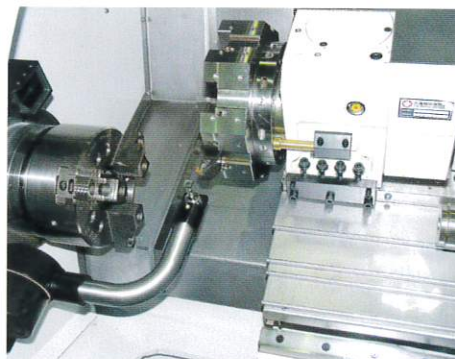
Chip conveyor

provides continuous removal of chips produced by the cutting



Automatic tailstock quill hydraulically driven

Fully programmable hydraulic tailstock can be activated via program or controlled directly by the operator with standard foot pedal.



Manual / Automatic Tool Touch Probe

provides quick set-up and easy use.

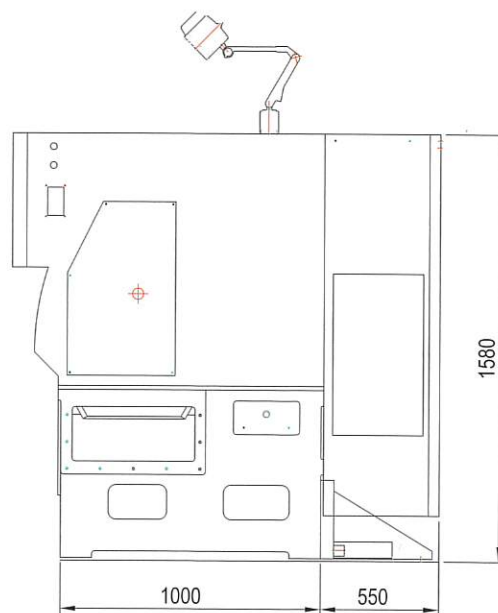
Live Tooling

For secondary milling machine operation, reducing additional part handling and setup cost. For cross or end-milling/drilling operation.

