

Eumach

Always A Step Ahead



LBM-1000

EMC / CE / ISO 9002 CERTIFIED

**VERTICAL MACHINING CENTER
HIGH SPEED BRIDGE TYPE**

A PROFESSIONAL CNC MACHINES MANUFACTURER

THE NEWEST EUMACH BRIDGE TYPE VERTICAL FURTHER INNOVATIONS IN RIGIDITY, ACCURACY ALSO FOR TRUE DIE / MOLD EVOLUTION.

Large workpiece load & traverse capacity

- 1100mm x 600mm x 500mm traverse, 700mm twin column distance, 1220mm x 600mm table size with up to 1500kg workpiece load.

Rigid double column bridge type construction

- The twin column & bridge is made of one piece Meehanite highest quality casting to ensure its rigidity and reduce vibrations during high speed heavy cutting.

Wide choice of spindles with full power range

- Various built-in motor spindle from Standard 24000 RPM, HSK-A63, or 30000 RPM HSK-E50.

Advanced latest CNC digital controls

- Fanuc 31i, Heidenhain iTNC-530/640, Siemens 840D.

- A chain type chip conveyor provided as standard



- A very wide door opening allows heavy workpiece load / unload directly from the table top side crane to make the operator's job more straight-forward and enhances safety and productivity.

