



5X-8

High Speed VMC with built-in 8" Trunnion

- + 12,000 RPM Inline Direct-Drive Beltless "Big-Plus" Spindle
- + 15-HP Spindle Motor with Synchronous Rigid Tapping Capability
- + 1,417 IPM Rapid Rates in X & Y Axis
- + 24-Tool High-Speed Twin-Arm Tool Changer
- + 300 PSI "Through-the-Spindle" Coolant System with Rotary Coupling

Axis Travel	X-Travel	25.59"	650 mm
	Y-Travel	19.68"	500 mm
	Z-Travel	17.71"	450 mm
	Spindle Nose to Rotary Table Surface	0" - 17.71"	0 - 450 mm
	Spindle Center to Z-axis way covers	20.27"	515 mm (throat dimension)
Tilting Rotary Table	Platter diameter	Ø 8.27"	Ø 210 mm
	Center bore diameter	Ø40 mm H7	
	T-Slot width	12 mm H7	Hardened & ground table & T-slots
	Guide block width	18 mm	
	A-Axis Tilting Servo Motor	Mitsubishi HF-224T	
	C-Axis Rotary Servo Motor	Mitsubishi HF-104T	
	Torque	7 kg-cm2	
	Indexing resolution / Accuracy, A / C	0.001°	50 sec. / 20 sec.
	Indexing repeatability, A / C	±4 sec. / ±3 sec.	
	Feedback System A / C	Heidenhain Encoder (ECN-223M w/ 10 sec. resolution)	
	Tilting angle range	+20° - -110° (130° total range)	
	Brake Torque A / C	423 ft. lbs. / 256 ft. lbs. (58.5 / 35.5 kg/m)	
	Cutting Torque limit	17 kg/ m	
	Rotational speed A / C	33/22 rpm	
	Transmission Ratio A / C	1:90 / 1:120	
	Work load capacity	165 lbs.	(75 kg) Horizontal
	Work load capacity	110 lbs.	(50 kg) In Tilt (10-90°)
Maximum Work Table Load	165 lbs.	75 kgs for rated accuracy	
Maximum Part Swing	Ø12.5"	Ø 317 mm	
Spindle	Spindle Motor – S1 / S2 / S3 = 7.5 / 11 / 15 kW	20-Horsepower Peak	15-HP 30-minute duty-rating
	Spindle Speed – Inline Direct-Drive	12,000 rpm	(15,000 & 24,000 rpm optional)
	Spindle Torque	50 ft-lb @ 1,500 rpm	
	Retention Knob (pull stud)	C40-4502H (coolant)	C40-4502S (solid)
	Retention System / Holding Capability	Bellville Spring Stack	1,650-1,760 lbs.
	Spindle Runout	≤ 0.000040" T.I.R.	
Axis Feeds	Rapid Traverse X, Y	1,417 ipm	(36 m / minute)
	Rapid Traverse Z	944 ipm	(24 m / minute)
	Cutting Feedrate	0.04 - 394 ipm	(10 m / minute)
	Axis Drive Motor Power – X, Y	2.7-HP	2.0 kW
	Axis Drive Motor Power – Z	4.7-HP	3.5 kW
	Ballscrews – X, Y, Z	32 mm ballscrews	12 mm pitch
	Least Input Command Increment	0.0001"/ 0.000040"	0.001 mm / (40-millionths in metric)
Tool Changer	Tool Capacity	30 Tool Twin-Arm	Hi-Speed Tool Changer
	Tool Shank	CAT#40 Taper	BT#40 optional
	Tool Change Time	1.7-sec. tool-to-tool	Inverter Motor Driven
	Maximum Tool Diameter / w/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 shortest path
Specifications	Air Service Requirements	85 psi @ 14-scfm	20 kg/cm ²
	Coolant Capacity	68-gallons	256 liters
	Electrical Requirements - connected load	220 vac ±5%, 60-Hz	30 kVA
	Floor space requirements (W x D x H)	100" x 86" x 113"	254 x 219 x 288 cm (add 48" for conveyor)
	Machine Weight	12,760 lbs.	5,788 kg
	Warranty – 1-year machine warranty	3-year Mitsubishi control, motors, & drives warranty	