

Machine specifications

	Item	Unit	MU-5000V (-L) No. 40 spindle	MU-5000V (-L) No. 50 spindle	MU-6300V (-L) No. 40 spindle	MU-6300V (-L) No. 50 spindle	MU-8000V (-L) No. 40 spindle	MU-8000V (-L) No. 50 spindle
Travels	X-axis (table L/R)	mm (in)	800 (31.50)		925 (36.42)		925 (36.42)	
	Y-axis (spindle saddle front / back)	mm (in)	1,050 (41.34)		1,050 (41.34) (+100 ATC movements)		1,050 (41.34) (+100 ATC movements)	
	Z-axis (spindlehead up / down)	mm (in)	600 (23.62)		600 (23.62)		600 (23.62)	
	A-axis (trunnion table rotation)	deg	+90 to -120		+90 to -120		+90 to -120	
	C-axis (table rotation)	deg	360 (infinite)		360 (infinite)		360 (infinite)	
	Table surface to spindle nose	mm (in)	80 to 680 (3.15 to 26.77)		160 to 760 (6.30 to 29.92)		200 to 800 (7.87 to 31.50)	
Table	Table size	mm (in)	ø500 (19.69)		ø630 (24.80)		ø800 (31.50) × 630 (24.80) width <ø800 (31.50)>	
	Max work size*1	mm (in)	ø700 × H500 (ø27.56 × H19.69)		ø830 × H550 (ø32.68 × H21.65)		ø1,000 × H550 (ø39.37 × H21.65)	
	Floor to table top	mm (in)	1,140 (44.88)		1,150 (45.28)		1,210 (47.64)	
	Max load capacity*1	kg (lb)	500 (1,100)		600 (1,320)		700 (1,540)	
	<Turning spindle speed>	min ⁻¹	<1,000>		<800>		<800>	
Spindle	Speed	min ⁻¹	10,000 [15,000, 20,000, 25,000] <8,000, [12,000, 20,000]>	6,000 [12,000] <10,000>	10,000 [15,000, 20,000, 25,000] <8,000, [12,000, 20,000]>	6,000 [12,000] <10,000>	10,000 [15,000, 20,000, 25,000] <8,000, [12,000, 20,000]>	6,000 [12,000] <10,000>
	Tapered bore		7/24 taper No. 40 <HSK-A63>	7/24 taper No. 50 <HSK-A100>	7/24 taper No. 40 <HSK-A63>	7/24 taper No. 50 <HSK-A100>	7/24 taper No. 40 <HSK-A63>	7/24 taper No. 50 <HSK-A100>
	No. of spindle ranges		Infinitely variable		Infinitely variable		Infinitely variable	
	Bearing dia	mm (in)	ø70 (2.76)	ø90 (3.54)	ø70 (2.76)	ø90 (3.54)	ø70 (2.76)	ø90 (3.54)
Feed	Rapid traverse	m/min (ipm)	X-Y-Z: 50 (1,969)		X-Y-Z: 50 (1,969)		X-Y-Z: 50 (1,969)	
	Rapid traverse	deg/min	A: 18,000 (50 min ⁻¹) C: 18,000 (50 min ⁻¹) <36,000 (100 min ⁻¹)>		A: 10,800 (30 min ⁻¹) C: 32,400 (90 min ⁻¹)		A: 10,800 (30 min ⁻¹) C: 32,400 (90 min ⁻¹)	
	Cutting feed rate	mm/min	X-Y-Z: 1 to 50,000		X-Y-Z: 1 to 50,000		X-Y-Z: 1 to 50,000	