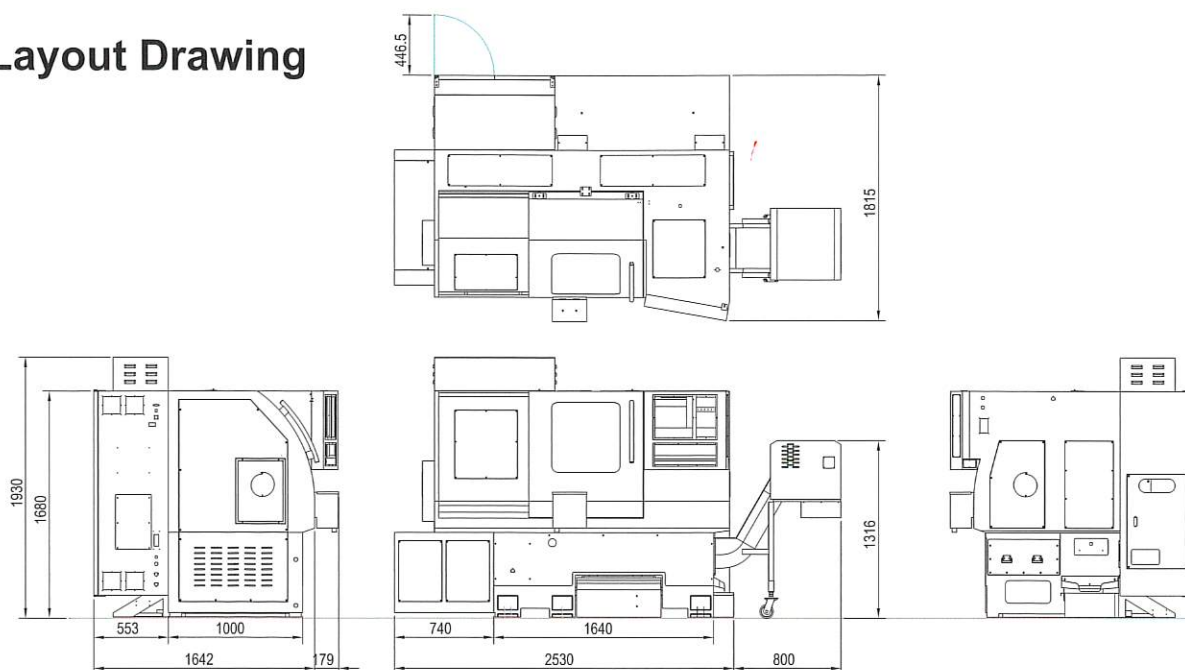
Ergonomic Design

Eye-level monitor

Eye-level control panel provides friendly operation. Manual guide programming on Fanuc control.

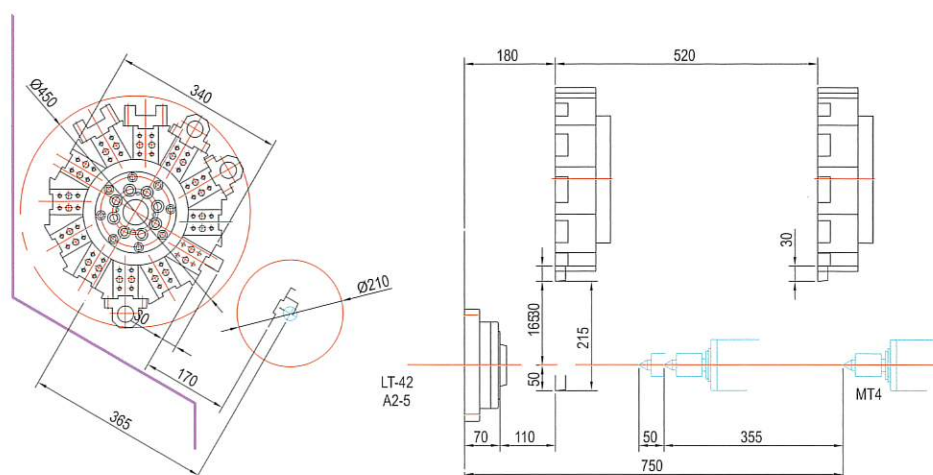


Layout Drawing

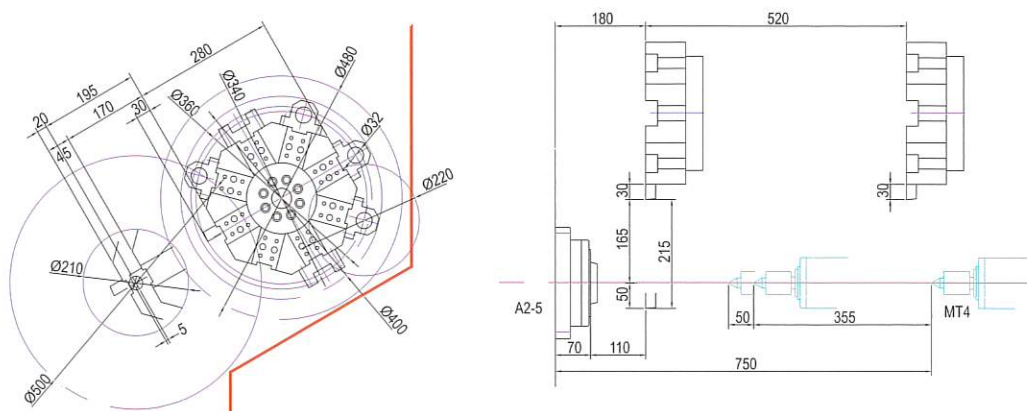


Interference Drawing

LS-200 turret (LT-42) with 12-positions standard top plate



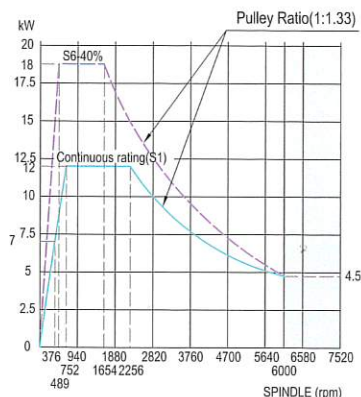
LS-160 turret(LT-42) with 8-position top plate (option)



