

	Item	Unit	MA-400HA		
Travels	X-axis travel (column left/right)	mm (in)	560 (22.05)		
	Y-axis travel (spindle up/down)	mm (in)	610 (15.49)		
	Z-axis travel (table front/back)	mm (in)	625 (24.61)		
	Spindle center to pallet top	mm (in)	50 to 660 (1.97 to 25.98)		
	Spindle nose to pallet center	mm (in)	85 to 710 (3.35 to 27.95)		
Pallet	Work area	mm (in)	400 x 400 (15.75 x 15.75)		
	Indexing angle	deg	1 [0.001]		
	Max workpiece dimensions	mm (in)	ø600 x 710*1 (ø23.62 x 27.95)		
	Max load capacity	kg (lb)	400 (880)		
Spindle	Spindle speed	min ⁻¹	Standard 50 to 8,000	Wide-range [50 to 15,000]	High-speed [50 to 20,000] 50 to 25,000, 35,000
	Tapered bore		7/24 taper No. 40 [HSK-A63]		[HSK-A63, A63, F63]
	Bearing dia	mm (in)	ø70 (ø2.76)		[ø70, ø60, ø60] (ø2.76, ø2.36, ø2.36)
Feed rate	Rapid traverse	mm/min (ipm)	X-Y-Z: 60 (2,362)		
	Cutting feed rate	mm/min (ipm)	X-Y-Z: 1 to 60,000 (0.04 to 2,362)		
Motors	Spindle (10 min/cont)	kW (hp)	15/11 (20/15)	[26/18.5 (35/25)]	[30/22, 15/11, 15 (40/30, 20/15, 20)]
	Feed axis motors	kW (hp)	X-Y-Z: 4.6 (6.3)		
	Table indexing	kW (hp)	3.0 (4.1)		
ATC	Tool shank		MAS-403 BT40 [HSK-A63]		[HSK-A63, A63, F63]
	Pull stud		MAS-2*2*3		—
	Magazine capacity	tools	30 [40, 60, 110, 146, 182, 218, 326]*4		
	Max tool dia (w/ adjacent)	mm (in)	ø100 (3.94)		
	Max tool dia (w/o adjacent)	mm (in)	ø150 (5.91)		
	Max tool length	mm (in)	300 (11.81) [400 (15.75)]*5		
	Max tool weight	kg (lb)	10 (7.4)		
	Tool selection		Memory random (Fixed with 110 or more tools)		
Machine Size	Height	mm (in)	2,759 (108.62)		
	Floor space; width x depth	mm (in)	2,414 x 4,532 (95.04 x 178.43)		
	Mass	kg (lb)	11,400 (25,080)		
CNC control			OSP-P300MA		

*1. ø500 x 710 (ø19.68 x 27.95) when the spindle must operate within 50 mm (1.97 in) from the pallet (X-Y-Z telescopic cover interference).

[]: Optional specifications

*2. Thru-spindle coolant specs use JIS standard specs.

*3. Pull studs not supplied with HSK toolholders

*4. Matrix system with more than 110 tools.

*5. "Long tools" may require the shutter to wait and result in longer ATC C-C times.