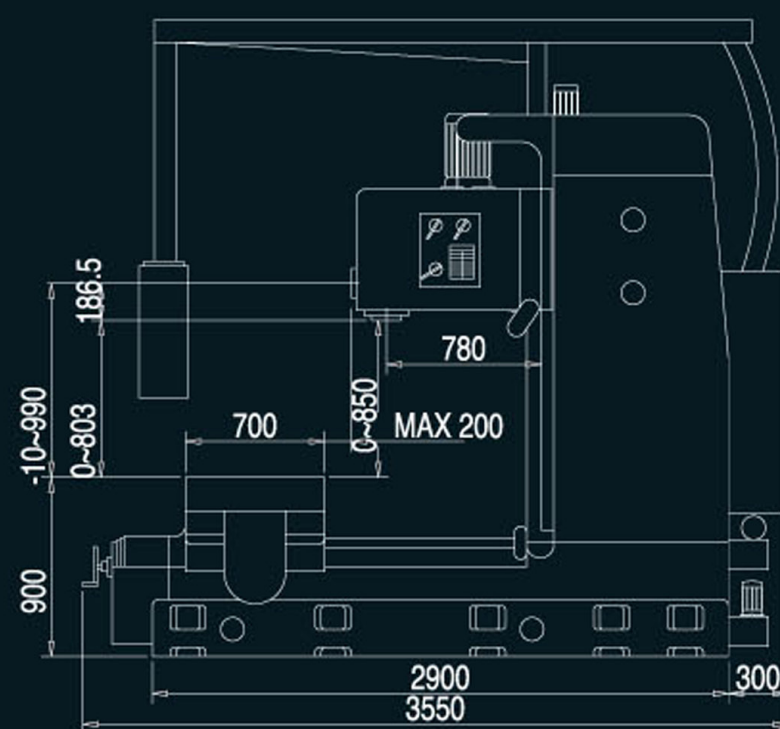
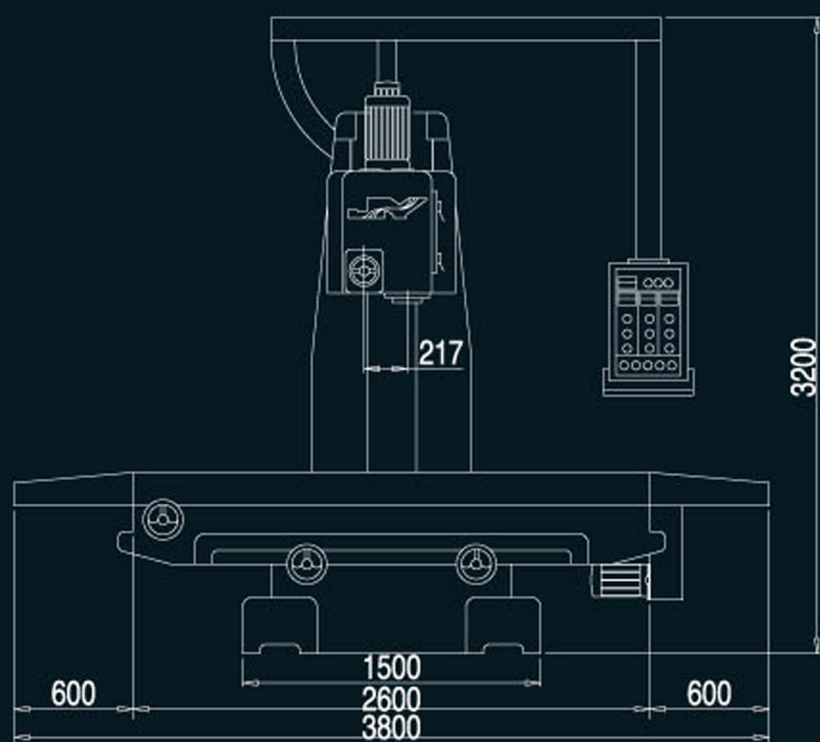


