

	Item	Unit	MA-12500H	MA-12500H W *1	
Travel	X-axis travel (table L/R)	mm (in.)	2,200 (86.61)		
	Y-axis travel (spindlehead vertical)	mm (in.)	1,600 (62.99)	1,475 (58.07)	
	Z-axis travel distance (column front/back)	mm (in.)	1,650 (64.96)		
	W-axis travel distance	mm (in.)	–	500 (19.69)	
	B axis (pallet swivel)	deg	±360		
	Pallet top to spindle centerline	mm (in.)	Tapping specs: 50 to 1,650 (1.97 to 64.96), [T-slot specs: 20 to 1,620 (0.79 to 63.78)]	Tapping specs: 50 to 1,525 (1.97 to 60.04), T-slot specs: 20 to 1,495 (0.79 to 58.86)	
	Pallet centerline to spindle nose	mm (in.)	225 to 1,875 (8.86 to 73.82)		
	Pallet centerline to W-axis spindle nose	mm (in.)	–	-275 to 1,875 (-10.83 to 73.82)	
Pallet	Pallet dimensions	mm (in.)	□ 1,250 (49.21)		
	Max load capacity	kg (lb)	Tapping specs: 5,000 (11,000), [T-slot specs: 4,600 (10,120)]		
	Indexing angle	deg	0.001		
	Max workpiece dimensions	mm (in.)	Tapping specs: ø2,000 (78.74) × h1,600 (62.99) [T-slot specs: ø2,000 (78.74) × h1,570 (61.81)]		
Spindle	Spindle speed	min ⁻¹	50 to 6,000 [10 to 4,500 <gear spindle>] [50 to 12,000 <integral motor/spindle>] [50 to 20,000 <integral motor/spindle>]	10 to 3,000 <gear spindle>	
	Spindle speed ranges		Stepless [2 <gear spindle>, Stepless <integral motor/spindle>]		
	Tapered bore		7/24 taper No. 50 [HSK-100, HSK-A125]		
	Bearing dia (front bearing)	mm (in.)	ø100 (3.94) [ø110 (4.33) <gear spindle>]	ø200 (7.87)	
	W-axis feed spindle diameter (Quill dia)	mm (in.)	–	ø130 (5.12)	
Feed	Rapid traverse	m/min (ipm)	X-Y-Z: 42 (1,654)	X-Y-Z: 42 (1,654), W: 8 (315)	
		deg/min	B: 3,240		
	Cutting feedrate	mm/min (ipm)	X-Y-Z: 1 to 42,000 (0.04 to 1,654)		
deg/min		B: 3,240			
Motors	Spindle drive	kW (hp)	45/37 (60/50) (20 min/cont) [40/37/30 (55/50/40) (15 min/30 min/cont) <gear spindle>] [37/26 (50/35) (10 min/cont) <integral motor/spindle>] [55/50 (75/66) (30 min/cont) <integral motor/spindle>]	37/30 (50/40) (30 min/cont) <gear spindle>	
	Feed axes	kW (hp)	X-Z: 5.2 (7) × 2, Y: 5.1 (7) × 2, B: 4.6 (6) × 2	X-Z: 5.2 (7) × 2, Y: 5.1 (7) × 2, B: 4.6 (6) × 2, W: 3.5 (4.7)	
ATC	Tool capacity	tools	[81, 129, 177]		
	Tool shank		MAS BT50 [CAT No. 50, DIN No. 50, HSK-A100, HSK-A125*2]		
	Pull stud		MAS-2 [MAS-1, CAT, CAT Special, DIN, JIS]		
	Max tool dia (w/ adjacent tool)	mm (in.)	ø130 (5.12)		
	Max tool dia (w/o adjacent tool)	mm (in.)	ø315 (12.40)*3		
	Max tool length	mm (in.)	600 (23.62)		
	Max tool weight	kg (lb)	30 (66)		
	Max tool moment	N-m (ft-lbf)	37 (27)		
	Tool selection		Fixed address		
APC	No. of pallets		2 [6]		
	Pallet change system		2-pallet parallel shuttle		
Machine size	Height	mm (in.)	3,781 (148.86)		
	Floor space W x D	mm (in.)	6,880 × 12,512 (270.87 × 492.60) (81-tool ATC magazine), × 13,214 (520.24) (129-tool ATC magazine), × 14,137 (556.57) (177-tool ATC magazine)		
	Weight	kg (lb)	63,100 (138,820) (81-tool ATC magazine), 63,700 (140,140) (129-tool ATC magazine), 64,000 (140,800) (177-tool ATC magazine)		
CNC			OSP-P300MA		

[] Optional

*1. W-axis specs are Optional.

*2. HSK-A125 shank not available for 6,000, 12,000, and 20,000 min⁻¹ spindles.

*3. With 20,000 min⁻¹ spindle, the Max tool dia (w/o adjacent tool) is ø315mm.