



4024

40.55" X 23.62" 3 Axis High Speed Vertical Machining Center

- + 30 Tool High Speed 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
- + 2,700 Block Look-Ahead High-Speed Machining
- + 4th & 5th Axis Wiring



Axis Travel

X-Travel	40.55" 1,030mm
Y-Travel	23.62" 600mm
Z-Travel	25.59" 650mm
Spindle Nose to Rotary Table Surface	5.1"– 30.56" 130 – 775mm
Spindle Center to Z-axis way covers	22.83" 580mm (throat dimension)

Table

Table Size (LxW)	45.66" x 19.68" 1,160mm X 500mm
T-slot width (5 T-slots total)	0.709" slot width 18 mm wide on 100mm centers
Max. Table Load	3,530 lbs. 1600 kgs for full accuracy

Spindle

Spindle Motor - S1/S2/S3=11/15/18.5kw	25-Horsepower Peak, 20-HP 30-minute duty-rating spindle
Spindle Speed – Inline Direct-Drive	12,000rpm (15,000rpm optional)
Spindle Torque	90 ft-lb @ 1,500 rpm
Tool Type	CAT #40 Taper, BT #40 optional
Spindle Taper Material / Hardness	SCM415 / HRC 58-62
Retention System / Holding Capability	Bellville Spring Stack 1650-1760 lbs
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 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, 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	5-HP, 3.5kw
Axis Drive Motor Power - Z	5-HP, 3.5kw
Ballscrews – X, Y, Z	40mm ballscrews 12mm pitch

Tool Changer

Tool Capacity (30+1)	30-Tool Twin-Arm
Tool Shank	CAT#40 Taper BT#40 optional
Tool Change Time	1.7-sec. tool-to-tool
Maximum Tool Diameter / w/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 shortest path

Specifications

Air Service Requirements	85 psi @ 14-scfm
Coolant Capacity / Pressure	97-gallons / 300 psi 256 liters / 20-bar
Connected load electrical requirement	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)	121" x 92" x 121", 306x231x256cm
Machine Weight	15,708 pounds 7,120 kg
Warranty – 1-year machine warranty	3-year Mitsubishi control, motors, & drive warranty