Bed Type Vertical & Horizontal Milling Machine



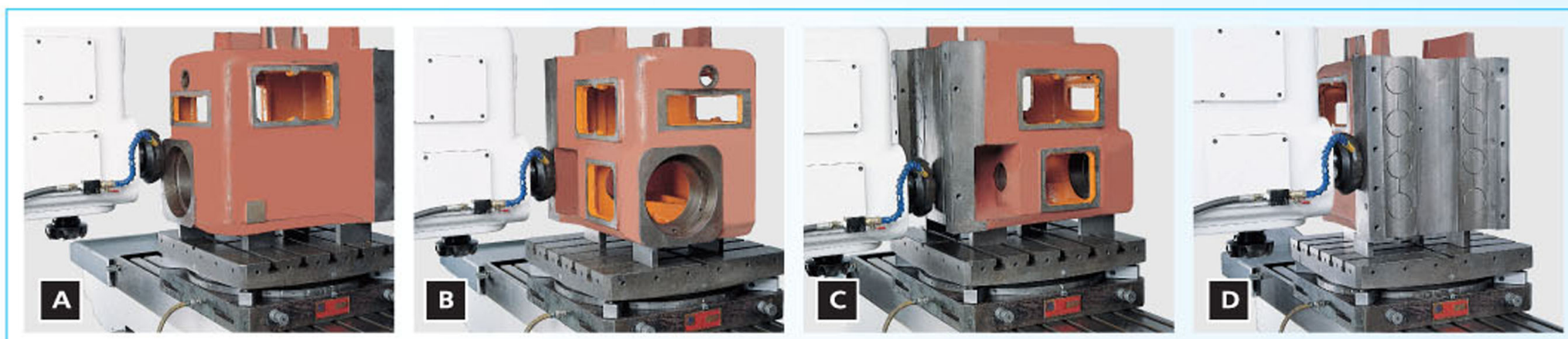
cyclone

VH series





VH-450 • 480 • 550 • 650A/B • 780 Series



5-SIDE MACHINING IS AVAILABLE

This machine can be fitted with a rotary table for easy and time saving 5-side machining.

FEATURES:

1. The bed, column, saddle and table are manufactured from high quality Meehanite cast iron, stress relieved for high stability.
2. All slideways are hardened, precision ground, then coated with Turcite-B for maximum wear resistance.
3. The X, Y axes are protected by stainless steel telescopic covers.
4. The X, Y axis drive employs high precision C5 class precision ball screws, combined with double nuts, ensuring high accuracy of feed.
5. The spindle runs on precise angular contact bearings.
6. The spindle is precision manufactured from SCM21 alloy steel, heat treated and precision ground.
7. All gears in milling head are hardened and precision ground for quiet running.
8. The X-axis feed is driven by a high torque servo motor, providing variable feed speed.
9. The powerful spindle motor gives a high chip removal rate.
10. Choice of Fanuc or Mitsubishi CNC controller.
11. All models can be converted into CNC controlled machines.



VERTICAL AND HORIZONTAL MILLING HEAD

A combination of vertical and horizontal spindles in a milling head for efficient machining.

When operating with a rotary table, 5-face machining can be quickly accomplished.

The gears inside the milling head are manufactured from SCM-21, carburized and tempered, then precision ground for heavy duty machining and smooth running.

Automatic forced lubrication to the milling head gears ensures minimum gear wear and long service life.



SPINDLE LUBRICATION SYSTEM

The gears and bearings in the milling head are lubricated by an efficient lubrication system to ensure their normal service life. The oil, after fan cooling, is delivered to the gears and bearings.



PRACTICAL TELESCOPIC COVER

The X, Y axes slideways are protected by telescopic cover to prevent scratching on surfaces from chips, and extend the service life of the machine.



RUGGED SADDLE

Massive, scientifically rib reinforced saddle provides rigid support for the table and heavy workpieces.

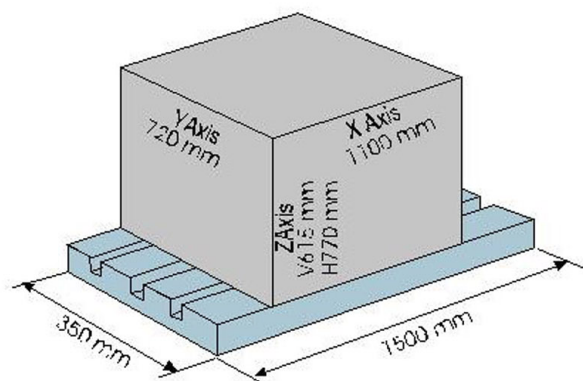


INTEGRATED AUTO LUBRICATING SYSTEM FOR ALL SLIDWAYS

VH450

- Table size: 1500 x 350 mm
- X-axis travel: 1100 mm
- Y-axis travel: 720 mm
- Z-axis travel: 780 mm
- Max. loading weight 1000 kgs
- Spindle speeds 45-1500 RPM (Variable)
- Vertical Spindle taper NT#40 (NT#50 opt)
- Horizontal Spindle taper NT#50
- 10 HP Spindle motor

