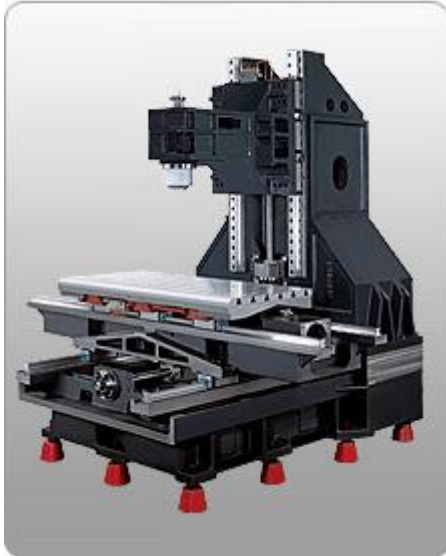


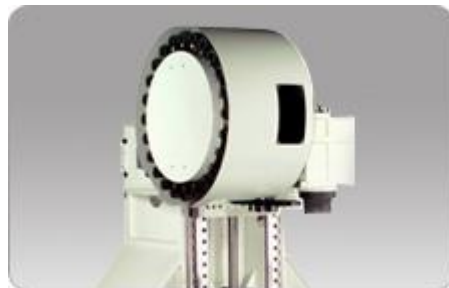
- Fully enclosed splashguard for elegant outlook.
- With standard flat-type removal mechanism.
- MEEHANITE cast iron for all major machine parts.
- Big diameter 3-Axis ball screws preload.
- Automatic central lubrication system.
- High efficiency.
- Excellent and stable accuracy.



MEEHANITE CASTING STRUCTURE

Certified meehanite cast iron formed a steady foundation as a rock. Heavy ribbed throughout for high rigidity and excellent mechanical and thermal stability.

- 3-axis linear guide ways for high speed feed rate and repeatability accuracy are guaranteed.
- Heavy design on column and base to take more force from cutting.
- Max. table load 1,000 kgs.



AUTOMATIC TOOL CHANGER

With standard Arm-type 24 tools magazine provides rapid, stable and reliable tool change, also it is controlled by PLC software for quicker tool selection to reduce non-cutting time.



BIG PRELOADED BALL SCREWS

- Oversized ball screws $\varnothing 45\text{mm}$ for X/Y Axis; $\varnothing 50\text{mm}$ for Z Axis are directly driving on all 3 axes.
- 3-axis-ball screws preloaded for excellent feeding accuracy.
- All axes are with high precision C3 grade ball screws.





**HEIDENHAIN
LINEAR SCALE
(OPTION)**



HEAVY DUTY LINEAR GUIDE WAYS

- Linear guide ways are in roller bearing type. (X: 45mm, Y/Z:55mm).
- Blocks with automatic central lubrication system



ZF GEAR BOX (OPTION)

- precision and powerful German ZF brand gear box for heavy cutting solution.



COOLANT GUN



**DIRECT DRIVE SPINDLE
(#40 OPTION)**



**RIGID HEAD
STRUCTURE**

- 6 blocks on Z axis linear way to take more force from cutting.
- 1,000 rpm belt type spindle as standard. (#40).