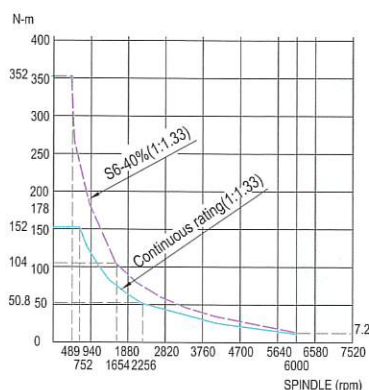
Torque & Horse power chart 12/18K (Siemens)

LT-42 Siemens

Horsepower Chart



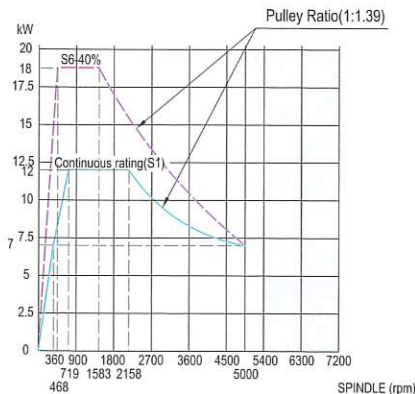
Torque Chart



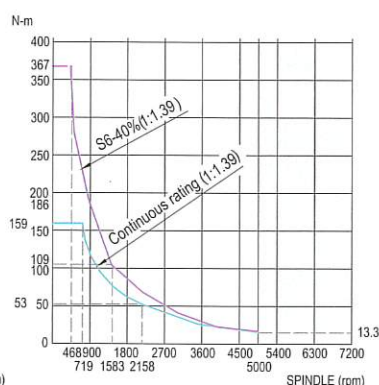
Torque / Horsepower Chart Data	
Spindle Taper	ISO A2-5
Spindle Speed	6000 RPM
Spindle Motor	Siemens 1PH8133-1DD02-0CA1
Motor Output	12 / 18 kW
Gear Ratio	-
Pulley Ratio	4/3(1:1.33)

LT-52 Siemens

Horsepower Chart



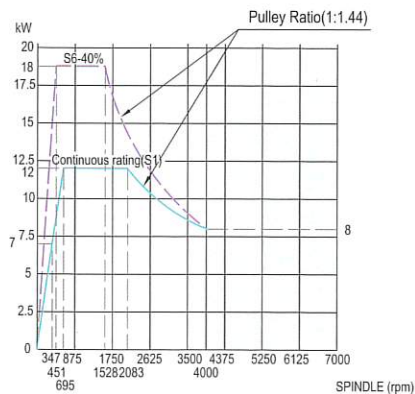
Torque Chart



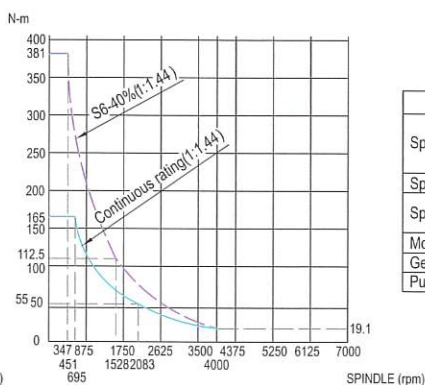
Torque / Horsepower Chart Data	
Spindle Taper	ISO A2-6(52mm)
Spindle Speed	5000 RPM
Spindle Motor	Siemens 1PH8133-1DD02-0CA1
Motor Output	12 / 18 kW
Gear Ratio	-
Pulley Ratio	39/28(1:1.39)

