



5X-16

5-Axis High Precision 17.7" VMC with Probes, Glass Scales

- + 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
- + 15,000 RPM Inline Direct-Drive Beltless "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-Axis Travel | 15.75" | 400 mm |
| | Y-Axis Travel | 13.78" | 350 mm |
| | Z-Axis Travel | 13.78" | 350 mm |
| | Spindle Nose to Work Table Surface | 5.9" – 19.68" | 150 – 500 mm |
| | Spindle Center to Z-axis way covers | 16.73" | 425 mm (throat dimension) |
| | Maximum Workpiece Dimension | 430 mm | 430 mm diameter / 380 mm height |
| Spindle | Spindle Motor – 7.5 / 11 kW | 20-Horsepower Peak | 15-HP 30-minute duty-rating |
| | Spindle Speed | 15,000 rpm Direct-Drive | |
| | Spindle Torque- Duel Winding Motor | 70 ft-lb 0-1,500 rpm | (95.5 Nm) |
| | Spindle Taper Material / Hardness | SCM415 / HRC 58-62 | |
| | Retention System / Holding Capability | Bellville Spring Stack | 1,650-1,760 lbs. |
| | Spindle Runout | ≤ 0.000040" T.I.R. | |
| | Spindle Bearings - Front | 110 mm GMN, P4 class-2 bearings | |
| | Spindle Bearings – Rear | 110 mm GMN, P4 class-2 bearings | |
| Axis Feeds | Rapid Traverse | X, Y, Z | 1,417 ipm (36 m / minute) |
| | Cutting Feed rate | 0.04 - 394 ipm | 10,000 mm / min |
| | Axis Drive Motor Power – X, Y | 4.7-HP | (3.5 kW) |
| | Axis Drive Motor Power - Z | 4.7-HP | (3.5 kW) w/ brake |
| | Ballscrews – X, Y, Z | 40 mm Diameter | 12 mm pitch |
| | Least Input Command Increment | 0.0001" / 0.000040" | 0.001 mm / (40-millionths in metric) |
| Tool Changer | Tool Capacity | 60-Tool Twin-Arm | High Speed Tool Changer |
| | Tool Shank | CAT#40 Taper | BT#40, HSK 63 optional |
| | Tool Change Time – Tool-to-Tool | 3.2-sec. Tool-to-Tool | |
| | Maximum Tool Diameter / w/adjacent tool | 3.93" / 2.95" | 100 mm / 75 mm |
| | Maximum Tool Length (from gage line) | 10" | 250 mm |
| | Maximum Tool Weight | 15 lbs. | 7 kg |
| | Tool Selection / Tool Access | Random access | Bi-directional shortest path |
| Specifications | Air Service Requirements | 85 psi @ 14-scfm | 6 kg/cm ² |
| | Electrical Requirements - connected load | 65 kVA | 220 vac ±5%, 60-Hz |
| | Coolant Capacity / Pressure | 87 gallons / 300 psi | 330 liters / 20-bar |
| | Machine Weight | 16,534 lbs. | 7,500 kg |
| | Warranty – 1-year machine warranty | 3-year Mitsubishi control, motors, & drive warranty | |