

Horizontal Machining Center MDH Series

Specification	Unit	MDH40P	MDH50PS	MDH50	MDH50A	MDH65S	MDH65	MDH65A	MDH80S	MDH80	MDH80A	MDH100S	MDH125
Table													
Worktable size (L*W)	mm	400 X 400	500 X 500	500 X 500	500 X 500	630 X 630	630 X 630	630 X 630	800 X 800	800 X 800	800 X 800	1000 X 1000	1250 X 1250
No. of Pallet		2		2	Single table	2	2	Single table	2	2	Single table	2	2
Table type		IT OP:BRT		IT OP:BRT			IT OP:BRT			IT OP:BRT			IT OP:BRT
Table indexing		IT (1° X 360°) BRT (0.001° X 360°)		IT (1° X 360°) BRT (0.001° X 360°)			IT (1° X 360°) BRT (0.001° X 360°)			IT (1° X 360°) BRT (0.001° X 360°)			IT (1° X 360°) BRT (0.001° X 360°)
Table indexing time	S	1.9(90°)		1.7(90°)			1.7(90°)			4.5(90°)			5(90°)
Pallet changing time	S	5		6	-	6	12	-	12	12.5	-	12.5	35
Max. table load	Kg	400		800			1300			2000			3000
Travel													
X/Y/Z-axis travel	mm	630/620/710		780/750/800			1050/900/900		1050/900/800	1400/1100/1050		14000/1100/1000	1700/1400/1240
X/Y/Z Axis guide way type		Linear guideway		Linear guideway			Linear guideway			Linear guideway			Linear guideway
Distance from table surface to spindle center	mm	80~700		80~830			80~980			80~1180			70~1470
Distance from spindle nost to table	mm	150~860		150~950			200~1100		300~1100	200~1250		250~1250	360~1600
Feedrate													
Rapid traverse of X/Y/Z axis	m/min	60		54			54			45			45
Cutting feed rate		1~20000		1~20000			1~20000			1~20000			1~20000
Spindle													
Spindle taper		No.40 (7:24)		No. 50 (7:24)			No. 50 (7:24)			No. 50 (7:24)			No. 50 (7:24)
Max. spindle speed	rpm	10000 (Direct-Drive) Opt:12000 (Direct-drive)		8000 (Motor Spindle) Opt:12000 (Motor Spindle) Opt:6000 (Gear box)			8000 (Motor Spindle) Opt:12000 (Motor Spindle) Opt:6000 (Gear box)			800 (Motor Spindle) Opt:12000 (Motor Spindle) (Gear box) Opt:4000 Opt:4000 (Gear box)		6000 (Motor Spindle) Opt: 8000, 12000 (Motor Spindle) Opt:6000 (gear box)	
Spindle motor power (Continuous/30 min)	kW	10000rpm:7.5/11 12000rpm:7.5/11		8000rpm:18.5/22 12000rpm:25/30 6000rpm:22/26			8000rpm:18.5/22 12000rpm:25/30 6000rpm:22/26			8000rpm:18.5/22 12000rpm:25/30 1000rpm:22/26 4000rpm:30/37		6000rpm:37/55 8000rpm:25/30 12000rpm:25/30 6000rpm:22/26	
ATC													
Tool magazine capacity	T	40 (Opt:60/80/120)		40 (Opt:60/80/120)			40 (Opt:60/80/120)			40 (Opt:60/80/120)			40 (Opt:60/80)
Tool shank type		BT40		BT50			BT50			BT50			BT50
Max. tool length	mm	350		500			500			500			500
Max. tool weight	Kg	8		25			25			25			25
Max. tool diameter (w/o adjacent tools)	mm	φ82(φ150)		φ115(φ270)			φ115(φ270)			φ115(φ270)			φ115(φ270)
Tool changing time (T-T)	S	1.2		2			2			2.5			2.5
Accuracy													

X/Y/Z axis positioning accuracy	mm	0.014	0.014	0.014	0.014	0.018	X:0.021 Y:0.018 Z:0.018					X:0.021 Y:0.021 Z:0.018	
X/Y/Z axis repeatability accuracy	mm	0.006	0.006	0.006	0.006	0.007	X:0.009 Y:0.007 Z:0.007					X:0.009 Y:0.009 Z:0.007	
CNC Controller													
CNC Controller		FANUC 31i	FANUC 31i	FANUC 31i	FANUC 31i	FANUC 31i	FANUC 31i	FANUC 31i	FANUC 31i	FANUC 31i	FANUC 31i	FANUC 31i	
General													
Machine dimensions (L X W X H)	mm	5952 X 2522 X 2771	5952 X 2522 X 2771	4891 X 3200 X 3125	4190 X 3200 X 3125	4850 X 3200 X 3125	5145 X 3342 X 3355	5100 X 3342 X 3350	5145 X 3342 X 3350	6153 X 3717 X 3827	5960 X 3682 X 3827	6153 X 3717 X 3827	8075 X 6087 X 3702
Machine weight	Kg	8000	8000	15000	14000	15000	18000	18000	18000	24000	24000	24500	32500

Standard configurations

- Spindle with two speed ranges
- Core-cooled ball screws
- Original high-speed synchronous tool changer
- Screw type chip conveyor (Double-side mounted)
- Auto lubrication system
- Rigid tapping
- Heat exchanger

Optional

- Built-in-rotary table (BRT)
- High volume flushing system
- Air conditioner
- HEIDENHAIN linear scale
- Gear box spindle
- Coolant-through spindle coolant system and high-pressure unit
- Ceiling shower
- Tool probe & work piece probe
- Oil-water separator system
- Chain-type chip conveyor
- Mist collector