

Machine Specifications

Model		MCR-C 25			MCR-C 30				MCR-C 35				
Item		25 × 40	25 × 50	25 × 65	30 × 50	30 × 65	30 × 80	30 × 100	35 × 50	35 × 65	35 × 80	35 × 100	35 × 120
Travel													
X-axis (table front / back)	mm (in.)	4,200 (165.35)	5,200 (204.72)	6,700 (263.78)	5,200 (204.72)	6,700 (263.78)	8,200 (322.83)	10,200 (401.57)	5,200 (204.72)	6,700 (263.78)	8,200 (322.83)	10,200 (401.57)	12,200 (480.31)
Y-axis (spindlehead horizontal)	mm (in.)	3,200 (125.98)			3,700 (145.67)				4,200 (165.35)				
Z-axis (ram vertical)	mm (in.)	1,050 [1,250] (41.34 [49.21])											
W-axis (crossrail vertical)	mm (in.)	1,000 (39.37)			1,200 (47.24)								
Effective width between columns	mm (in.)	2,650 (104.33)			3,150 (124.02)				3,650 (143.70)				
Table to spindle nose	mm (in.)	0 to 1,650 [0 to 1,550]* ¹ (0 to 64.96 [0 to 61.02])			0 to 1,850 [0 to 1,750]* ¹ (0 to 72.83 [0 to 68.90])				0 to 1,800 [0 to 1,700]* ¹ (0 to 70.87 [0 to 66.93])				
Table													
Working surface	mm (in.)	2,000 × 4,000 (78.74 × 157.48)	2,000 × 5,000 (78.74 × 196.85)	2,000 × 6,500 (78.74 × 255.91)	2,500 × 5,000 (98.43 × 196.85)	2,500 × 6,500 (98.43 × 255.91)	2,500 × 8,000 (98.43 × 314.96)	2,500 × 10,000 (98.43 × 393.7)	3,000 × 5,000 (118.11 × 196.85)	3,000 × 6,500 (118.11 × 255.91)	3,000 × 8,000 (118.11 × 314.96)	3,000 × 10,000 (118.11 × 393.7)	3,000 × 12,000 (118.11 × 472.44)
Maximum load	kg (lb)	22,000 (48,400)	27,000 (59,400)	34,000 (74,800)	33,000 (72,600)	43,000 (94,600)	52,000 (114,400)	66,000 (145,200)	29,500 (64,900)	37,000 (81,400)	47,000 (103,400)	61,000 (134,200)	65,000 (143,000)
T-slots Width x No. <center pitch>	mm	24H7 × 11 (center 200, both ends 130)			24H7 × 13 (center 200, both ends 180)				24H7 × 15 (center 200)				
Height from machine bottom	mm (in.)	850 (33.46)			900 (35.43)				950 (37.40)				
Spindle													
Speed range	min ⁻¹	10 to 4,000 [10 to 6,000* ²]											
Taper bore		7/24 taper No. 50											
Bearing diameter	mm (in.)	ø100 (3.94) [ø85 (3.35)* ²] (High output specifications: ø130 (5.12)* ³ , ø100 (3.94)* ⁴)											
Feedrates													
Rapid traverse	m/min (ipm)	X-Y: 24, Z: 15 (X-Y: 0.94, Z: 0.59)			X-Y: 24* ⁵ , Z: 15 (X-Y: 0.94, Z: 0.59)		X: 20, Y: 24* ⁵ , Z: 15 (X: 0.79, Y: 0.94, Z: 0.59)		X-Y: 24* ⁵ , Z: 15 (X-Y: 0.94, Z: 0.59)		X: 20, Y: 24* ⁵ , Z: 15 (X: 0.79, Y: 0.94, Z: 0.59)		
Feedrate	mm/min (ipm)	1 to 10,000 (0.04 to 394)											
W axis traverse (crossrail)	m/min (ipm)	3 (0.12)											
Automatic Tool Changer													
Tool shank		MAS BT50											
Pull stud		MAS P50T-2											
Tool magazine capacity	tools	50 [80, 100, 120, 180]											
Max tool diameter	mm (in.)	w/ adjacent tools: ø135 (5.31); w/o adjacent tools: ø264 (10.39)											
Max tool length	mm (in.)	600 (23.62)											
Max tool weight	kg (lb)	25 (55)											
Tool selection		Fixed adress											
Motors													
Spindle drive	kW (hp)	VAC 45/37 (60/50) (30 min/cont) [37 (50) cont]* ²											
Axis feed drives	kW (hp)	X: 14.0 (19), Y: 9.4 (13), Z: 5.2 × 2 (7 × 2)											
Crossrail traverse drive	kW (hp)	W: 4.6 × 2 (6 × 2)						W: 5.2 × 2 (7 × 2)					
Power Sources													
Electrical power supply	kVA	60* ⁶											
Compressed air supply	L/min (ANR)	650 (0.5 MPa or more)* ⁶											
Machine Size													
Height	mm (in.)	6,720 (264.57)			6,900 (271.65)								
Floor space (machine only)	mm (in.)	7,810 × 10,730 (307.48 × 422.44)	7,810 × 12,830 (307.48 × 505.12)	7,810 × 16,430 (307.48 × 646.85)	8,310 × 12,830 (327.17 × 505.12)	8,310 × 16,430 (327.17 × 646.85)	8,310 × 19,430 (327.17 × 764.96)	8,310 × 23,930 (327.17 × 942.13)	8,835 × 12,830 (347.83 × 505.12)	8,835 × 16,430 (347.83 × 646.85)	8,835 × 19,430 (347.83 × 764.96)	8,835 × 23,930 (347.83 × 942.13)	8,835 × 27,930 (347.83 × 1,099.61)
Weight (machine only)* ⁷	kg (lb)	48,000 (105,600)	55,000 (121,000)	63,000 (138,600)	61,000 (134,200)	70,000 (154,000)	83,000 (182,600)	91,000 (200,200)	68,000 (149,600)	78,000 (171,600)	92,000 (202,400)	102,000 (224,400)	116,000 (255,200)
CNC		OSP-P300MA											

[]: Optional

*1. With 250-mm long extension head

*2. 6,000 min⁻¹ specs

*3. 4,000 min⁻¹ specs

*4. 6,000 min⁻¹ specs

*5. Deceleration near both ends of Y-axis travel

*6. Standard specs

*7. With 50-tool magazine, 2-station AAC