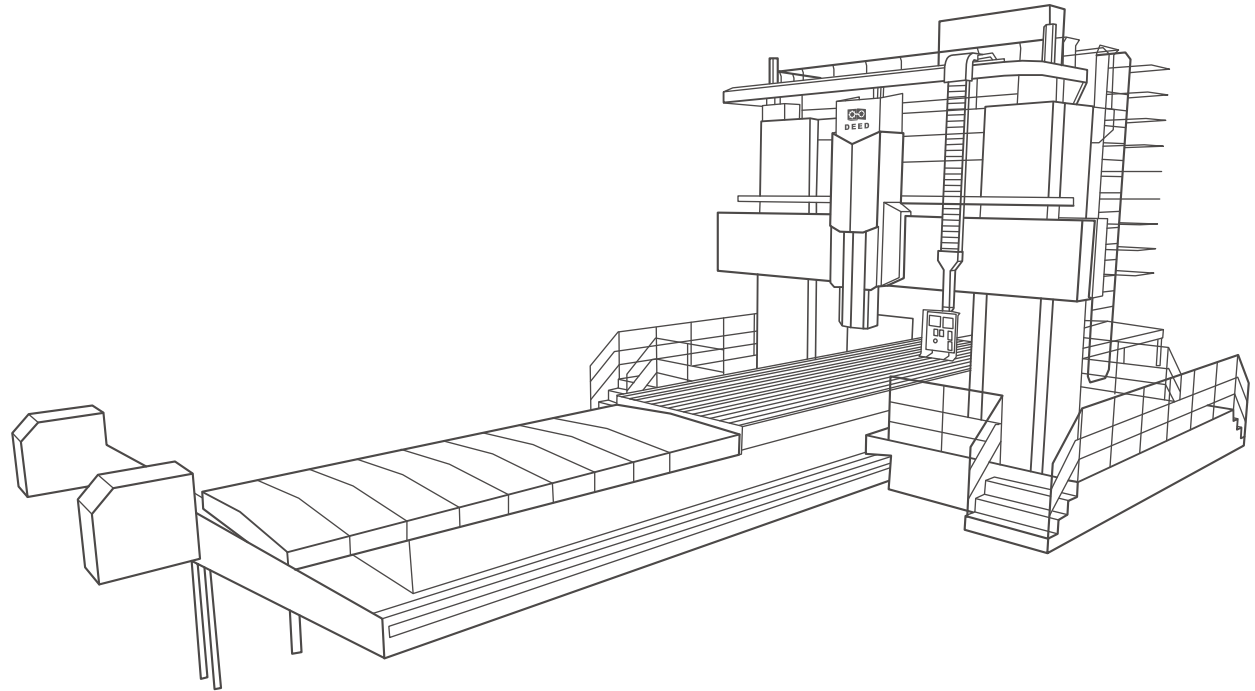







大型龙门镗铣加工中心

Large Gantry Boring&Milling Machining Center




精 | Precise


大 | Large


特 | Customized



中国销售中心
China Sales Center

销售热线 / Sales Hotline(China): 0537-3775666
外贸热线 / Sales Hotline(overseas): +86 537 3451030
售后热线 / After-sales Service: 400-113-6699
企业邮箱 / E-mail: sale@deedmt.com / itd@deedmt.com
企业网址 / Website: www.deedmt.com (中国/China) / www.cncindeed.com(国际/overseas)
地址: 山东省济宁市兖州经济开发区永安路
Address: Yong'an Road,Industrial Park,Yanzhou District,Jining City,Shandong Province.