CAL MACHINING CENTER NOT ONLY WITH ACY, SPEED AND HEAVY CUTTING BUT

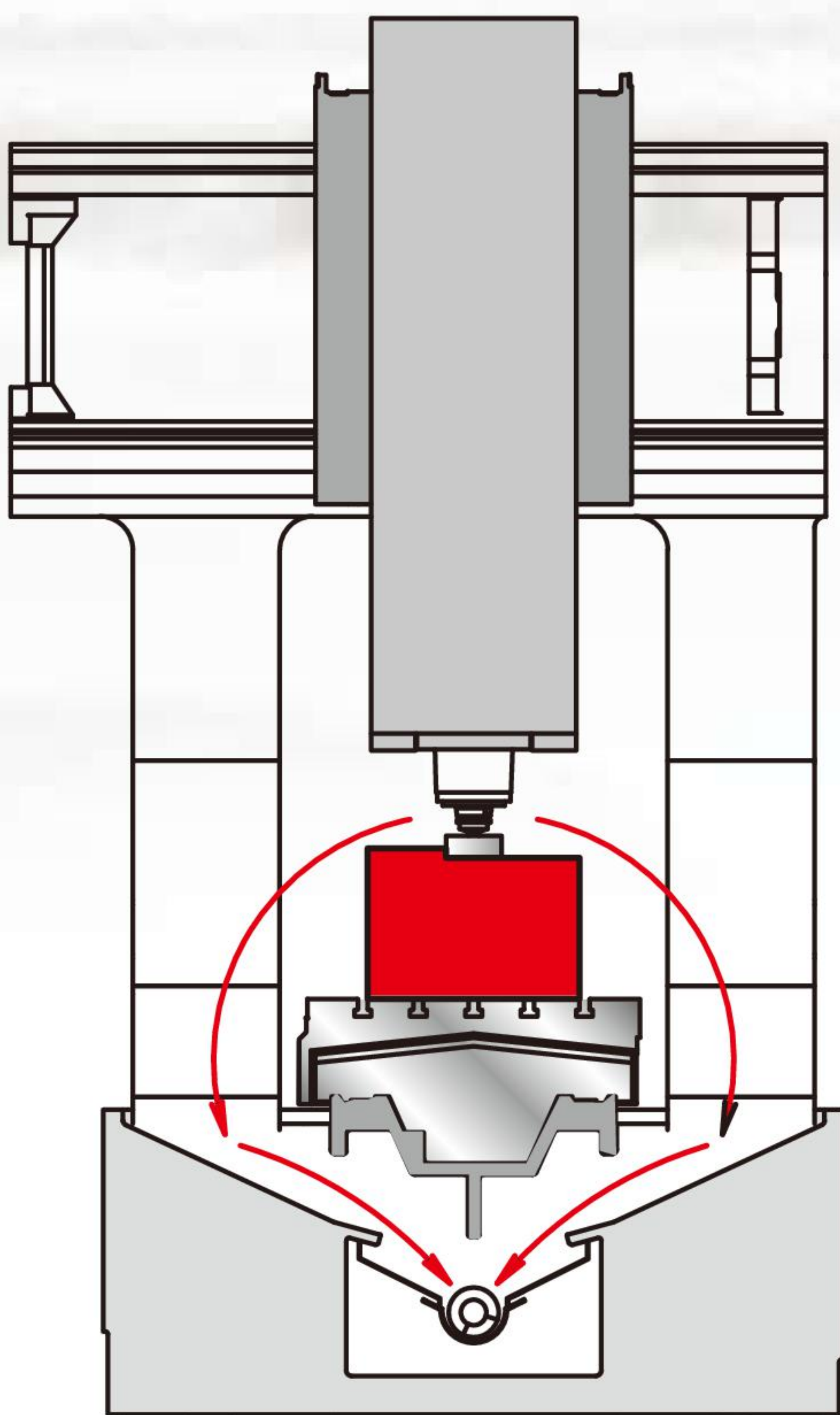


- ▶ Totally enclosed guarding includes top side of roof to keep all the chips, water and noise inside of machine to have a clean, quiet and comfortable working environment.
- ▶ A screw chip auger under machine central bed delivers efficiently chips to the chain type or scraper type chip conveyor & bucket, both are standard equipment.

RIGID OVERALL MACHINE DESIGN &

Rigid one piece castings bridge & twin columns

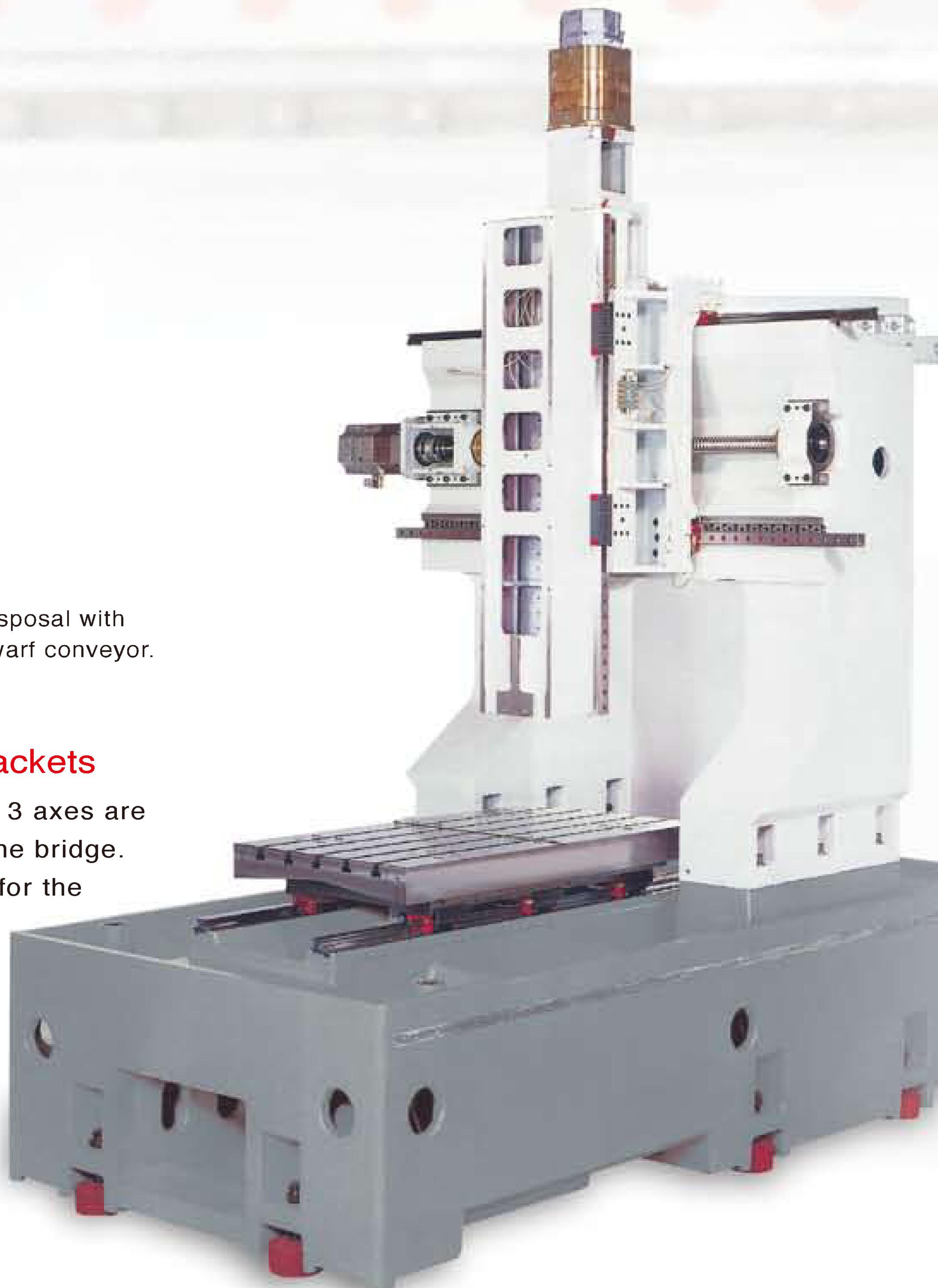
- ▶ The wide distance 700mm between twin column, allowing the most convenience mounting of medium workpiece, fixture or rotary table etc.
- ▶ Thermal influences are mini-mised, due to short distance between spindle axis and portal.
- ▶ Permanent motor spindle cooling system.
- ▶ Machine bed is a thermally symmetrical design.