MACHINING CAPACITY:

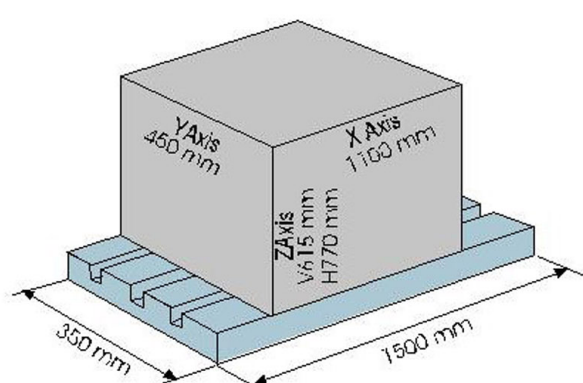


* Coolant tray & chip guard are optional.

VH480

- Table size: 1900 x 420 mm
- X-axis travel: 1300 mm
- Y-axis travel: 850 mm
- Z-axis travel: 780 mm
- Max. loading weight 1000 kgs
- Spindle speeds 45-1500 RPM (18 speeds)
- Spindle taper NT#50
- Vertical & Horizontal Spindle taper NT#50
- 10 HP Spindle motor

MACHINING CAPACITY:

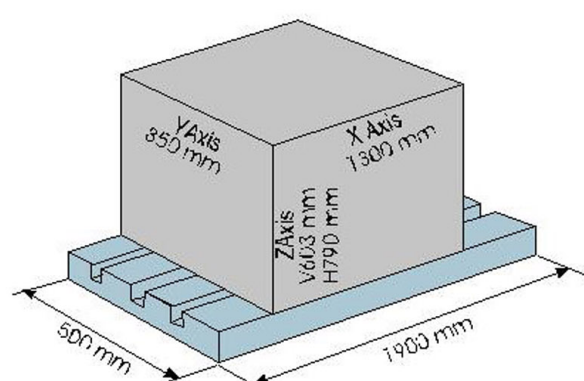


* Coolant tray & chip guard are optional.

VH550

- Table size: 1900 x 500 mm
- X-axis travel: 1300 mm
- Y-axis travel: 900 mm
- Z-axis travel: 800 mm
- Max. loading weight 1500 kgs
- Spindle speeds 45-1500 RPM (18 speeds)
- Vertical & Horizontal spindle taper NT#50
- 10HP spindle motor

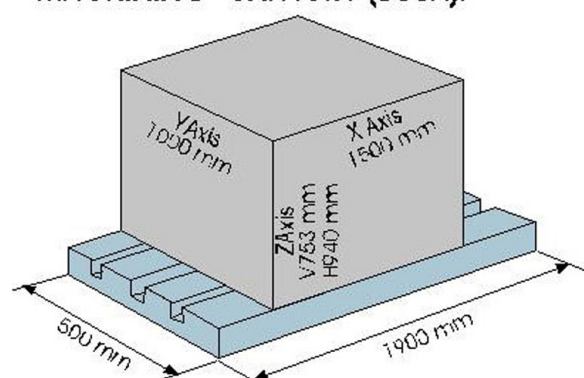
MACHINING CAPACITY:



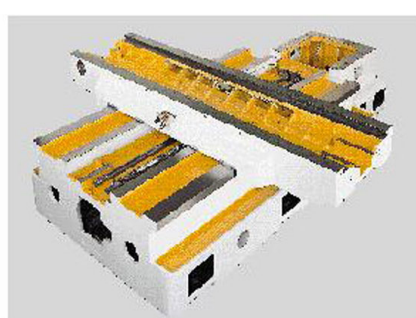
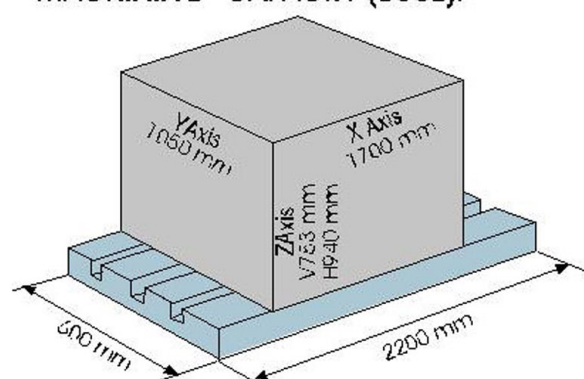
VH650A/B

