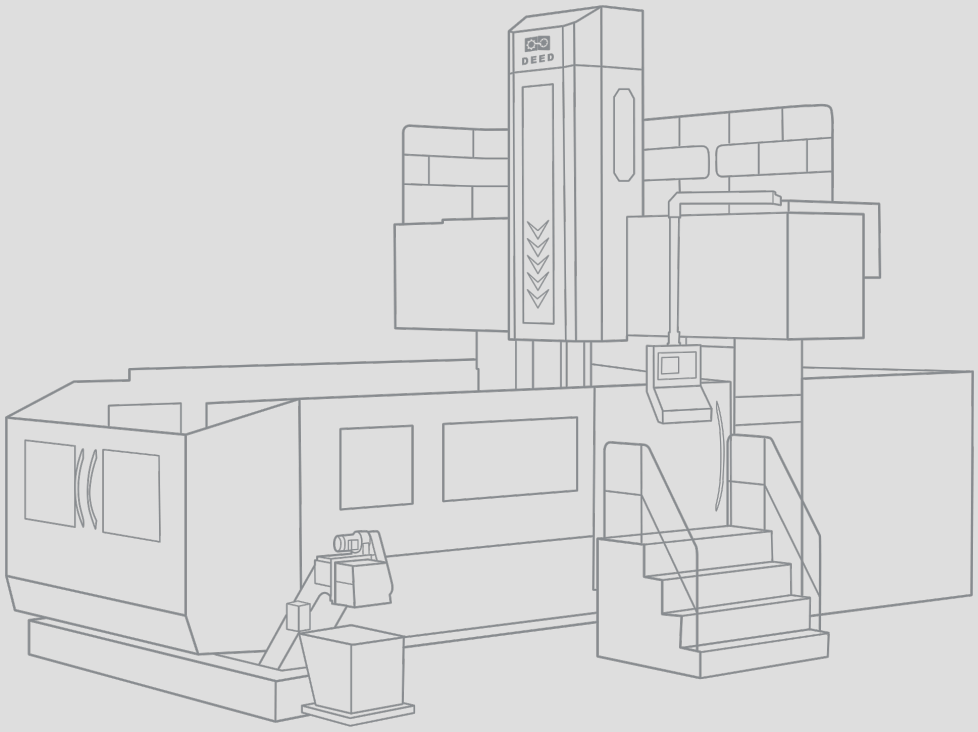
DEED BENELUX

GL / GMC SERIES

FIXED BEAM GANTRY MACHINING CENTER

3-AXIS & 5-AXIS

ADVANCED GERMAN TECHNOLOGY WITH THE STRENGTH OF CHINESE MANUFACTURING



COMPANY PROFILE



Shandong Deed Precision Machine Tool Co., Ltd. is a high-end equipment enterprise integrating R&D, production and sales of high-end CNC machine tools, located in Yanzhou District, Jining City. The company takes high-speed vertical machining center, large scale gantry machining center, high-efficiency drilling & tapping machining center, high-precision turning center, high-precision five-axis linkage machining center, horizontal milling & boring machining center and horizontal machining center as the leading products, and serves a wide range of key industries such as aviation, aerospace, military, shipbuilding, automobile, construction machinery, rail transit, 5G, precision mold and others, both in the domestic and overseas markets. The company vigorously implements the development strategy of “going out and bringing in”, and has reached a comprehensive strategic cooperation with the well-known German CNC machine tool manufacturing enterprise ROTTLER to jointly develop high-grade precision machine tools of the world’s leading level and jointly explore the global high-end market. Establishing a high-end machine tool R & D center and manufacturing base in Germany - “Hipreed Technology GmbH”, fully implementing international operations and achieving the perfect combination of German technology and Chinese manufacturing. The company has five domestic and foreign R & D centers, with six provincial and municipal innovation platforms, with comprehensive R & D, experiment, testing, manufacturing advantages of high-grade machine tool research and development, new material development, advanced technology testing and reliability improvement. Through continuous innovation and breakthrough, it has undertaken 25 key government science and technology projects, obtained more than 200 intellectual property rights of various types, 15 scientific and technological achievement awards, and is in a leading position of the overall development and innovation ability in the industry. With strong technology and innovation advantages, the company has passed the ISO9001 quality management system certification, ISO14001 environmental management system certification and ISO45001 occupational health and safety management system certification. It has won more than 80 key awards such as the “National High-Tech Enterprise”, “National Specialized New Little Giant Enterprise”, the highest award of China’s machine tool industry the “ Spring Swallow Award”, “ Top 10 Product Quality of China’s Machine Tool Industry”, and “Chinese Machinery Industry Science & Technology Progress 2nd Award “ etc.