LT-65 Siemens

Horsepower Chart



Torque Chart

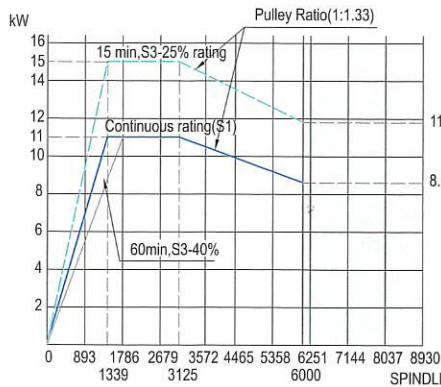


Torque / Horsepower Chart Data	
Spindle Taper	ISO A2-6(65mm)
Spindle Speed	4000 RPM
Spindle Motor	Siemens 1PH8133-1DD02-0CA1
Motor Output	12 / 18 kW
Gear Ratio	-
Pulley Ratio	36/25(1:1.44)

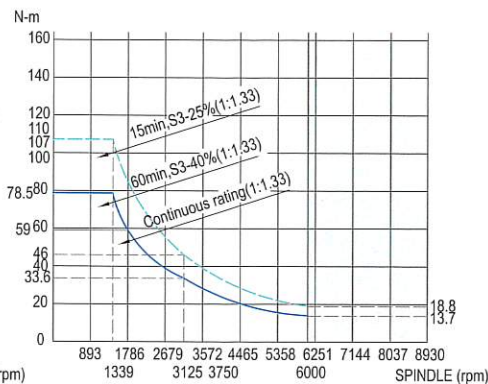
Torque & Horse power chart 11/15K (Fanuc)

LT-42 Fanuc

Horsepower Chart



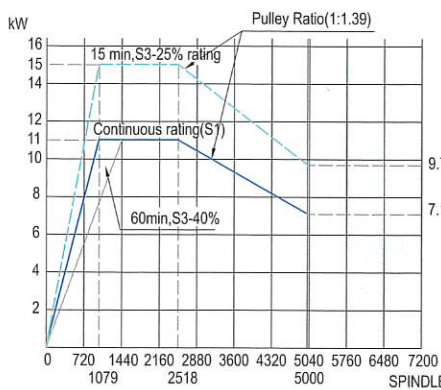
Torque Chart



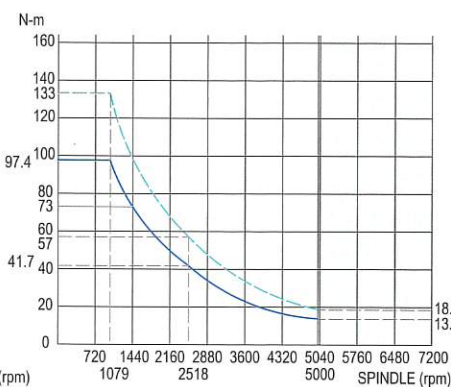
Torque / Horsepower Chart Data	
Spindle Taper	A2-5(42mm)
ISO	-
Spindle Speed	6000 RPM
Spindle Motor	FANUC β ii12/10000
Motor Output	11 / 15 kW
Gear Ratio	-
Pulley Ratio	4/3(1:1.33)