- Table size: 1900 x 500 mm (650A) / 2200 x 600 mm (650B)
- X-axis travel: 1500 mm (650A) / 1700 mm (650B)
- Y-axis travel: 1000 mm (650A) / 1050 mm (650B)
- Z-axis travel: 950 mm
- Max. loading weight 2000 kgs
- Spindle speeds 45-1500RPM (18 speeds)
- Vertical & horizontal spindle taper NT#50
- Spindle motor: 10HP (650A) / 15HP (650B)

MACHINING CAPACITY (650A):



MACHINING CAPACITY (650B):



BASE B

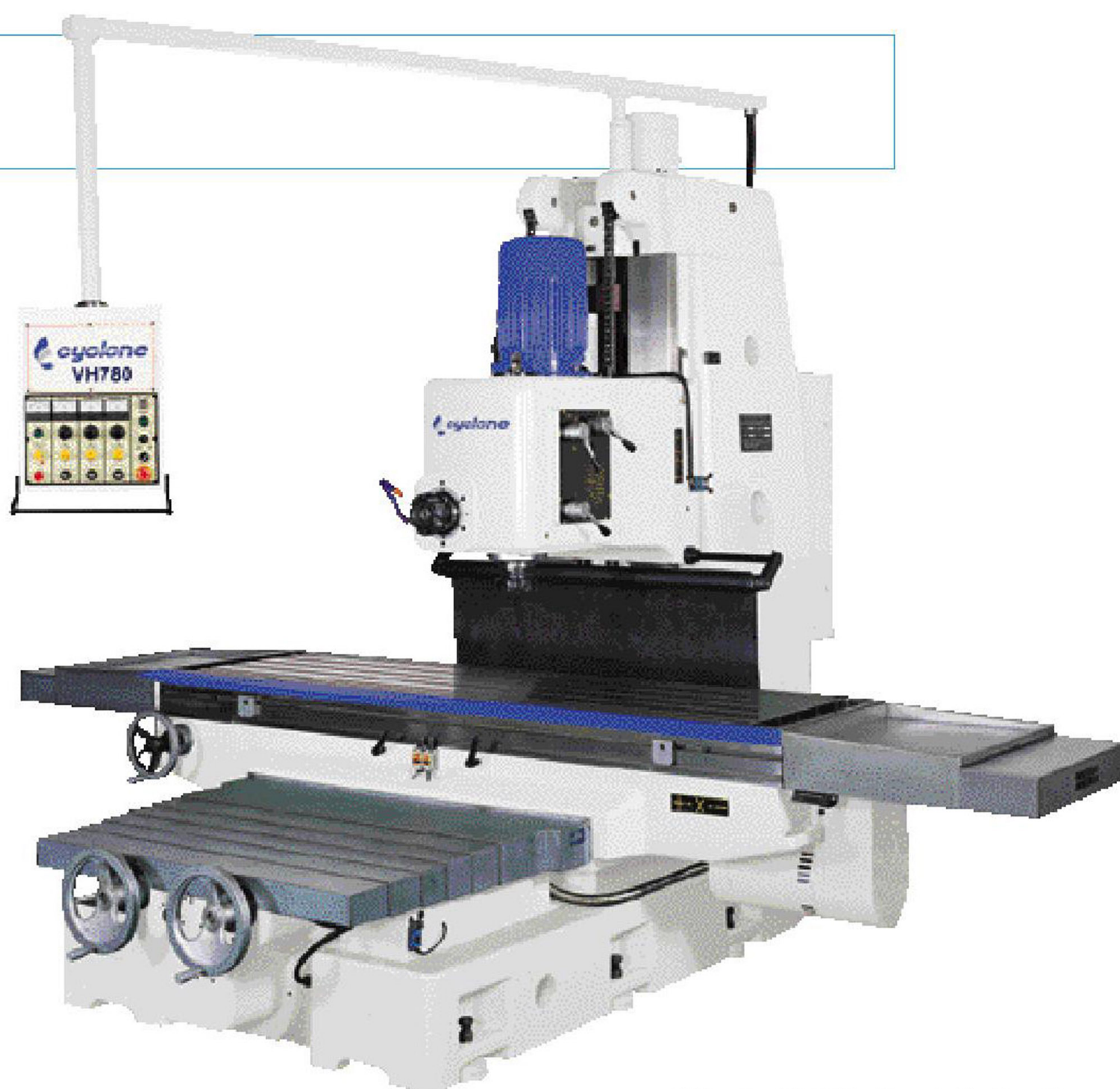
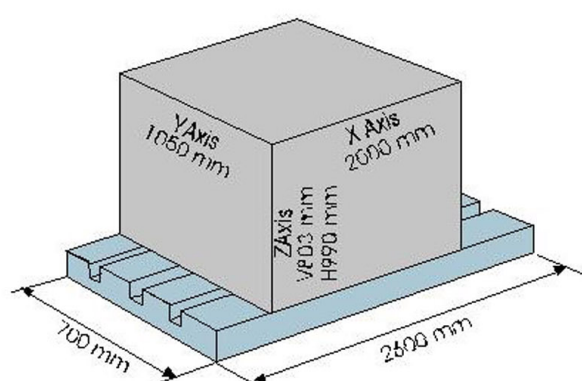
The 4-way base offers solid support, convenient oil circulation and chips removal.