CATALOG

5 GL Series fixed beam gantry machining center

6 GL Series: product advantages

7 GL Series: technical parameters

8 GL Series: configurations

10 GMC Series gantry machining center

11 GMC Series: product advantages & spindles

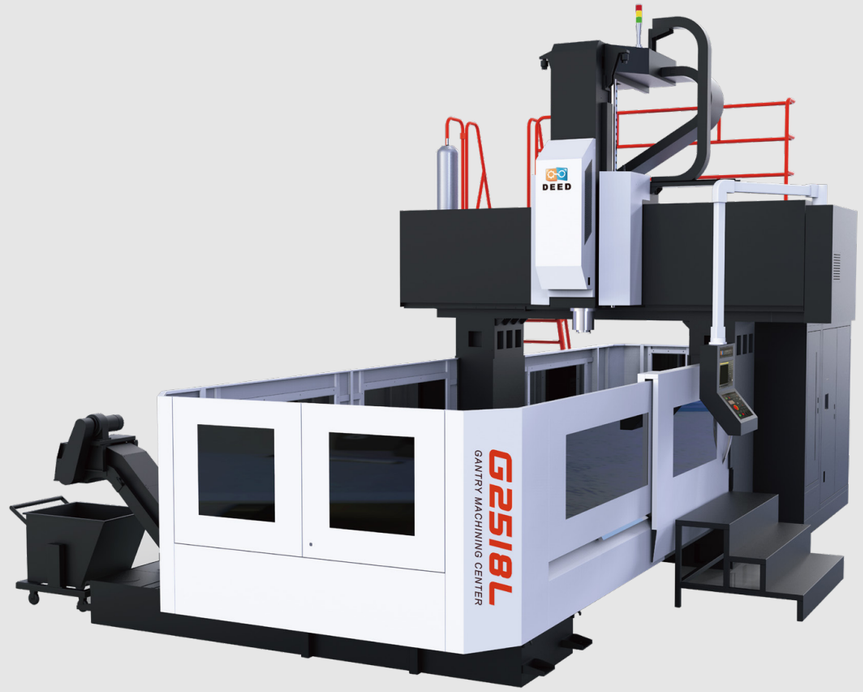
12 GMC Series: technical parameters

13 LF5 Series fixed beam 5-axis gantry machining center

14 LF5 Series: 5-axis head & technical parameters

15 LF5 Series: configurations

DEED BENELUX



GL SERIES

FIXED BEAM GANTRY MACHINING CENTER

Excellent high-rigidity structure

Cost-effective full-stroke machining

PRODUCT OVERVIEW

The GL series uses a moving table; the bed, columns and beam form a closed gantry frame for high rigidity and high stability. The machine performs milling, boring, drilling, rigid tapping and 3-axis simultaneous surface machining. A right-angle milling head can be added on request, so five faces can be machined in one setup. Especially suitable for roughing and semi-finishing of mold parts, structural parts for automation equipment, large parts for the energy, engineering and casting industries, and large structural parts such as railway steering knuckles.

PRODUCT ADVANTAGES

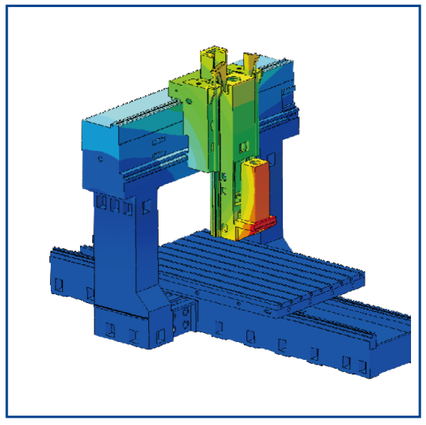
- Mineral casting
  The fixed parts (machine bed and columns) are made of a new mineral casting material with excellent vibration absorption, low thermal expansion, low thermal conductivity, corrosion resistance and low internal stress from room-temperature curing.