LT-52 Fanuc

Horsepower Chart



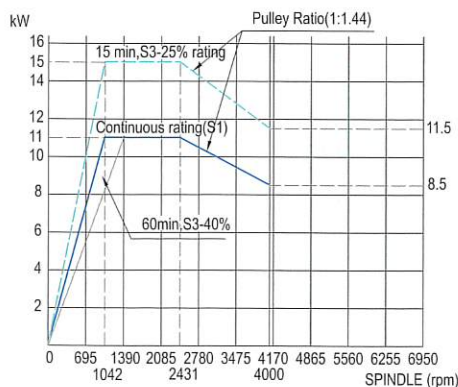
Torque Chart



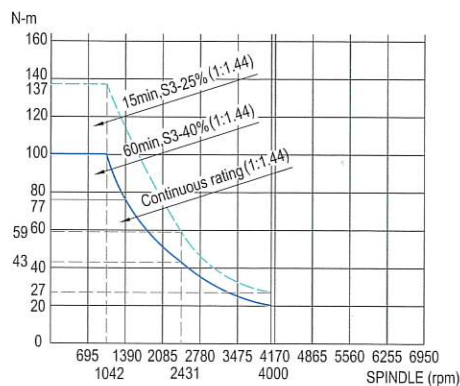
Torque / Horsepower Chart Data	
Spindle Taper	A2-6(52mm)
ISO	-
Spindle Speed	5000 RPM
Spindle Motor	FANUC β ii12/10000
Motor Output	11 / 15 kW
Gear Ratio	-
Pulley Ratio	39/28(1:1.39)

