

SHMC series



Horizontal Machining Center

The horizontal machining center is suitable for multiple surfaces workpiece and multiple working procedures for process of milling, drilling, boring, reaming, tapping, two and three dimensional curve surfaces. It has excellent performance of machining holes on box type workpiece and plane surface in one time setting. It can be widely applied in the fields of automobile, diesel engine, aviation, home electrical appliance, general machinery and etc.



Features

1. Moving column design. Symmetry mechanical design with roller linear guideway can reach rapid traverse 48M/min
2. Excellent dynamic accuracy. Ball bar testing feed rate 8000mm/min
3. Rapid spindle keep low thermal deflection. 4 front bearing + 2 rear bearing to offer less cutting vibration and high run out accuracy
4. Oil mist lubrication for build-in spindle, helping to lessen the thermal deflection after long hour running
5. Excellent acceleration high speed build-in spindle. 0-1000rpm takes only 1.3 sec. Max. spindle reaches 1500rpm. Max. torque reaches 167 Nm
6. Ideal power performance belt-driven spindle

7. Hydraulic rotary joint. Convenient for customer to design fixture
8. Servo driven APC. Pallet changes running smoothly with accuracy indexing. Pallet-to-pallet takes 3 seconds only
Servo driven tool magazine. Fast indexing 4 tools per second. Tool management function. Tooling life management function

Technical specifications

Item		Unit	SHMC50	SHMC100	SHMC120	
Pallet	Table size	mm	500x500	1000x1000	1200x1200	
	Bolt hole	mm	M16xP2x24	M20xP2.5x80	M20xP2.5x120	
	Max. loading capacity	kg	500	3000	4000	
	Max. range of work piece	mm	Φ680x1000	Φ1500x1400	Φ2300x1700	
	B axis indexing	deg.	0.001°	5°	5°	
	No. of pallet		2	Std.1 opt.2	Std.1 opt.2	
Travel range	Max. travel range of X/Y/Z axis		mm	620/620/620	1600/1400/1400	2500/1400/1400
	Distance from spindle nose	Belt driven	mm	130-750	200-1600	200-1600
		Build-in	mm	130-750	120-1520	120-1520
	Distance from spindle nose	Belt driven	mm	110-730	200-1600	
		Build-in	mm	160-780	120-1250	
Spindle	Spindle taper			BT 40	BT50	BT50
	Spindle speed		rpm	std. 12000 opt. 8000/10000/15000	Std. 6000 opt. 10000	std. 6000 opt. 10000
Feed rate	Max. cutting feed rate		mm/min	10000	5000	5000
	Rapid travel speed of X/Y/Z axis		m/min	48	10	10
Tool magazine	Tool capacity			std.40 opt.60/120	std.60 opt.120	std.60 opt.120
	Max. adjacent tool (Dia.xL)		mm	Φ75x300	Φ125x350	Φ125x350
	Max. tool weight		kg	7	20	20
	Tool shank type			BT/CAT/DIN.	BT/CAT/DIN.	BT/CAT/DIN.
Drive motor	Spindle motor (30Min./con.)	Belt driven	kw	15/11	30/25	30/25
		Build-in	kw	22/18.5		
	Hydraulic motor		kw	3.75	7.5	7.5
	Coolant motor		kw	1.17	1.17	1.17
General	Power capacity		kva	40	50	50
	Air pressure required		bar	6	6	
	Overall dimension (LxWxH)		mm	4600x2650x2900		
	Net weight(40 tools)		kg	10500		

Standard accessories

1. Fanuc 0i-MD controller
2. BT 50 build-in type spindle 6000rpm
3. Spindle motor: 30/25Kw (30 min./con.)
4. Spindle oil cooling system
5. Chain type 60 tools ATC
6. Automatic lubrication system
7. Remote manual pulse generator
8. Hydraulic clamp system
9. Internal screw type chip conveyor
10. Chain-type chip conveyor
11. Indexing angle table 5°
12. Semi-enclosed splash guard
13. Coolant system
14. Indication lamp
15. Work lamp
16. Tool kit
17. Leveling bolts and pads

Optional accessories**SHMC100 & SHMC120 Types**

1. Fanuc 31i controller
2. BT 50 build-in spindle 10000rpm
3. Coolant through spindle 20 Bar
4. Oil mist through spindle
5. Auto pallet change system
6. Chain-type 120 tools ATC
7. Indexing angle table 1°
8. Indexing angle table 0.001°
9. Linear scale for 3 axes
10. Linear scale for B axes
11. Oil mist collector
12. Transformer
13. CE

SHMC50 Type

1. Fanuc 31i controller
2. BT 40 belt-driven spindle 8000rpm
3. BT 40 belt-driven spindle 10000rpm
4. BT 40 build-in spindle 15000rpm
5. Coolant through spindle 20 bar
6. Oil mist through spindle
7. Chain-type chip conveyor
8. Air conditioner for electrical cabinet
9. Chain-type 60 tools ATC
10. Indexing angle table 1°
11. Single working table system
12. Linear scale for 3 axes
13. Linear scale for B axes
14. Oil mist collector
15. Transformer