- Welded steel moving parts
  Table, saddle and spindle box are welded from steel plate: high rigidity with lower moving mass and inertia, for faster response and better motion accuracy.

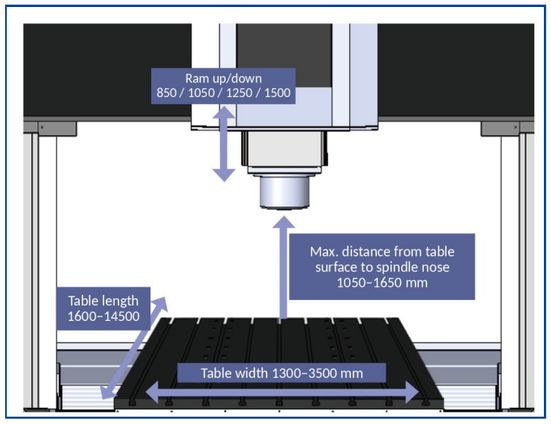
- Heavy-duty roller guideways
  All three axes run on heavy-load roller linear guideways with roller retainers that prevent deviation, for balanced, stable motion and long-term precision.

- Large-section ram
  The spindle box uses a large cross-section ram on heavy-load roller guideways, giving strong lateral cutting capacity and full-stroke heavy cutting in Z.

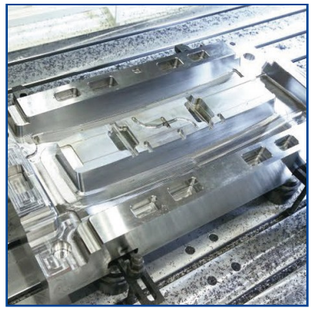
- Double balance cylinders
  The Z axis uses two balance cylinders to eliminate unbalanced torque caused by its own weight.

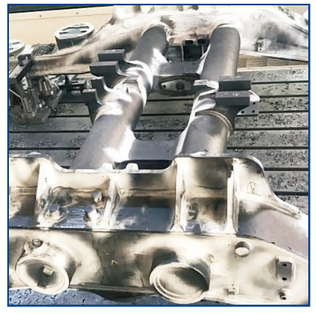


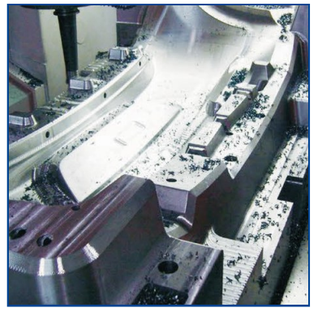
FEA-optimized gantry structure.



Working range (depending on model).







