



## 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 Inch per Minute 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" 880mm
Y-Travel	32.62" 600mm
Z-Travel	25.59" 650mm
Spindle Nose to Table Surface	4.72" – 18.89", 120 – 480mm
Spindle Center to Z-axis way covers	22.44" 570mm (throat dimension)

## Rotary Table

Platter Diameter	Ø 12.6" Ø 320mm
Center Bore Diameter	Ø 50 H7
T-slot width / Number	12 H7 / 4, Hardened & ground table & T-slots
Guide block width	18mm
Maximum Work-Table Load	220 lbs 100kgs
Maximum Part Swing	Ø16.3" Ø 414mm

## Spindle

Spindle Motor - S1/S2/S3 =11/15/18.5kw	25-Horsepower Peak, 20-HP 30-minute duty-rating
Spindle Speed – Mitsubishi Inline Direct-Drive	12,000rpm (15,000rpm 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	110mm NSK 70BNR, 2 - P4 class-7 bearings
Spindle Bearings - Rear	110mm NSK 70BNR, 2 - P4 class-7 bearings
Retention System/Holding Capability	Bellville Spring Stack, 1650-1760 lbs
Retention Knob Specification	#40 Japanese standard, JMTBA double 45° head angle Ø.590"

## 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	1,417 ipm, 36m / minute
Rapid Traverse - Z	1,260 ipm, 32m / minute
Cutting Feedrate	0.02 - 393 ipm, 10m / minute
Axis Drive Motor Power - X, Y, Z	5-HP, 3.5kw
Ballscrews - X, Y, Z	40mm ballscrews with 12mm 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	1.7-sec. tool-to-tool
Maximum Tool Diameter / with adjacent tool	5.90" / 3.15" 150mm / 80mm
Maximum Tool Length / Weight	11.81" / 15 lbs. 300mm 7kg
Tool Selection / Tool Access	Random Access / Bi-Directional

## Specifications

Air Service Requirements	85 psi @ 14-scfm
Coolant Capacity / Pressure	97-gallons / 300 psi, 256 liters / 20-bar
Connected Load Electrical Requirements	50 Amps / 220vac ±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" (306x231x256cm)
Machine Weight	15,708 lbs 7,120 kgs
Warranty – 1-year machine warranty	3-year Mitsubishi control, motors, & drive warranty