



5-Axis High Speed VMC with built-in 12" Trunnion

- + Glass Scale Feedback on All 5-Axis
- + Roller Bearing Ways (twice as rigid as ball ways)
- + 40-Tool Double Arm ATC
- + 1,417 IPM Rapid Rates
- + 12,000 RPM Double-Ground "Big-Plus" Spindle
- + Spindle Chiller for Consistent Thermal Stability
- + 300-PSI Through-the-Tool Coolant System
- + Available as 4 + 1 or 5 Axis simultaneous



Axis Travel

X-Travel	34.64" 880 mm
Y-Travel	23.62" 600 mm
Z-Travel	18.80" 480mm
Spindle Nose to Table Surface	0.00"-18.80", 000-480mm
Spindle Center to Z-axis way covers	22.44" 570 mm (throat dimension)

Rotary Table

Platter Diameter	Ø 12.6" Ø 320 mm
Center Bore Diameter	Ø 50 H7
T-slot width / Number	12 H7 / 4, Hardened & ground table & T-slots
Guide block width	18 mm
Maximum Work-Table Load	330 lbs ("A" Axis at 0 - 10 degrees) 220 lbs ("A" Axis at 10 - 90 degrees)
Maximum Part Swing	Ø16.3" Ø 414 mm

Spindle

Spindle Motor - S1 / S2 / S3 = 11 / 15 / 18.5 kw	25-Horsepower Peak, 20-HP 30-minute duty-rating
Spindle Speed - Mitsubishi Inline Direct-Drive	12,000 RPM (15,000 RPM optional)
Spindle Torque	90 ft-lb @ 1,500 RPM
Tool Type	CAT #40 Taper (BT #40 optional)
Retention Knob (Pull Stud)	C40-4502H (coolant) C40-4502S (solid)
Spindle Runout	≤0.000040" T.I.R.
Spindle Bearings - Front	110 mm NSK 70BNR, 2 - P4 class-7 bearings
Spindle Bearings - Rear	110 mm NSK 70BNR, 2 - P4 class-7 bearings
Retention System / Holding Capability	Bellville Spring Stack, 1,650 - 1,760 lbs
Retention Knob (pull stud)	C40-4502H (coolant) Japanese Standard

Axis Feeds

Accuracy X, Y, & Z Axis (JIS6338)	± 0.0002" / 12" ± 0.005 mm over 300 mm travel
Repeatability X, Y, & Z Axis (JIS6338)	± 0.0001" / 12" ± 0.003 mm over 300 mm travel
Least Input Command Increment	0.0001" / 0.000040" 0.001 mm / (40-millionths in metric)
Rapid Traverse - X and Y	1,417 IPM, 36 m / minute
Rapid Traverse - Z	1,260 IPM, 32 m / minute
Cutting Feedrate	0.02 - 393 IPM, 10 m / minute
Axis Drive Motor Power - X, Y, Z	5-HP, 3.5 kw
Ballscrews - X, Y, Z	40 mm ballscrews with 12 mm pitch

Tool Changer

Tool Capacity (40+1)	40 Tool Twin-Arm, Chain-Drive Storage Rack
Tool Shank	CAT#40 Taper (BT#40 optional)
Tool Change Time	2.8-seconds tool-to-tool
Maximum Tool Diameter / with adjacent tool	5.90" / 3.15" 150 mm / 80 mm
Maximum Tool Length / Weight	11.81" / 15 lbs 300 mm 7 kg
Tool Selection / Tool Access	Random Access / Bi-Directional

Specifications

Air Service Requirements	85 PSI @ 14-scfm
Coolant Capacity / Pressure	97-gallons / 300 PSI, 367 liters / 20-bar
Connected Load Electrical Requirements	38 kVA 220 vac ±5%, 60-Hz
Floor space requirements (W x D x H)	115" x 82" x 116" (add 48" on left side for conveyor)
Shipping dimensions (W x D x H)	169" x 92" x 96" (306 x 231 x 256 cm)
Machine Weight	15,708 lbs 7,120 kg
Warranty - 1-year machine warranty	3-year Mitsubishi control, motors, & drive warranty