TECHNICAL PARAMETERS

GL Series fixed beam gantry machining center | standard configuration

Model	X axis travel	Y axis travel	Z axis travel	Table width	Table max. load	Max. speed	Spindle power	Spindle torque	X/Y/Z rapid traverse
	mm	mm	mm	mm	t	rpm	kW	Nm	m/min
GL18 / GL24 series									
G1614L	1600	1300	800	1300	4	6000	15/18.5	190/313	16/16/16
G2016L	2100	1600	850	1400	4.5	6000	15/18.5	190/313	16/16/16
G2018L	2100	1800	850	1600	6	6000	15/18.5	190/313	16/16/16
G2518L	2600	1800	850	1600	7	6000	15/18.5	190/313	16/16/16
G3018L	3100	1800	850	1600	8	6000	15/18.5	190/313	16/16/16
G3518L	3500	1800	850	1600	9	6000	15/18.5	190/313	12/16/16
G4018L	4000	1800	850	1600	10	6000	15/18.5	190/313	12/16/16
G4518L	4500	1800	850	1600	11	6000	18.5/35	156.9/296	10/16/16
G5018L	5000	1800	850	1600	12	6000	18.5/35	156.9/296	8/16/16
G5518L	5500	1800	850	1600	13	6000	18.5/35	156.9/296	8/16/16
G6018L	6000	1800	850	1600	14	6000	18.5/35	156.9/296	8/16/16
G3024L	3000	2400	850	1800	8	6000	15/18.5	190/313	12/12/12
G3524L	3500	2400	850	1800	9	6000	15/18.5	190/313	12/12/12
G4024L	4000	2400	850	1800	10	6000	15/18.5	190/313	12/12/12
G4524L	4500	2400	850	1800	11	6000	18.5/35	156.9/296	10/12/12
G5024L	5000	2400	850	1800	12	6000	18.5/35	156.9/296	8/12/12
G5524L	5500	2400	850	1800	13	6000	18.5/35	156.9/296	8/12/12
G6024L	6000	2400	850	1800	14	6000	18.5/35	156.9/296	8/12/12
GL28 / GL32 / GL37 / GL42 series									
G3028L	3000	3400	1250	2200	17	6000	22/26	770/910	12/12/12
G3528L	3500	3400	1250	2200	18	6000	22/26	770/910	12/12/12
G4028L	4000	3400	1250	2200	20	6000	22/26	770/910	12/12/12
G4528L	4500	3400	1250	2200	22	6000	22/26	770/910	12/12/12
G5528L	5500	3400	1250	2200	23	6000	22/26	770/910	12/12/12
G6528L	6500	3400	1250	2200	24	6000	22/26	770/910	12/12/12
G4532L	4500	3800	1250	2800	24	6000	22/26	770/910	12/12/12
G5532L	5500	3800	1250	2800	28	6000	22/26	770/910	12/12/12
G6532L	6500	3800	1250	2800	30	6000	22/26	770/910	12/12/12
G8532L	8500	3800	1250	2800	32	6000	22/26	770/910	12/12/12
G10532L	10500	3800	1250	2800	32	6000	22/26	770/910	10/12/12
G6537L	6500	4300	1250	3200	30	6000	22/26	770/910	12/12/12
G8537L	8500	4300	1250	3200	32	6000	22/26	770/910	10/12/12
G10537L	10500	4300	1250	3200	36	6000	22/26	770/910	10/12/12
G12537L	12500	4300	1250	3200	36	6000	22/26	770/910	8/10/10
G10542L	10500	4300	1250	3500	36	4500	30/37	1365/1688	8/10/10
G12542L	12500	4300	1250	3500	36	4500	30/37	1365/1688	8/10/10
G14542L	14500	4300	1250	3500	36	4500	30/37	1365/1688	8/10/10

* Values shown apply to the standard configuration. Options are available on request. The parameters are subject to the technical agreement.

Thanks to our direct contact with the factory, additional options and custom-made solutions are possible.
Please ask about the possibilities.

CONFIGURATIONS | GL18 / GL24

Standard configuration

No.	Standard Configuration	No.	Standard Configuration
1	FANUC 0i-MF control system	9	External protection
2	Spindle oil cooling system	10	Cleaning air gun
3	Automatic lubrication system	11	Warning light
4	Z axis balance system	12	Working light
5	Workpiece air cooling system	13	Electric cabinet heat exchanger
6	Workpiece water cooling system	14	Spindle air curtain (dust-proof)
7	Automatic chip removal device	15	Standard accessories
8	Internal protection		

Options

No.	Options	No.	Options
1	FANUC 31i, SIEMENS 828D or SIEMENS ONE control	11	Oil-water separator
2	Disc type tool magazine 24T/30T	12	Manual accessory milling heads: right-angle head, extension head, universal head, right-angle extension head, double-head right-angle milling head, vertical/ horizontal head; optional gear disc positioning
3	Chain type tool magazine 32T/40T	13	Automatic/semi-automatic accessory milling heads: right-angle head, extension head, universal head, right-angle extension head
4	Columns heightened 200 mm	14	Manual milling head magazine
5	Columns heightened 400 mm	15	Online measurement
6	Z axis travel lengthened 200 mm	16	Tool setter
7	CTS 20/30/50/70 bar	17	Workpiece cleaning water gun
8	Fully enclosed machine guarding	18	Spindle ring spray
9	Full-side enclosed machine guarding	19	Foundation subsidence
10	Full closed-loop linear scales	20	CNC rotary table (4th axis)

Thanks to our direct contact with the factory, additional options and custom-made solutions are possible.
Please ask about the possibilities.

