

Machine Specifications

		MCR-A5CII 20			MCR-A5CII 25					MCR-A5CII 30				MCR-A5CII 35						
Nominal sizes		20 × 30	20 × 40	20 × 50	25 × 30	25 × 40	25 × 50	25 × 65	25 × 80	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.)	3,200 (125.98)	4,200 (165.35)	5,200 (204.72)	3,200 (125.98)	4,200 (165.35)	5,200 (204.72)	6,700 (263.78)	8,200 (322.83)	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.)	2,800 (102.36)			3,100 (122.05)					3,600 (141.73)				4,100 (161.42)						
Z-axis (ram vertical)	mm (in.)	800 (31.50)																		
W-axis (crossrail vertical)	mm (in.)	800 (31.50)			1,000 (39.37)					1,200 (47.24)										
Effective width between columns	mm (in.)	2,150 (84.65)			2,650 (104.33)					3,150 (124.02)				3,650 (143.70)						
Table to spindle nose	mm (in.)	0 to 1,450 [0 to 1,350] *1 (0 to 57.08) [0 to 53.14]			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	1,500 × 3,000	1,500 × 4,000	1,500 × 5,000	2,000 × 3,000	2,000 × 4,000	2,000 × 5,000	2,000 × 6,500	2,000 × 8,000	2,500 × 5,000	2,500 × 6,500	2,500 × 8,000	2,500 × 10,000	3,000 × 5,000	3,000 × 6,500	3,000 × 8,000	3,000 × 10,000	3,000 × 12,000		
Maximum load	kg (lb)	12,000 (26,400)	16,000 (35,200)	20,000 (44,000)	18,000 (39,600)	22,000 (48,400)	27,000 (59,400)	34,000 (74,800)	42,000 (92,400)	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 × No. <center pitch>	mm	24H7 × 11 <center: 140, both ends: 100>			24H7 × 11 <center: 200, both ends: 130>					24H7 × 13 <center: 200, both ends: 180>				24H7 × 15 <center: 200, both ends: 200>						
Height from machine bottom	mm (in.)	850 (33.46)							900 (35.43)				950 (37.40)							
●Spindle																				
Speed range	min ⁻¹	30 to 4,000 [30 to 6,000, 30 to 10,000] *2																		
Taper bore		7/24 taper No.50																		
Bearing diameter	mm (in.)	ø100 (3.94) [ø85 (3.35)] *2																		
●Feed rates																				
Rapid traverse	m/min	X: 30, Y: 32, Z: 20 *3							X: 20, Y: 32, Z: 20	X: 30, Y: 32 *4, Z: 20 *3			X: 20, Y: 32 *4, Z: 20			X: 30, Y: 30 *4, Z: 20 *3			X: 20, Y: 30 *4, Z: 20	
Feed rate	mm/min	1 to 10,000																		
Crossrail traverse	m/min	3																		
●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: ø230 (9.06)																		
Max tool length	mm (in.)	400 (15.75)																		
Max tool weight	kg (lb)	25 (55)																		
Tool selection		Fixed adress																		
●Motors																				
Spindle drive	kW (hp)	26/22 (30 min/cont) [30/22 (30 min/cont)] *5																		
Axis feed drives	kW (hp)	X: 9.4 (12.5), Y: 7.3 (9.7), Z: 5.2 × 2 (6.9 × 2)					X: 14.0 (18.7), Y: 7.3 (9.7), Z: 5.2 × 2 (6.9 × 2)													
Crossrail traverse drive	kW (hp)	W: 4.6 × 2 (6.1 × 2)																		
●Power Sources																				
Electrical power supply	kVA	60 *6																		
Compressed air supply	L/min	650 (0.5 MPa or more) *6																		
●Machine Size																				
Height	mm (in.)	5,820 (229.13) *7			6,020 (237.00) *7					6,300 (248.03) *7										
Floor space (machine only)	mm	6,180 × 8,430	6,180 × 10,730	6,180 × 12,830	6,680 × 8,430	6,680 × 10,730	6,680 × 12,830	6,680 × 16,430	6,680 × 19,430	7,280 × 12,830	7,280 × 16,430	7,280 × 19,430	7,280 × 23,930	7,780 × 12,830	7,780 × 16,430	7,780 × 19,430	7,780 × 23,930	7,780 × 27,930		
Weight (machine only)	kg (lb)	32,000 (70,400)	36,000 (79,200)	40,000 (88,000)	33,000 (72,600)	39,000 (85,600)	44,000 (96,800)	52,000 (114,400)	58,000 (127,600)	50,000 (110,000)	59,000 (129,800)	67,000 (147,400)	78,000 (171,600)	56,000 (123,200)	65,000 (143,000)	79,000 (173,800)	87,000 (191,400)	101,000 (222,200)		
●CNC																				
OSP-P300MA																				

[] : Optional
*1. [] : Numbers in the case of extension head length 250 mm.
*2. [] : Shows 6,000 min⁻¹, 10,000 min⁻¹ spec
*3. 20 m/min on each axis with die/mold kit.
*4. Deceleration near both ends of Y-axis travel
*5. Square brackets show high-speed 10,000 min⁻¹ aluminum machining specifications
*6. Standard specs
*7. Height increases 40 mm with use of chemical anchors.