LT-65 Fanuc

Horsepower Chart



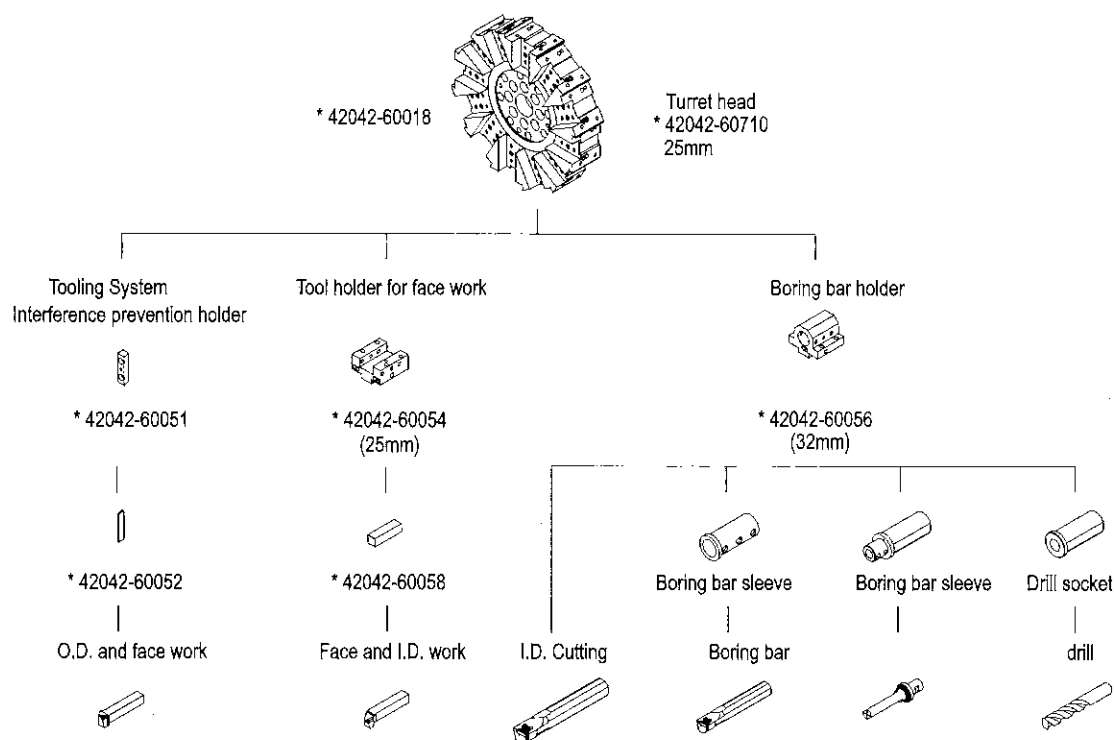
Torque Chart



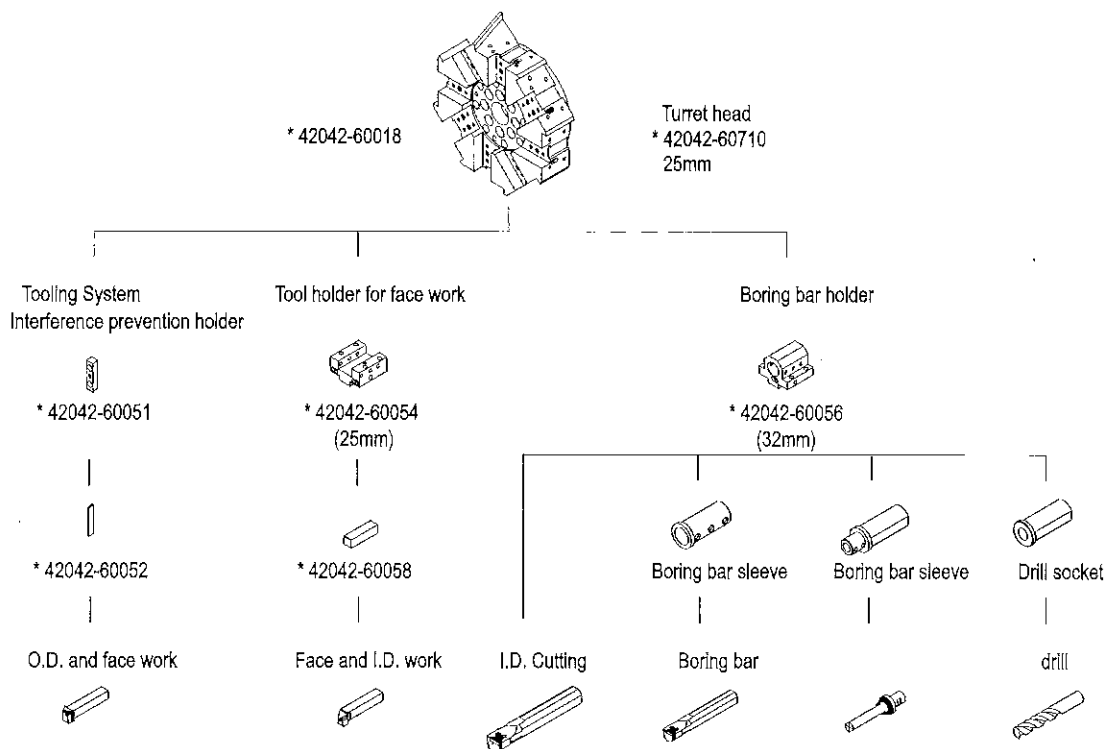
Torque / Horsepower Chart Data	
Spindle Taper	A2-6(65mm)
ISO	-
Spindle Speed	4000 RPM
Spindle Motor	FANUC β ii12/10000
Motor Output	11 / 15 kW
Gear Ratio	-
Pulley Ratio	36/25(1:1.44)

Tooling System (Option)

LS-200 12 Station standard disc (25mm)