CONFIGURATIONS | GL28 / GL32 / GL37 / GL42

Standard configuration

No.	Standard Configuration	No.	Standard Configuration
1	FANUC 0i-MF control system	9	External protection
2	Spindle oil cooling system	10	Cleaning air gun
3	Automatic lubrication system	11	Warning light
4	Z axis balance system	12	Working light
5	Workpiece air cooling system	13	Electric cabinet air conditioner
6	Workpiece water cooling system	14	Spindle air curtain (dust-proof)
7	Automatic chip removal device	15	Standard accessories
8	Internal protection		

Options

No.	Options	No.	Options
1	FANUC 31i, SIEMENS 828D or SIEMENS ONE control	12	Oil-water separator
2	Disc type tool magazine 24T/30T	13	Manual accessory milling heads: right-angle head, extension head, universal head, right-angle extension head, double-head right-angle milling head, vertical/ horizontal head; optional gear disc positioning
3	Chain type tool magazine 32T/40T	14	Automatic/semi-automatic accessory milling heads: right-angle head, extension head, universal head, right-angle extension head
4	Vertical/horizontal tool magazine 40T/60T	15	Automatic milling head magazine
5	Columns heightened 200 mm	16	Manual milling head magazine
6	Columns heightened 400 mm	17	Online measurement
7	Z axis travel lengthened 200 mm	18	Tool setter
8	CTS 20/30/50/70 bar	19	Workpiece cleaning water gun
9	Fully enclosed machine guarding	20	Spindle ring spray
10	Full-side enclosed machine guarding	21	Foundation subsidence 900 mm
11	Full closed-loop linear scales	22	CNC rotary table (4th axis)

Thanks to our direct contact with the factory, additional options and custom-made solutions are possible.
Please ask about the possibilities.

DEED BENELUX



GMC SERIES

GANTRY MACHINING CENTER

High-speed, high-precision cutting

Meets complex multi-face machining demands

PRODUCT OVERVIEW

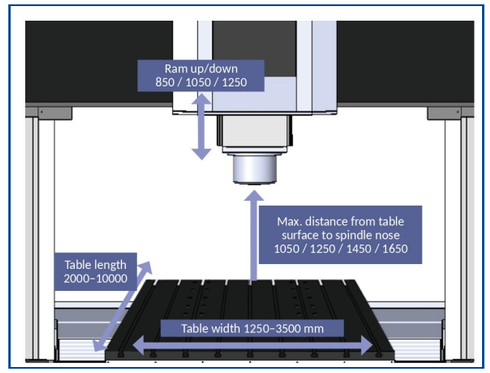
The GMC series is the latest precision gantry milling center, jointly developed by Deed and its German partner. It is especially suitable for precision, high-speed and heavy cutting of metal parts in many industries. The machine performs milling, boring, drilling, rigid tapping and 3-axis simultaneous contour machining. A right-angle milling head can be added on request, so five faces can be machined in one setup, effectively improving machining precision and efficiency.

PRODUCT ADVANTAGES

High-rigidity design, full-stroke machining

The fixed parts (machine bed and columns) are made of a new mineral casting material with excellent vibration absorption, low thermal expansion, low thermal conductivity and good corrosion resistance.

Beam, saddle and spindle box are welded from German steel plate: higher rigidity, lighter moving parts and lower inertia, for better response and motion accuracy.

