



78-MSY

6-Axis Mill / Turn Lathe with 16-Tool Turret

- + 78 mm 3" Bar Capacity
- + Twin 4,000 RPM Opposed Spindles
- + 16-Driven Tool Positions each station can mount multiple tools
- + "Y" Axis with ± 1.968 " Travel
- + Full "C" Axis on Main and Sub-Spindle
- + Complete Front & Back Work

Capacity	Turning Diameter Maximum / Standard Turning Length	12.79" (325 mm) 22.04"	8.26" (210 mm) 560 mm
Main Spindle	Spindle nose Spindle Bar Capacity Chuck Size - optional Spindle Center Height Maximum spindle speed Main Spindle motor horsepower 15 / 22 kW	A2-6 3.070" 10" (with 78 mm bore) 39.37" 60 - 4,000 rpm (Integral Refrigerated Spindle) 30-HP (30-minute duty rating) / 20-HP (constant duty rating)	78 mm drawtube I.D. 1,000 mm
Sub Spindle	Spindle nose Spindle Bar Capacity Chuck Size - optional Maximum spindle speed Main Spindle motor power 11 / 15 kW	A2-6 70 mm 8" (Ø10" optional) 60 - 4,000 rpm (Integral Spindle) 15-HP (30-minute duty rating) / 10-HP (constant duty rating)	
Live Tool Turret	Number of turret stations Index time (adjacent tool / 180° index) Live Tool Power / rpm 3.7 / 5.5 kW Tool Size / Collet Size Tool Holder Type & Size Turret Thru-The-Tool-Coolant	16 (Any combination of 16 ID, OD or Live tool stations) 0.2 seconds / 1.2 seconds High-Speed Servo Indexing 7.5-HP / 6,000 rpm, 14.75 ft. lbs. torque (20 Nm) 1" (25 mm) (for square tool & 32 mm round tools) / ER-32 collets BMT-65 Base Mount Tooling Rated for High Pressure coolant option	
C¹ & C² Axis	Spindle Radial Resolution / Speed	360,000 radial positions with full contouring capability / 600 rpm	
B-Axis (sub spindle travel)	B Axis Rapid Traverse Rate B Axis Travel	1,573 Inch Per Minute 27.16"	40 m / minute 690 mm
Axis Travels	Axis Travel – X / Y / Z Axis Rapid Travers Rate – X / Y / Z Axis Axis Motor Power Axis Continuous Thrust Rating Minimum Programmable Input	X = 9.05 / Y = ±1.968" / Z = 23.7" (230 mm) / (±50 mm) / (700 mm) 630 / 236 / 1,574 ipm (16 / 6 / 40 m/minute) 3-HP in X, Y, Z axis X = 2,142, Y = 2,924, Z = 1,425 pounds of thrust force 0.0001" (0.001 mm = 40 millionths of an inch)	
Specifications	Hydraulic System Coolant Pumps – Dual Coolant Pumps Coolant Tank Machine Weight Electrical Requirements Air Requirements	8- gallons (30 Liters) with 5-HP (3.5 kW) pump motor 2 x 1.7 HP pumps for tooling / 2 pumps for chip flushing 74-gallon (280 Liters) coolant tank 17,650 lbs. 8,000 kgs 56 kVA, 220 vac ±5%, 3-phase, 60 Hz, 130 amps 85-psi @ 8-cfm for parts catcher, ejector, oil mist lubricator	