VH780

- Table size 2600 x 700 mm
- X-axis travel: 2000 mm
- Y-axis travel: 1050 mm
- Z-axis travel: 1000 mm
- Max. loading weight 3000kgs
- Spindle speeds 45-1500RPM (18 speeds)
- Vertical & horizontal spindle taper NT#50
- 15 HP spindle motor

MACHINING CAPACITY:

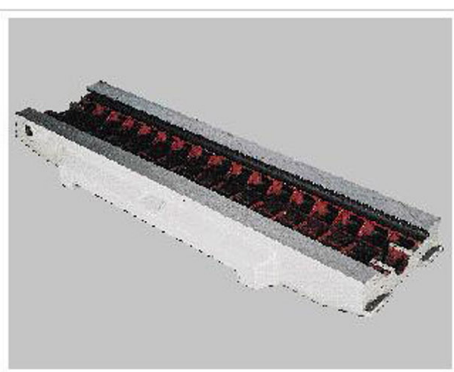


* Coolant & Chip Tray is Optional.



BASE A

The 4-way base offers solid support, convenient oil circulation and chips removal.



SADDLE

The saddle is scientifically ribbed to ensure deformation free performance. It is designed with a proper oil circulation path.



VERTICAL COLUMN

Box design, extremely sturdy and shockproof.

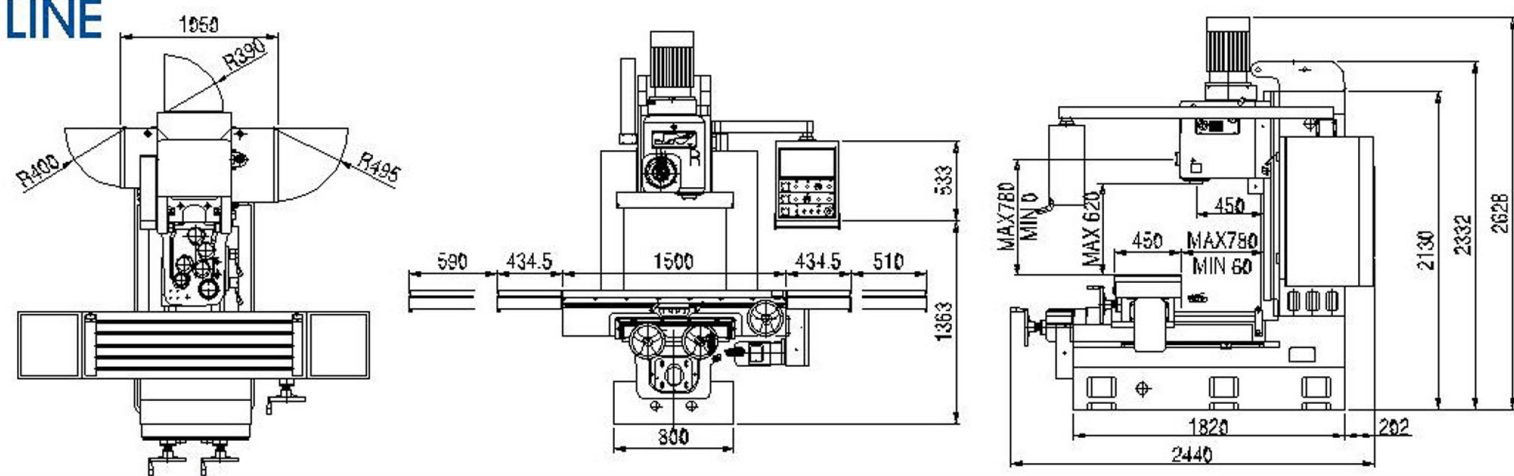
STANDARD ACCESSORIES

- Automatic lubricating system
- Cooling system
- Air pressure lock system
- Telescopic cover
- Tool box
- Spindle draw bar screw
- Leveling pads
- Leveling screws