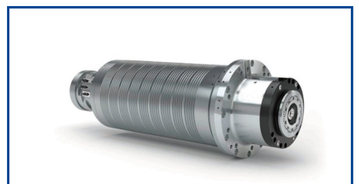


SPINDLES



Direct drive spindle (standard)

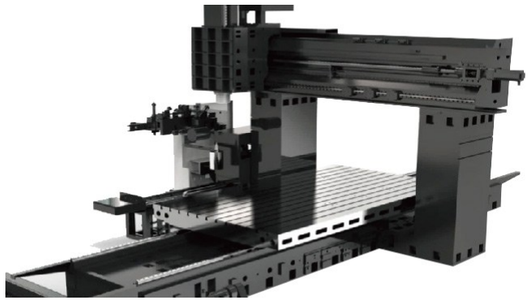
Spindle speed	**8000 rpm**
Main motor power	**22/26 kW**
Spindle torque	**560/661 Nm**



Electro spindle (option)

Spindle speed	**12000 rpm**
Main motor power	**25/44 kW**
Spindle torque	**87/150 Nm**

High-speed electro spindle with air-oil lubricated bearings, precise feed and compressed-air heat dissipation.



TECHNICAL PARAMETERS

GMC Series gantry machining center | standard configuration

Model	X axis travel	Y axis travel	Z axis travel	Table width	Table max. load	Max. speed	Spindle power	Spindle torque	X/Y/Z rapid traverse
	mm	mm	mm	mm	t	rpm	kW	Nm	m/min
GMC16 / GMC20 / GMC24 series									
GMC2016L	2000	1600	850	1250	5	8000	22/26	560/660	16/16/16
GMC2516L	2500	1600	850	1250	6	8000	22/26	560/660	16/16/16
GMC3016L	3000	1600	850	1250	8	8000	22/26	560/660	16/16/16
GMC3516L	3500	1600	850	1250	9	8000	22/26	560/660	16/16/16
GMC4016L	4000	1600	850	1250	10	8000	22/26	560/660	16/16/16
GMC2020L	2000	2000	850	1600	7	8000	22/26	560/660	16/16/16
GMC2520L	2500	2000	850	1600	9	8000	22/26	560/660	16/16/16
GMC3020L	3000	2000	850	1600	11	8000	22/26	560/660	16/16/16
GMC3520L	3500	2000	850	1600	13	8000	22/26	560/660	16/16/16
GMC4020L	4000	2000	850	1600	14	8000	22/26	560/660	16/16/16
GMC3024L	3000	2400	850	1800	15	8000	22/26	560/660	16/12/16
GMC3524L	3500	2400	850	1800	16	8000	22/26	560/660	16/12/16
GMC4024L	4000	2400	850	1800	17	8000	22/26	560/660	16/12/16
GMC4524L	4500	2400	850	1800	18	8000	22/26	560/660	16/12/16
GMC28 / GMC32 / GMC37 series									
GMC3028L	3000	3600	1250	2600	17	6000	22/26	770/910	12/12/12
GMC3528L	3500	3600	1250	2600	18	6000	22/26	770/910	12/12/12
GMC4028L	4000	3600	1250	2600	20	6000	22/26	770/910	12/12/12
GMC4528L	4500	3600	1250	2600	22	6000	22/26	770/910	12/12/12
GMC5028L	5000	3600	1250	2600	24	6000	22/26	770/910	12/12/12
GMC5528L	5500	3600	1250	2600	26	6000	22/26	770/910	12/12/12
GMC6528L	6500	3600	1250	2600	30	6000	22/26	770/910	12/12/12
GMC5532L	5500	4000	1250	2800	28	6000	22/26	770/910	12/12/12
GMC6532L	6500	4000	1250	2800	32	6000	22/26	770/910	12/12/12
GMC8532L	8500	4000	1250	2800	36	6000	22/26	770/910	12/12/12
GMC10532L	10500	4000	1250	2800	40	6000	22/26	770/910	10/12/12
GMC5537L	5500	4500	1250	3500	28	6000	22/26	770/910	12/12/12
GMC6537L	6500	4500	1250	3500	32	6000	22/26	770/910	12/12/12
GMC8537L	8500	4500	1250	3500	36	6000	22/26	770/910	12/12/12
GMC10537L	10500	4500	1250	3500	40	6000	22/26	770/910	10/12/12

* Values shown apply to the standard configuration. Options are available on request. The parameters are subject to the technical agreement.