SPECIFICATION

Model	V33		V43	
Travel				
X-Axis	850 mm (33.5 ")		1,100 mm (43.3 ")	
Y-Axis	600 mm (23.6 ")			
Z-Axis	510 mm (20.1 ")			
Spindle nose to table	120 - 630 mm(4.7 X 24.8")			
Table				
Table size	1,050 X 600 mm (41.3 X 23.6 ")		1,300 X 600 mm (51.2 X 23.6 ")	
Floor to table	855 mm (33.7 ")			
Max. table loading capacity	1,000 kgs(2200 Lbs)			
T-slot (number x width x pitch)	6 X 18 mm X 100 mm(6 X 0.7 X 3.9 ")			
Spindle center to column	600 mm (23.6 ")			
Feed system				
Rapid traverse speed	32 M/min (1259.8 " /min)			
Feed motor (FANUC)	X/Y: 3.0kW (12 Nm) , Z: 7.0kW (30 Nm)			
Ball screw diameter & pitch	X, Y : 45 mm (1.8 ") Z:50 mm (2.0") / 12mm (0.5")			
Cutting feed rate	1 - 10,000 mm/min (0.04-393.7 " /min)			
Type of transmission	Direct mounting			
Spindle				
Type of tool shank	BT 40 / CAT 40 / DIN 69871A	BT 50 / CAT 50 / DIN 69871A	BT 40 / CAT 40 / DIN 69871A	BT 50 / CAT 50 / DIN 69871A
Max. spindle speed	10,000 / 15,000 or 20,000 rpm (Op)	6,000 / 8,000 rpm (Op)	10,000 / 15,000 or 20,000 rpm (Op)	6,000 / 8,000 rpm (Op)
Spindle motor	11/15 kW / 7.5/11kW or 15/18.5 kW (Op)	15/18.5kW / 22/26kW (Op)	11/15 kW / 7.5/11kW or 15/18.5 kW (Op)	15/18.5kW / 22/26kW (Op)
Type of transmission	Belt / Direct drive or Build-in (Op)	Belt	Belt / Direct drive or Build-in (Op)	Belt
ATC				
Tool storage capacity	24 Tools / 32 or 40 Tools (Op)	24 Tools / 32 or 40 Tools (Op)	24 Tools / 32 or 40 or 60 Tools (Op)	24 Tools / 32 or 40 Tools (Op)
ATC type	Arm type			

Max. tool diameter	95/76/76 mm (3.7/3.0/ 3.0")	110/127/127 mm (4.3/5/5")	95/76/76/76 mm (3.7/3.0 /3.0/3.0")	110/127/127 mm (4.3/5/5")
Without adjacent tool	185/127/127 mm (7.3/5.0/ 5.0")	200/228/228 mm (7.9/9/ 9")	85/127/127/127 mm (7.3/5.0/5.0/5.0")	200/228/228 mm (7.9/9/ 9")
Max. tool length	300 mm (11.8 ")	350 mm (13.8 ")	300 mm (11.8 ")	350 mm (13.8 ")
Max. tool weight	7 kgs (15 Lbs)	15 kgs (32 Lbs)	7 kgs (15 Lbs)	15 kgs (32 Lbs)
Tool changing time (Tool to Tool)	1.8/1.5/1.5 sec	2.9 sec	1.8/1.5/1.5/1.5 sec	2.9 sec
Tool changing time (Chip to Chip)	5.5 sec	6 sec	5.5 sec	6 sec
Method of tool selection	Random selection			
	Bi-directional magazine rotation			
Tool display	Yes			
Special tool management	Yes			
Coolant system				
Coolant tank size	445L		486L	
Coolant capacity	105 L / min			
Chip Flush capacity	125 L / min			
Machine size				
Machine height	2,920 mm (115.0 ")			
Floor space	3,955 mm (155.7 ") (W) X 2,250 mm (88.6 ") (D)		4,395 mm (173.0 ") (W) X 2,250 mm (88.6 ") (D)	
weight	8,200 kgs (18040 Lbs)		8,500 kgs (18700 Lbs)	
Power source				
Electrical power supply	25 KVA / 3PH, 220V 50/60HZ			
Compressed air supply	6.0 kgf/cm ² (85psi)			
Controller				
	FANUC / HEIDENHAIN / SIEMENS			

Edition / A09

* Specifications may differ according to option accessories and are subject to change without notice.

Standard accessories

- Arm type ATC (24 tools)
- (#40) 10,000rpm spindle (Belt type)
- (#50) 6,000rpm spindle (Belt type)
- Spindle chiller
- Spindle coolant system
- Flat type chip conveyor
- Automatic lubrication system
- Portable electronic handwheel (FANUC)
- Working light
- Alarm light
- Spindle air blow
- Coolent gun

Optional accessories

- #40: Arm type ATC (32/40/60 tools)
- #50: Arm type ATC (30/40 tools)
- #40: 15,000rpm spindle (Direct drive)/ 20,000 rpm spindle (Built-in)
- #50: 8,000rpm spindle (Belt type)
- Coolant through spindle system
- 4th or 4+5th axis rotary table
- Heidenhain 3-Axis rotary table
- Working piece measurement system
- Tool length measurement system
- Heat exchanger on electrical cabinet
- Power transformer
- CE (Safety door interlock)
- ZF gear box
- Air gun
- Coolant gun (control from panel)
- Riser block 80/200/350mm
- Paper filter and Water cart
- 45 degree control panel
- ATE cover