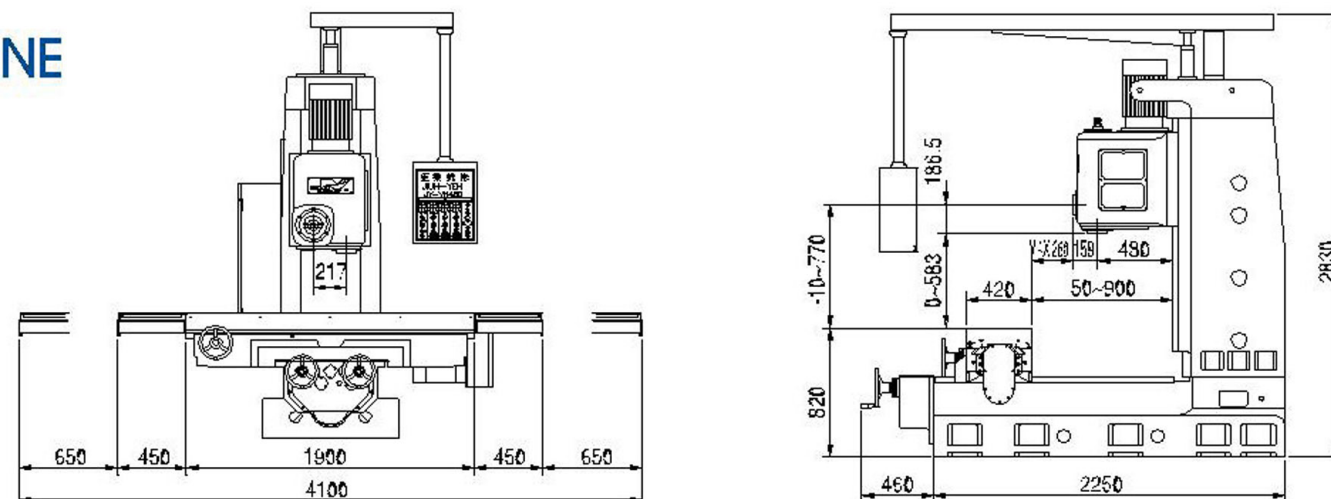
OPTIONAL ACCESSORIES

- Digital readout/linear scale (X, Y, Z)
- Ballscrew (X, Y)
- Air power draw bar (Vertical and horizontal)
- Rotary table (15°, 45°, 90°)
- Magnet (400 x 800, 500 x 1000)
- Spindle braking equipment (Vertical and horizontal spindle)
- Vice (16", 20")
- Free vice (4")
- End milling collet chuck set
- Face milling head
- Face milling shank
- Universal fixture set
- Halogen work light