- ▶ Excellent swarf and coolant disposal with continous bed cleaning and swarf conveyor.

Ballscrew mounting brackets

- ▶ The mounting brackets for 3 axes are being well distributed on the bridge, base and saddle castings for the maximum rigidity, the ballscrews are mounted on both ends to prevent heat generated by respective high speed positioning from affecting positioning accuracy.



SUPERIOR FEATURES:



Roller guideways & ballscrews

- The high rigid & heavy duty roller type linear motion guideways on 3 axes to provide low starting inertia, low friction and high acceleration, rates optimizing servo drive and ensure machine response immediately & precisely for high speed cutting requirements, especially in rapid positioning and contouring cutting.
- A ball screw central cooling device on X & Y axis is standard, to draw all the heat resulted by the very high speed transmission.

USER-FRIENDLY & ERGONOMIC GUARDING DESIGN:



Compact & clear guardings

- Full cover for all electrics water cooler, transformers, pneumatics etc, for a clean environment & convenient after service.

- A viewing window located in the rear side of machine guarding in order to examine cutting condition and also easy for rear side area maintenance.

BUILT-IN MOTOR SPINDLES & ATC:



Automatic tool changer

- A disk type 16 stations automatic tool changer provides as standard



- The spindle is equipped with hybrid bearings (ceramic sphere) to ensure thermal stability which guarantees a long service free the equipment even when using high spindle speeds.

Models	P24
Max.speed RPM	24000
Rated speed RPM	3000
Spindle taper	HSK-A63
Housing diameter mm	160
Power S1/S6 KW	18 / 25
Torque S1/S6 Nm	29 / 41

- 24000RPM motor spindle cutting capacity:
ϕ 50mm5R-3 flutes face cutter on special mold steel HP4M by 1500RPM, 4000mm/min x 42mm width x 0.7mm depth=**117.6 C.C/Min.**

OPTIONAL ACCESSORIES:



1. TOOL LASER MEASUREMENT



- 2. AXIS LINEAR GLASS SCALES
- 3. CNC ROTARY TABLE
- 4. WORKPIECE PROBE
- 5. COOLANT THRU SPINDLE DEVICE
- 6. 30000 RPM HSK-E50 SPINDLE

SPECIFICATIONS:

MODEL	LBM-1000
TABLE:	
OVERALL SIZE	1220mm × 600mm
T-SLOT	18mm × 5 × 100mm
MAXIMUM LOADING	1500 kgs
TRAVEL:	
X AXIS	1100mm table in & out
Y AXIS	600mm head left & right
Z AXIS	500mm head up & down
DISTANCE:	
BETWEEN 2 COLUMNS	700mm
SPINDLE TO TABLE TOP	45mm ~ 545mm (NOTE)
FLOOR TO TABLE TOP	840mm
SPINDLE: (BUILT-IN MOTOR SPINDLE)	
MOTOR	18 / 25 KW & 29 / 41 Nm
TAPER	HSK-A63
SPEED	24000 RPM
FEEDRATE:	
CUTTING	UP TO 10 M/min
RAPID X / Y / Z	36 / 36 / 36 M/min
MINIMUM SETTING	0.001mm
AUTOMATIC TOOL CHANGER:	
NO. OF TOOLS	16
MAX. TOOL DIA. / LENGTH	80mm / 250mm
MAX. TOOL WEIGHT	7 kgs
COOLANT & LUBRICATION:	
COOLANT TANK VOLUME	200 Liters
PNEUMATIC REQUIRED	7 kgf / cm ²
LUBRICATION TANK	4 Liters
ACCURACY:	
POSITIONING	± 0.005mm / 300mm
REPEATABILITY	0.003mm
ROUNDNESS	0.01mm / 300mm DIA.
MACHINE NET WEIGHT	11000 kgs

CNC CONTROL:



Fanuc
Oi-MD / 31i-MB



Heidenhain
iTNC-530 / 640



Siemens
840D / 828D

Note : DISTANCE WILL BE SLIGHTLY DIFFERENT WHEN USING OPTIONAL SPINDLES.

■ STANDARD ACCESSORIES

1. FULL GUARD WITH ROOF

2. ARMLESS ATC

3. COOLANT SYSTEM

4. SPINDLE AIR BLAST

5. AUTO. LUBRICATION
6. WORKING LAMP

7. ALARM LIGHT

8. LEVELLING PADS & BOLTS

9. ADJUSTING TOOLS & BOX

10. 24000RPM MOTOR SPINDLE & WATER COOLER