



Cincinnati Machine SMART-t V5A-3222 CNC Heavy Duty Bridge Type 5 Axis Vertical Machining Center

1.2. Standard accessories

Item	Standard accessories
1	HEIDENHAIN TNC640 controller
2	HSK-A63 20,000rpm 45/45 kW (For xx22/xx28)
3	HSK-A100 12,500rpm 54/54 kW (For xx31/xx34/xx38/xx43)
4	Z axis travel 800mm (For xx22/xx28)
5	Z axis travel 1,000mm (For xx31/xx34/xx38/xx43 std.)
6	Automatic Tool Changer 40 tools
7	Fully enclosed splash guard (roof included) (X<6m)
8	X/Y axes rack and pinion type linear system and servo motors (For xx38/xx43)
9	Z axis roller type linear guide ways
10	Z axis twin ball screws (For xx38/xx43)
11	Nitrogen balancing system (For xx22/xx28/xx31/xx34)
12	Automatic lubrication system
13	Spindle oil cooler
14	Air blast through spindle
15	Manual pulse generator
16	Working lamp
17	3-color alarm lamp
18	Air dryer
19	Air conditioner for electrical cabinet
20	Water gun and air gun interface
21	Cutting coolant unit
22	Twin auger chip removal system
23	Chip conveyor with cart
24	Oil skimmer
25	Column type controller panel
26	Leveling bolts & blocks
27	Tool box
28	HEIDENHAIN linear scales
29	Automatic tool measuring system
30	Automatic work piece measuring system

1.3. Optional accessories

Item	Optional accessories
1	SIEMENS 840D controller
2	Z axis travel 1,200mm
3	Automatic Tool Changer 60/90 tools
4	Semi splash guard
5	Fully enclosed splash guard (roof excluded) (X<6m)
6	Coolant through spindle at 20/40/70 bar
7	Transformer
8	Oil mist collector
9	CE norm

1. MECHANICAL INSTRUCTION

1.1. Specification

Model	Unit	V5A-2222	V5A-3222	V5A-4222
Travel				
X axis	mm	2,200	3,200	4,200
Y axis	mm	2,200		
Z axis	mm	800 (1,000-opt.)		
Spindle nose to table	mm	-10~790 (-10~990- opt.)		
Distance between columns	mm	1,600(1,550)/2,100(2,050)		
Table				
Table dimensions (L)	mm	2,000	3,000	4,000
Table dimensions (W)	mm	1,400		
T-slot (WidthxNumberxPitch)	-	22x7x180		
Max. table loading	kg	3,000	5,000	5,000
Spindle				
Spindle motor (cont./30 min.)	kW	45/45*		
Spindle speed (gear box)	rpm	20,000(12,500 A100-opt.)		
Spindle taper	-	HSK A100 / HSK A63		
Feed rate				
Rapid traverse (X/Y/Z)	m/min	24/24/15		18/24/15
Cutting feed rate	mm/min	15,000		
Accuracy				
Positioning accuracy	mm	±0.005/300 ; ±0.015/full travel		
		P0.025	P0.03	
Repeatability	mm	±0.003		
		Ps0.02	Ps0.023	
Others				
Electric power consumption	kVA	100		
Pneumatic input pressure	kg/cm ²	6.5		
Machine weight (approximate)	tons	21	25	29
Machine floor space (LxWxH)	m	8.4x6.1x7.8	10.4x6.1x7.8	12.4x6.1x7.8