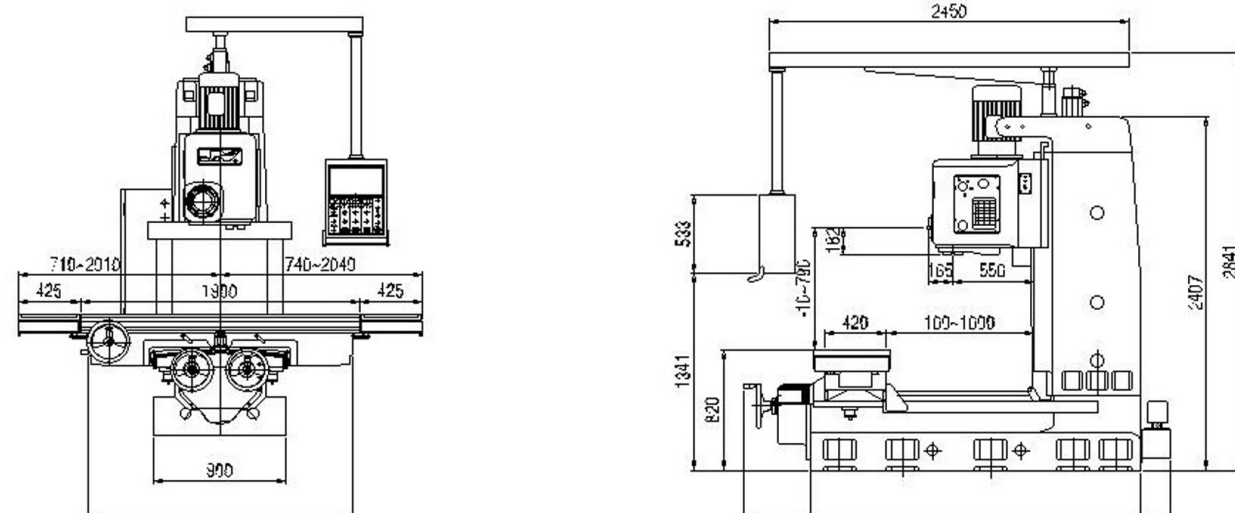
VH450 LINE



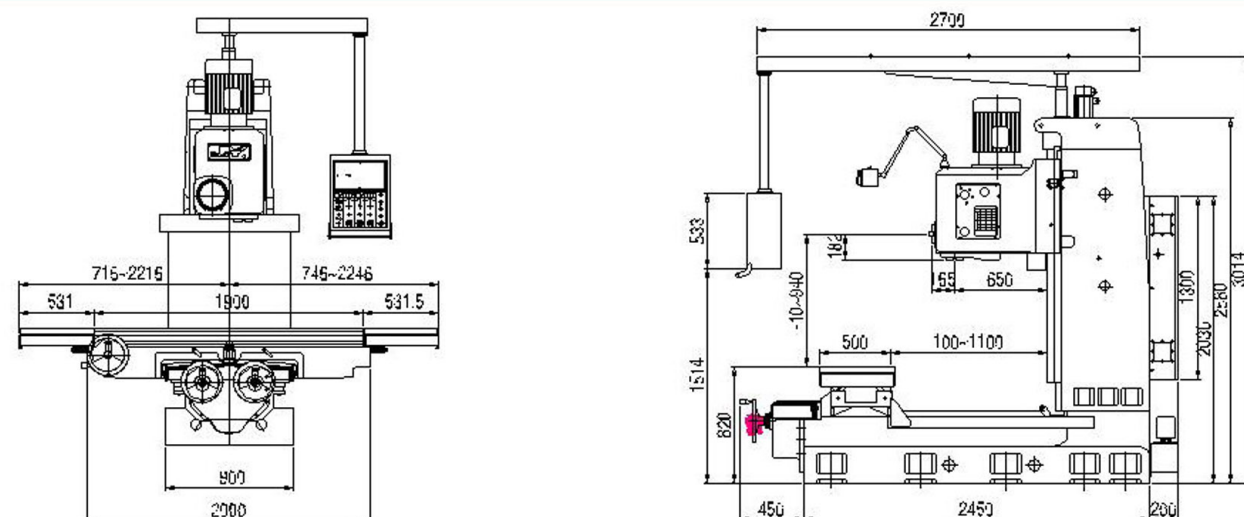
VH480 LINE



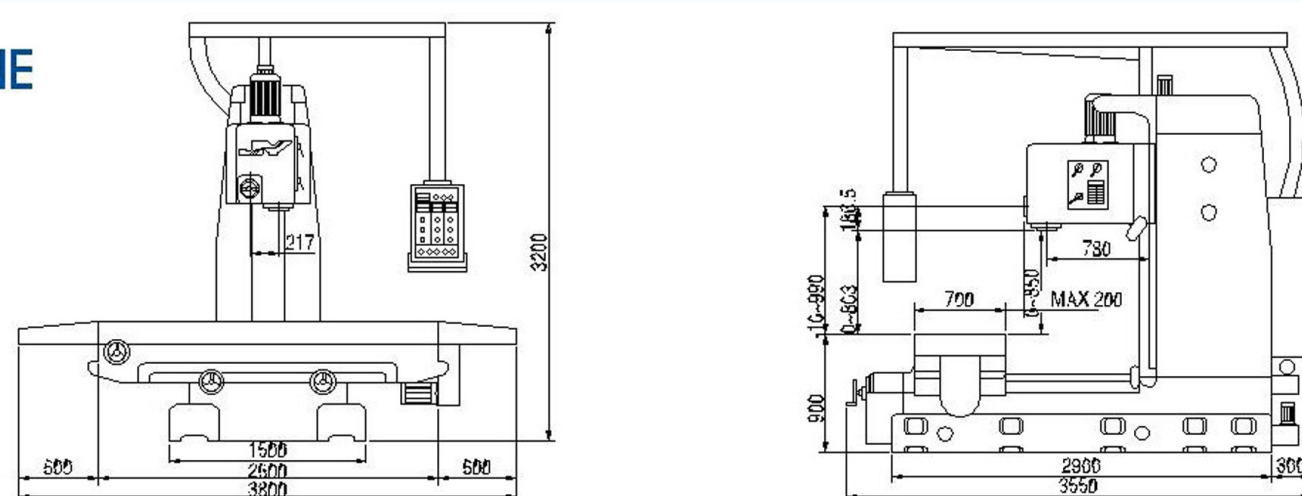
VH550 LINE



VH650 LINE



VH780 LINE



Specifications:

MODEL		VH450	VH480	VH550	VH650A/B	VH780
Table						
Table size	mm	1500 x 350	1900 x 420	1900 x 500	1900 x 500 / 2200 x 600	2600 x 700
X axis travel	mm	1100	1300	1300	1500 / 1700	2000
Y axis travel	mm	720	850	900	1000 / 1050	1050
Z axis travel	mm	780	780	800	950	1000
T-slot (width x trough number x pitch)	mm	18 x 3 x 80	18 x 5 x 80	18 x 5 x 80	18 x 5 x 80 / 20 x 5 x 125	20 x 5 x 125
X axis feedrate	mm/min	25~1500	30~2800	30~2800	30~2800	30~2500
Y axis feedrate	mm/min	25~1500	30~2800	30~2800	30~2800	30~2500
Z axis feedrate	mm/min	25~1500	30~1000	30~1000	30~1000	30~2500
X axis rapid travel	mm/min	1500	2800	2800	2800	2500
Y axis rapid travel	mm/min	1500	2800	2800	2800	2500
Z axis rapid travel	mm/min	1500	1000	1000	1000	2500
Range of cutting reference						
Cutting length	mm	1100	1300	1300	1500	2000
Cutting width	mm	420	450	520	620	750
Cutting height	mm	500	500	500	640	750
Loading weight	kgs	1000	1500	1500	2000	3000
Spindle (vertical)						
Spindle speed	RPM	45~1500	45~1500	45~1500	45~1500	45~1500
Spindle taper		NT40 (NT50 opt)	NT50	NT50	NT50	NT50
