

GEN MILL



5127

51.27" X 27.56" 3 Axis High Speed Vertical Machining Center

- + 30 Tool High Speed Double Arm ATC
- + Spindle Chiller for Consistent Thermal Stability
- + 12,000 RPM Double-Ground "Big-Plus" Spindle
- + 300-PSI Through-the-Tool Coolant System
- + 2,700 Block Look-Ahead High-Speed Machining
- + 4th & 5th Axis Wiring
- + Y-Axis Supported with 4-Ways



Axis Travel

X-Travel	51.27" 1,300mm
Y-Travel (4-Linear cross ways)	27.56" 700mm
Z-Travel	25.59" 650mm
Spindle Nose to Table Surface	5.9" – 31.5" 150 – 800mm
Spindle Center to Z-axis way covers	28.96" 735 mm (throat dimension)

Table

Table Size (LxW)	57.98 x 27.56" 1,450mm X 700mm
T-slots (5 T-Slots)	0.709" slot width 18 mm on 100mm centers
Max. Table Load	4,850 lbs. 2200 kgs load

Spindle

Spindle Motor - S1/S2/S3=15/18.5/26kw	35-HP S3 Power, 25-HP 30-minute duty-rating
Spindle Speed – Inline Direct-Drive	12,000rpm
Spindle Torque	90 ft-lb @ 1,500 rpm
Tool Type	CAT #40 Taper (BT #40 optional)
Spindle Taper Material / Hardness	HRC 58-62 SCM 415
Spindle Orientation	By sensor
Spindle Runout	≤ 0.000040 T.I.R.
Spindle Bearings - Front	110mm NSK 70BNR 10 x 2, P4 class-7 bearings
Spindle Bearings - Rear	110mm NSK 70BNR 10 x 2, P4 class-7 bearings
Retention System / Holding Capability	Bellville Spring Stack 1650-1760 lbs
Retention Knob (pull stud)	C40-4502H (coolant) Japanese Standard

Axis Feeds

Accuracy X, Y, & Z axis (JIS6338)	± 0.0002" / 12" ± 0.005mm over 300mm travel
Repeatability X, Y, & Z axis (JIS6338)	± 0.0001" / 12" ± 0.003mm over 300mm travel
Least Input Command Increment	0.0001" / 0.000040" 0.001mm / (40-millionths in metric)
Rapid Traverse X and Y / Motor HP	984 ipm / 6-HP, 25m / minute / 4.5kw
Rapid Traverse Z / Motor HP	984 ipm / 6-HP, 25m / minute / 4.5kw
Ballscrews – X, Y, Z	X, Y= 50mm ballscrews 10mm pitch, (Z=40mm)
Cutting Feedrate	0.04 – 393 ipm

Tool Changer

Tool Capacity (30+1)	30 Tool Twin-Arm
Tool Shank	CAT#40 Taper
Tool Change Time (average)	3.7-seconds tool-to-tool
Maximum Tool Diameter / w/adjacent tool	5.90" / 3.15" 150mm / 80mm
Maximum Tool Length	11.81" 300mm
Maximum Tool Weight	15 lbs. 7kg
Tool Selection / Tool Access	Random access Bi-directional

Specifications

Air Service Requirements	85 psi @ 14-scfm
Coolant Capacity / Pressure	134 gallons / 300 PSI 510 liters
Connected Load Electrical Capacity	75 Amps / 220vac ±5%, 60-Hz
Floor space requirements (L x W x H)	146" x 130" x 119" 370x330x260cm (+ 48" for conveyor)
Shipping dimensions (L x W x H)	126" x 92" x 101" 318x231x256cm
Machine Weight	19,841 pounds 9,000 kg
Warranty – 1-year machine warranty	3-year Mitsubishi control, motors, & drive warranty