Motors	Spindle (10 min/cont)	kW (hp)	11/7.5 (15/10) [22/18.5 (30/25), 30/22 (40/30), 15/11 (20/15)] <11/7.5 (15/10), [22/18.5 (30/25), 30/22 (40/30)]>	11/7.5 (15/10) [26/18.5 (35/25)] <26/18.5 (35/25)>	11/7.5 (15/10) [22/18.5 (30/25), 30/22 (40/30), 15/11 (20/15)] <11/7.5 (15/10), [22/18.5 (30/25), 30/22 (40/30)]>	11/7.5 (15/10) [26/18.5 (35/25)] <26/18.5 (35/25)>	11/7.5 (15/10) [22/18.5 (30/25), 30/22 (40/30), 15/11 (20/15)] <11/7.5 (15/10), [22/18.5 (30/25), 30/22 (40/30)]>	11/7.5 (15/10) [26/18.5 (35/25)] <26/18.5 (35/25)>
	Feed axes	kW (hp)	X: 5.2 (6.9), Y-Z: 3.5 (4.7), A: 3.5 × 2 (4.7 × 2)		X: 5.2 (6.9), Y-Z: 3.5 (4.7), A: 4.6 × 2 (6.1 × 2)		X: 5.2 (6.9), Y-Z: 3.5 (4.7), A: 4.6 × 2 (6.1 × 2)	
	Feed axes (C-axis: milling)	kW (hp)	C: 3.0 (4) <5.0 (6.7)>		C: 7.2 (9.6)		C: 7.2 (9.6)	
	Turning (15 min/cont)	kW (hp)	<17/13 (23/17)>		<16/12 (21/16)>		<16/12 (21/16)>	
Auto tool changer (ATC)	Tool shank		MAS BT40 <HSK-A63>	MAS BT50 <HSK-A100>	MAS BT40 <HSK-A63>	MAS BT50 <HSK-A100>	MAS BT40 <HSK-A63>	MAS BT50 <HSK-A100>
	Pull stud		MAS2 <->		MAS2 <->		MAS2 <->	
	Tool capacity (magazine)		32-tool [48-tool, 64-tool: chain, Over 64-tool: matrix*2]		32-tool [48-tool, 64-tool: chain, Over 64-tool: matrix*2]		32-tool [48-tool, 64-tool: chain, Over 64-tool: matrix*2]	
	Max tool dia (w/adjacent / w/o adjacent)	mm (in)	ø90/ø125 (ø3.54/ø4.92)	ø100/ø152 (ø3.94/5.98)	ø90/ø125 (ø3.54/ø4.92)	ø100/ø152 (ø3.94/5.98)	ø90/ø125 (ø3.54/ø4.92)	ø100/ø152 (ø3.94/5.98)
	Max tool length	mm (in)	400 (15.75)		400 (15.75)		400 (15.75)	
	Max tool mass	kg (lb)	8 (17.6)	12 (26.4) [15 (33)]	8 (17.6)	12 (26.4) [15 (33)]	8 (17.6)	12 (26.4) [15 (33)]
	Tool selection		Memory random (matrix magazine is fixed address system)		Memory random (matrix magazine is fixed address system)		Memory random (matrix magazine is fixed address system)	
Machine size	Height	mm (in)	3,435 (135.24)		3,525 (138.78)		3,625 (142.72)	
	Floor space W x D (w/o operator platform)	mm (in)	3,995 × 2,750 (157.28 × 108.27)	3,995 × 2,840 (157.28 × 111.81)	4,850 × 2,990 (190.94 × 117.72)		5,280 × 2,990 (207.87 × 117.72)	
	Mass	kg (lb)	15,400 (33,880)	15,650 (34,430)	17,500 (38,500)	17,700 (38,940)	18,400 (40,480)	18,600 (40,920)
CNC			OSP-P500M-H <OSP-P500S-H>		OSP-P500M-H <OSP-P500S-H>		OSP-P500M-H <OSP-P500S-H>	

*1. With APC specifications, there are limits on maximum pallet load and maximum workpiece dimensions.

*2. Matrix magazines of 64, 98, 132 and 166 tools have short frames, while those of 200, 234 and 268 tools have long frames.

[] : Option

< > : Turning specifications