Distance of spindle nose to table surface	mm	0~617	0~583	0~603	0~753	0~803
Distance of spindle center to column slide surface	mm	450	480	550	650	780
Spindle (horizontal)						
Spindle speed	RPM	45-1500	45-1500	45~1500	45~1500	45~1500
Spindle taper		NT50	NT50	NT50	NT50	NT50
Distance of spindle center to table surface		0~780	-10~770	-10~810	-10~940	-10~990
Distance of spindle nose to table surface		190	260	290	290	290
Power						
Spindle motor		10HP x 4P	10HP x 4P AC	10HP x 4P AC	10HP x 4P AC / 15HP x 4P AC	15HP x 4P AC
X axis feed motor		1HP x 6P	2HP x 4P DC	2HP x 4P DC	2HP x 4P DC	3HP x 4P DC
Y axis feed motor		1HP x 6P	2HP x 4P DC	2HP x 4P DC	2HP x 4P DC	3HP x 4P DC
Z axis feed motor		1HP x 6P	2HP x 4P DC	2HP x 4P DC	2HP x 4P DC	3HP x 4P DC
Packing dimensions						
L x W x H (after packing)	mm	2550 x 2030 x 2550	3120 x 2280 x 2550	3120 x 2280 x 2550	3190 x 2520 x 2960 3490 x 2790 x 2970	3790 x 3210 x 3300
Net weight (before packing)	kgs	4200 kg	5500 kg	5500 kg	7000 kg / 7500 kg	15000 kg
Gross weight (after packing)	kgs	5000 kg	6500 kg	6000 kg	8000 kg / 8500 kg	16000 kg

● In the interest of product development, L&W Machine Tools, Inc. reserves the right to alter any mechanical specification without prior notice.

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