Thanks to our direct contact with the factory, additional options and custom-made solutions are possible.
Please ask about the possibilities.

DEED BENELUX



LF5 SERIES

FIXED BEAM 5-AXIS GANTRY MACHINING CENTER

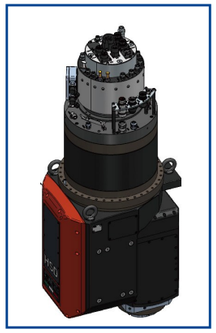
Easy operation, excellent machining capacity

High-speed double swing milling head in a symmetrical structure

PRODUCT OVERVIEW

Fixed-beam 5-axis gantry with fixed gantry frame and moving table. Bed and columns are made of mineral casting; the columns are fixed on both sides of the bed and the beam with ram is fixed on the columns. A high-speed, high-precision double swing milling head in a symmetrical structure ensures thermal symmetry, high rigidity, stability and positioning accuracy. Constant-temperature spindle cooling and a double hydraulic balancing system for the spindle box keep the machine precise. Used in aerospace, shipbuilding, new energy, heavy machinery, textile printing and mold making, for large plates, disc-type parts, housings and molds.

5-AXIS DOUBLE SWING MILLING HEAD





Standard HSD 5-axis head

- Cross integrated structure
- A/C axis: torque motor + electro spindle
- A/C axis: pneumatic/hydraulic clamping
- High-speed electro spindle for high-speed cutting
- Suitable for high-speed, high-dynamic applications

TECHNICAL PARAMETERS

LF5 Series fixed beam 5-axis gantry | standard configuration

Configuration / Model		Unit	G3024LF5	G4028LF5	G6532LF5
Working range	Distance between columns	mm	2400	2800	3200
	X/Y/Z travel	mm	3000/2600/1050	4000/3200/1050	6500/3600/1050
	X/Y/Z rapid traverse	m/min	12/12/12		
Table	Table size	mm	3000×1800	4000×2200	6500×2800
	Table load	kg	10000	16000	20000
Spindle	Spindle taper	/	HSK-A63	HSK-A63	HSK-A100
	Max. spindle speed	rpm	24000	18000	12000
	Power (rated/S6)	kW	40/48	50/67.5	63/76
	Torque (rated/S6)	Nm	47/57	90/120	200/241
5-axis head	A axis rotation angle	°	±110	±110	±100
	C axis rotation angle	°	±360		
	A/C axis max. speed	rpm	30		

* Values shown apply to the standard configuration. Options are available on request. The parameters are subject to the technical agreement.

Thanks to our direct contact with the factory, additional options and custom-made solutions are possible.
Please ask about the possibilities.

CONFIGURATIONS | LF5

Standard configuration

No.	Standard Configuration	No.	Standard Configuration
1	SIEMENS ONE control system	9	External protection
2	Spindle constant temperature system	10	Cleaning air gun
3	Automatic lubrication system	11	Warning light
4	Z axis balance system	12	Working light
5	Workpiece air cooling system	13	Electric cabinet air conditioner
6	Workpiece water cooling system	14	Spindle air curtain (dust-proof)
7	Automatic chip removal device	15	Standard accessories
8	Internal protection	16	Full closed-loop linear scales

Options

No.	Options	No.	Options
1	HNC 5-axis simultaneous control, or FANUC 0i-MF(1) 4+1/3+2 control	9	Workpiece cleaning water gun
2	Disc tool magazine 24T/30T	10	Oil-water separator
3	Chain type tool magazine 32T/40T/60T	11	Foundation sink 900 mm
4	Z axis travel 1250 mm, columns heightened	12	Mepro 5-axis milling head
5	CTS 20/30/50/70 bar	13	Kessler 5-axis milling head
6	Online measurement	14	Fully enclosed machine guarding
7	Tool setter	15	Oil-mist collector
8	Four-side enclosed machine guarding	16	Benchmark ball, test rod, square ruler

Thanks to our direct contact with the factory, additional options and custom-made solutions are possible.
Please ask about the possibilities.

NOTES

CNC-SUPPLY
The World of Manufacturing

