

Standard Machine Specifications

		VARIAXIS j-500	VARIAXIS j-500/5X	VARIAXIS j-600	VARIAXIS j-600/5X
Stroke	X-axis travel (spindle head left / right)	350 mm		850 mm	
	Y-axis travel (spindle head back / forth)	550 mm			
	Z-axis travel (spindle head up / down)	510 mm			
	A-axis travel (table tilt)	-120 ~ +30°		-	
	B-axis travel (table tilt)	-		-120 ~ +90°	
	C-axis travel (table rotation)			360°	
Table	Distance from table top to spindle nose	50 ~ 560 mm (table horizontal)		70 ~ 580 mm (table horizontal)	
	Table size	Φ500 mm × 400 mm		Φ600 mm × 500 mm	
	Max. workpiece size	Φ500 mm × 350 mm		Φ730 mm × 450 mm*1	
	Table load capacity (evenly distributed)	200 kg		500 kg	
	Table surface configuration	M16 × P2 tap 24		M16 × P2 tap 16	
Spindle	Max. spindle speed	12000 rpm			
	Spindle taper	No. 40			
	Spindle bearing ID	Φ70 mm			
Feedrate	Rapid traverse rate (X-,Y-,Z-axis / A-axis)	30 m/min / 30 rpm		-	
	Rapid traverse rate (X-,Y-,Z-axis / B-axis)	-		30 m/min / 30 rpm	
	Rapid traverse rate (X-,Y-,Z-axis / C-axis)	30 m/min / 30 rpm			
	Cutting feedrate (X-,Y-,Z-axis / C-axis)	30 m/min / 30 rpm			
	Simultaneously controlled axes	4 (A-axis only indexing)	5-axis	4 (B-axis only indexing)	5-axis
	Min. indexing increment (A-axis)	0.0001°		-	
	Min. indexing increment (B-axis)	-		0.0001°	
Automatic tool changer	Min. indexing increment (C-axis)	0.0001°			
	Indexing time(A-axis)	0.6 sec / 90°		-	
	Indexing time(B-axis)	-		0.6 sec / 90°	
Motors	Tool shank configuration	No.40			
	Tool storage capacity	18			
	Max. tool diameter /length (from gauge line) / weight	Φ90 mm / 300 mm / 8 kg			
	Max. tool diameter with adjacent toolpockets empty	Φ130 mm			
	Tool selection method	Random selection, shortest path			
	Tool change time (chip-to-chip)	6.2 sec			
Machine size	Spindle motor (40 % ED / Cont. rating)	11 kW (15 HP) / 7.5 kW (10 HP)			
	Electrical power requirement (40 % ED / Cont. rating)	29.0 kVA / 24.0 kVA	29.5 kVA / 24.5 kVA	29.4 kVA / 24.5 kVA	35.4 kVA / 30.5 kVA
	Air supply	0.5 MPa ~ 0.9 MPa 200 NL / min			
CNC	Height	2840 mm, 2905 mm (ConSep)		3060 mm	
	Floor space	2565 mm × 3225 mm		3075 mm × 3325 mm	
	Machine weight	7000 kg		11000 kg	
Sound	Equivalent continuous sound pressure level at operator position (dependant on equipment options)	Less than 80 db (A)			

*1 Requires 80 mm chamfer on top edge of workpiece.

Standard and Optional Equipment

		j-500	j-500/5X	j-600	j-600/5X
Table	Φ500 mm × 400 mm tapped table	●	●	—	—
	Φ500 mm × 400 mm T-slot table	○	○	—	—
	Φ300 mm tapped table	○	○	—	—
	Φ600 mm × 500 mm tapped table	—	—	●	●
	Φ600 mm × 500 mm T-slot table	—	—	○	○
ATC	ATC 18 tool magazine	●	●	●	●
	ATC 30 tool magazine	○	○	○	○
Spindle	12000 rpm spindle (#40)	●	●	●	●
	18000 rpm spindle (#40)	○	○	○	○
Factory automation	Absolute position detection	●	●	●	●
	Mazak monitoring system B (RMP600)	○	○	○	○
	Preparation for Mazak monitoring system B (RMP600)	○	●	○	●
	Automatic power on / off and warm-up operation	●	●	●	●
	Status light (3 colors)	○	○	○	○
	Visual tool ID / preparation for data management	○	○	○	○
	Auto tool length measurement and tool breakage detection	●	●	●	●
	Remote manual pulse generator	○	○	○	○
	Front door auto open / close	○	○	—	—
	Preparation for hydraulic power supply for fixture clamping	○	○	○	○
2 pallet changer	○	○	○	○	
High accuracy	Ball screw core cooling (X, Y, Z-axis)	●	●	●	●
	Scale feedback (X, Y, Z-axis)	○	○	○	○
	Scale feedback (A, C-axis)	○	○	—	—
	Scale feedback (B, C-axis)	—	—	○	○
Coolant	Coolant temperature control	○	○	○	○
	Hand held coolant nozzle	○	○	○*1	○*1
	Flood coolant 1.5 kgf/cm ² , 30 L/min	●	●	●	●
	Coolant through spindle 5 kgf/cm ²	○	○	○	○
	Workpiece washing coolant	○	○	○	○
	High pressure coolant through spindle 15 kgf/cm ²	○	○	○	○
Chip disposal	SUPER FLOW coolant system	○	○	○	○
	Workpiece air blast	○	○	○	○
	Chip conveyor (Hinge type / ConSep)	○	○	○	○
Working environment	Chip bucket (swing type / fixed type)	○	○	○	○
	Top cover (Y-axis cover)	●	●	●	●
	Additional worklight	○	○	○	○
Others	Oil skimmer	○	○	○	○
	Mist collector	○	○	○	○
Others	MAZA-CHECK	○	●	○	●

*1 Not available on 2 pallet changer

Above specifications are for European market. Standard and optional equipment vary by market.