GS / GSA SERIES

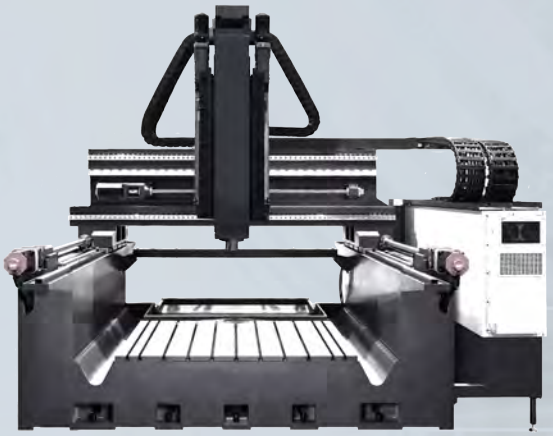
Gentry Type Machining Center

High Speed Machining

High Speed Solution for Large Mold and Workpiece Machining Project

Precise contour accuracy, high-speed cutting feedrate, and excellent surface roughness.

- 30 m/min Feed Rate (OPT.)
- Positioning Accuracy P 0.006mm
- Repeatability Ps 0.004mm
- Aluminum Alloy Chips Removal Rate 5,000 cc/min



- **Optimal dynamic response mechanism achieves high speed feed and high acceleration and deceleration.**
- **Weight of ratio Machine head/ Moving beam/ Base : 1 / 3 / 7**
- **Excellent kinetic structure for steady and speedy motion.**

GS/GSA Specification

	Model			Unit	GS-1220	GS-1620	GS-2020	GS-2520	GS-3020
1	**Travel**								
1-1	X axis			mm	1,200	1,600	2,000	2,500	3,000
1-2	Y axis			mm	2,000				
1-3	Z axis			mm	800 / 1,000 (Opt.)				
1-4	The distance between spindle nose to table	Direct drive 40#	Z axis=800	mm	100~900				
			Z axis=1000	mm	200~1,200 (column +300) (Opt.)				
1-5	The distance between columns (Port width)			mm	2,600				
2	**Table**								
2-1	Table size			mm	1,200 x 2,000	1,600 x 2,000	2,000 x 2,000	2,500 x 2,000	3,000 x 2,000
2-2	T slots (WxNxP)			mm	22 x 11 x 200				
2-3	Maximun loading			kg/m^2	3,000				
3	**Spindle**								
3-1	Power (S1/S6)			kW	L: 15 / 18.5				
3-2	Speed			rpm	Direct drive 15,000				
3-3	Torque (S1/S6)			Nm	L: 120 / 126 H: 29 / 35				
4	**Feeding**								
4-1	Cutting feed rate			mm/min	1~24,000				
4-2	Rapid traverse			m/min	XYZ: 24 / 30 (Opt.)				
5	**Accuracy**								
5-1	Positioning Acuracy(JIS-B6333)			mm	±0.005 / Full Travel				
5-2	Repeatability(VDI3441)			mm	P0.006				
5-3	Positioning Acuracy(JIS-B6333)			mm	±0.002				
5-4	Repeatability(VDI3441)			mm	Ps0.004				
6	**ATC**								
6-1	Magazine capacity			pcs	20T / 32T (Opt.) / 40T (Opt.) / 60T (Opt.)				
6-2	MAX. tool(Dia./Length/Weight)			kg	BBT-40 : Ø75 (Ø130) mm / 300 mm / 8kg				
7	**Others**								
7-1	Power requirement			kVA	50				
7-2	Pneumatic requirement			kg/cm^2	6				
7-3	Net weight			kg	25,500	28,500	31,500	34,500	37,500
7-4	Gross weight			kg	29,500	32,500	35,500	38,500	41,500
7-5	Space (LxWxH)			m	6.9 x 7.8 x 3.8	7.2 x 7.8 x 3.8	7.6 x 7.8 x 3.8	8.1 x 7.8 x 3.8	8.6 x 7.8 x 3.8

* For details, please refer to Machine Specification.

* The manufacture reserves the right to modify the design, specifications mechanism, etc.

GS/GSA series

Standard acce ssories and function

1 FANUC 0i-MF controller
2 Direct drive spindle 15,000rpm
3 Z-axis travel 800mm
4 Spindle cooler system
5 Vertical type tool magazine 20T
6 Centralized auto lubrication system
7 Independent lubrication oil collector for 3-axis
8 Air blast through spindle
9 Wash gun & pneumatic interface
10 Cutting fluid cooling system
11 Enclosed sheet metal guard without roof
12 Screw type chip conveyor on table sides
13 Caterpillar type chip conveyor / Water tank
14 Heat exchanger for electrical cabinet
15 Working lamp
16 Operation cycle finish and alarm light
17 Movable manual pulse generator
18 RJ45 interface
19 Footswitch for tool clamping
20 XYZ-axis Linear scales(FAGOR)
21 Auto power off function
22 Spindle cutting load software protection
23 XYZ axis travel hard limits protection
24 Foundation pads and bolts kits
25 Adjustment tool and tool kits
26 Z-axis retract function at power failure
27 Thermal compensation system
28 Technical manuals
(operation, maintenance manual and circuit diagram)

Option accessories and function

1 FANUC 31iB controller;
HEIDENHAIN TNC620/ 640 controller
2 Built-in spindle: 18,000/ 24,000/ 28,000rpm (HSK-A63);
10,000/ 12,000/ 15,000 (HSK-A100)
3 Direct driven spindle: 10,000/ 12,000(50#)
4 XYZ-axis rapid traverse 30m/min
5 Z-axis travel 1,000mm, 300mm higher column
6 Vertical type tools magazine 32T/ 40T/ 60T
7 Coolant through spindle system 20/70 bar
(Vertical spindle)
8 Spindle ring cutting coolant device
9 Oil skimmer
10 Oil mist cooling device
11 Enclosed sheet metal guard with roof
12 Chip clean flushing device on table side grooves
13 Helical blade screw conveyor on table sides
14 Foot pad above chip groove
15 Dual belt type chip conveyor/Water tank
16 Chip cart
17 Sub working table
18 3-axis independent manual pulse generator
19 Remote monitoring software-professional
20 Auto tool length measurement
21 Auto workpiece coordinate measurement
22 Transformer