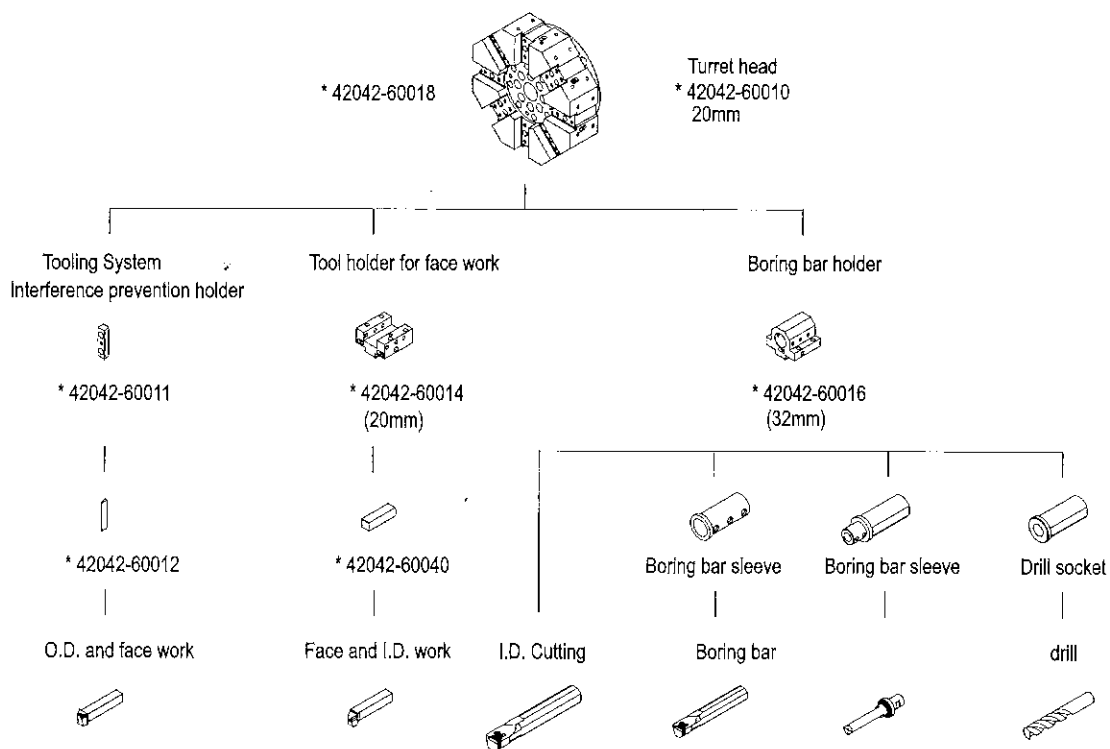


LS-200 8 Station standard disc (25mm)

