

A 600

Horizontal MC for flexible manufacturing

HS-M363-R2.7 20140114



HORIZONTAL MACHINING CENTER FOR FLEXIBLE MANUFACTURING

HS-M363-R2.4-20130107

A 600 is built with highly rigid box on box design for stable machining, and its small footprint is perfect for FA system. The spindle integrates the motor to limit vibration, noise, and power loss at high speed rotation. The jet of oil is injected directly onto the spindle bearing for effective cooling, and the motor and the spindle assembly are jacket-cooled to limit the displacement caused by heat. The servo motor's precision worm gear design increases the motor's torque, and the large-capacity oil-pressure brake system provides stable and accurate machining when performing fixed-angle roughing and boring.



✧ Main Features

1. Hi-Performance

- Built-in spindle motor: 22/18.5kW
- Powerful X/Y structure (Box in Box)
- High rigid Roller LM guide in all axes
- Realization of multi process by B-axis(Std.)

2. Hi-Speed

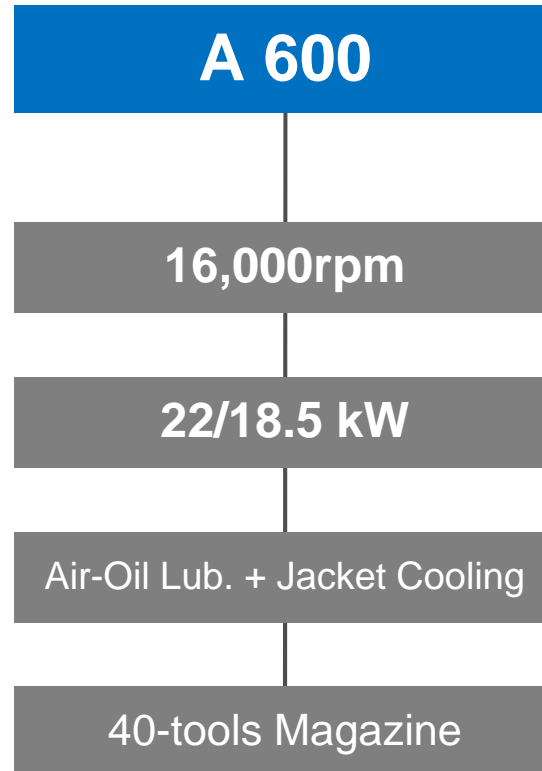
- Quick Rapid feedrate (X/Y/Z): 60/60/60m/min
- Max. spindle speed: 16,000rpm
- Tool changing time(Tool to Tool): 1.5sec
- Spindle cooling & Lubrication system: Air-Oil type

3. Hi-Dignity

- Full Splash Guard (Perfect protection of leaking)
- Easy Access & Maintenance Design

4. Variety Function

- Hwacheon original function
 - Std.: HAI(40block)
 - Opt.: HAI(200block)HECC/HTLD/OPTIMA/HSDC
- Spindle Through Coolant(Opt.): 30bar, 70bar



A 600/16,000rpm

✓ HSK-A63

ITEM		A 600
● Travel		
X-axis Stroke (longitudinal Movement of Spindle)	mm(inch)	600 (23.62")
Y-axis Stroke (Cross Movement of Table)	mm(inch)	600 (23.62")
Z-axis Stroke (Vertical Movement of Spindle)	mm(inch)	800 (31.5")
B-axis Rotation Angle	° (deg)	360
Distance from Table Center to Spindle Gauge Plane	mm(inch)	150~950 (5.91"~37.4")
Distance from Table Surface to Spindle Center	mm(inch)	90~690 (7.87"~27.17")
● Table		
Working Surface	mm(inch)	500 (19.69") x 500 (19.69")
Table Loading Capacity	kg(lb)	600 (1,323)
Min. Indexing Angle	° (deg)	0.001
Max. Workpiece Dia.	mm(inch)	Ø800 (31.5")
● Spindle		
Max. Spindle Speed	rpm	16,000
Spindle Motor	kW(HP)	22/18.5 (30/25)
Type of Spindle Taper hole	-	HSK-A63
Spindle bearing Inner Diameter	mm(inch)	Ø70 (Ø2.76")
Method of Spindle Lubrication & Cooling	-	Air-Oil Lub. + Jacket Cooling
● Feedrate		
Rapid Speed (X/Y/Z)	m/min(ipm)	60 / 60 / 60 (2,363 / 2,363 / 2,363)
Feedrate (X/Y/Z)	rpm	30
● Motor		
Feed motor (X/Y/Z)	kW(HP)	7 / 7 / 7 / 3 (9.3 / 9.3 / 9.3 / 4)
Coolant Motor (Spindle/Chip Flushing)	kW(HP)	0.4 (0.54) / 0.9 (1.24)
Spindle Cooler (50/60Hz) – Inverter type	kW(HP)	0.4 (0.54)

ITEM	A 600	
● ATC		
Type of Tool Shank	-	HSK-A63
Tool Storage Capacity	ea	40
Max. Tool Diameter (With Adjacent Tools/ Without)	mm(inch)	Ø90(3.54) / Ø160(6.3)
Max. Tool Length	mm(inch)	320 (12.6")
Max. Tool Weight	kg(lb)	8 (17.64)
Method of Tool selection	-	Memory random
Method of Operation (Magazine/Swing Arm)	-	Servo Motor / Servo Motor
● Power Source		
Electric Power Supply	kVA	75
Compressed air Supply (Pressure x Consumption)	-	0.5~0.7MPa x 690Nl/min
● Tank Capacity		
Spindle Cooling / Lubrication / Hydraulic	ℓ(gal)	20 (5.28) / 4.3 (1.14) / 100 (26.42)
Coolant	ℓ(gal)	420 (110.95)
● Machine Size		
Height	mm(inch)	2,990 (117.72")
Floor Space (Length × Width)	mm(inch)	1,700x5,520 (66.9"x217.32")
Weight	kg(lb)	11,000 (24,251)
● NC Controller		Fanuc 0i-MD