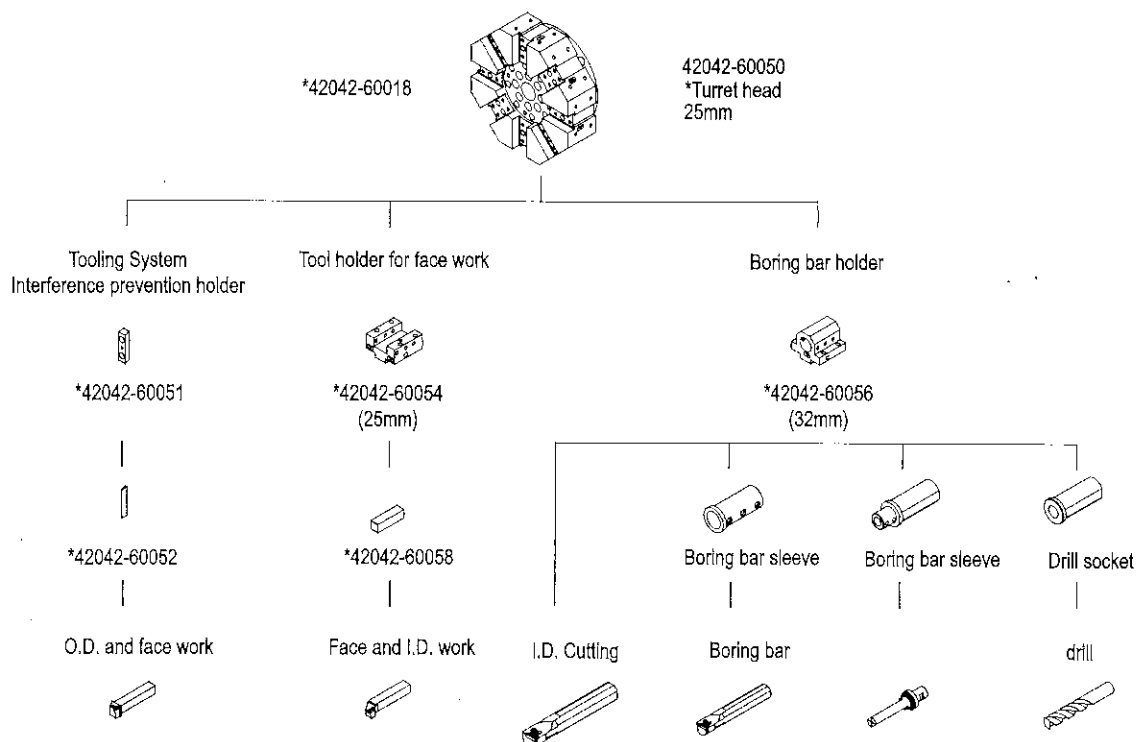


Tooling System (Option)

LS-160 8 stations standard disc (20mm)



LS-160 8 stations standard disc (25mm)



Technical Data

Features	Description	Unit	LT-42	LT-52	LT-65
Capacity	Swing over bed	mm	500		
	Swing over cross slide	mm	220		
	Max. cutting diameter	mm	210		
	Max. cutting length	mm	460		
	Slant bed degree	degree	30		
Travel	X axis travel	mm	(215) 170+45		
	Z axis travel	mm	520		
Spindle	Spindle nose		A2-5/A2-6		
	Through hole diameter	mm	42 / 52 / 65		
	Spindle speed	rpm	6000	5000	4000
	Spindle motor [*]	kW	Fanuc: 11/15 Fagor: 7.5/11 for LT-42/52, 11/15 for LT-65 Siemens: 12/15		
	Hydraulic chuck size	mm	169	210	215
	Hydraulic pressure-min/max	kgf/cm ²	5/30		
Turret	Turret type		Hyd. vertical		
	Tool no.		8 or 12		
	Boring bar dia.	mm	Ø32 (VDI-30) / Ø40 (VDI-40)		
Live Tooling (opt.)	Number of tool station	mm	12(VDI-30) / 8(VDI-40)		
	Power rating	kW	3.75		
	Max. speed	rpm	4000		
Axes	X axis ballscrew		Ø 32 x P10 x C3		
	X axis linear guideway	mm	30		
	X axis rapid feed	m/min	30		
	Z axis ballscrew		Ø 32 x P10 x C5		
	Z axis linear guideway	mm	30		
	Z axis rapid feed	m/min	30		
Motor	Coolant pump motor	W	530 (50Hz) / 750 (60Hz)		
	Hydraulic pump motor	W	1500		
	Lubrication pump motor	W	12		
Coolant	Tank capacity	L	140		
	Max. coolant pressure	kg/cm ²	10		
	Max. coolant flow	L/min	58 (50Hz) / 66 (60Hz)		
Tailstock (Opt.)	Tailstock quill dia.	mm	65		
	Tailstock travel	mm	370		
	Quill inside taper	MT	4		
	Quill travel	mm	50		
Miscellaneous	LxWxH (with chip conveyor)	mm	3330 x 1821 x 1930		
	LxWxH (without chip conveyor)	mm	2530 x 1821 x 1930		
	Machine weight	kg	3000	3040	3070
Total power consumption		KVA	Fagor:20	Fanuc:25	Siemens:20

* Specifications are subject to change without notice.

Accessory

Standard

- Heat exchanger for electric cabinet
- Hydraulic tailstock quill
- High pressure coolant system
- Auto lubrication system
- Hydraulic unit
- Fully enclosed splash guard with interlock safety device
- CE norms

Option

- Manual / automatic tool setter
- C axis with braking system
- Power turret Sauter VDI30 12 station
- Auto parts catcher
- Bar feeder interface
- Bar feeder V-65E / V-65LE / DH-65
- Spindle reduction tube (45mm) for bar feeder
- EMC
- Collet unit
- Collet
- Extra for Fanuc OiTF controller with 10.4" LCD display and Manual Guide
- Fagor Service Contract for 24 months
- Power transformer
- Live toolholders
- 20 bar coolant through tool
- Safety module