德国 (Germany)
欧洲研发、销售中心
Europe R&D, Sales Center
地址 / Address: Stahlwerkstraße 32-D-57555 Mudersbach

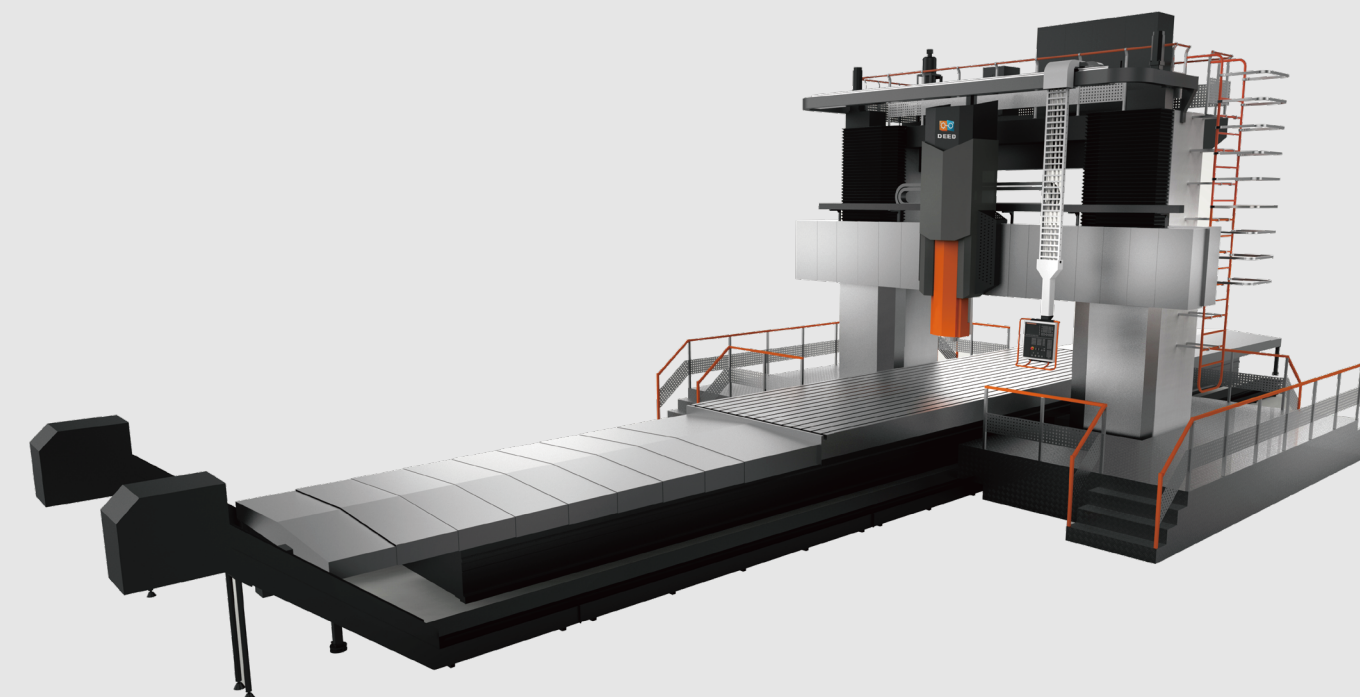
山东蒂德精密机床有限公司
SHANDONG DEED PRECISION MACHINE TOOL CO.,LTD.

蒂德简介

COMPANY PROFILE

山东蒂德精密机床有限公司是一家集高档数控机床研发、生产、销售为一体的高端装备企业，位于济宁市兖州区，现有员工500余人，目前是“中国机床工具工业协会理事单位”和“山东机床通用机械工业协会理事单位”。公司以高速立式加工中心、大型龙门加工中心、高效钻攻加工中心、高精度车削加工中心、高精度五轴联动加工中心、卧式铣镗加工中心及卧式加工中心为主导产品，广泛服务于国内外航空、航天、军工、船舶、汽车、工程机械、轨道交通、5G、精密模具等重点领域。公司大力实施“走出去，引进来”的发展战略，与德国知名数控机床制造企业ROTTLER达成全面战略合作，联合开发具有世界领先水平的高档精密机床，共同开拓全球高端市场，并在德国设立了高端机床研发中心及制造基地——“Hipreed Technology GmbH（汉普瑞德科技有限公司）”，全面实施国际化运营，实现了德国技术和中德制造的完美结合。公司建有国内外5大研发中心，拥有6大省市级创新平台，具备高档机床研发、新材料研制、先进技术测试和可靠性提升等全面的研发、实验、测试、制造优势。通过持续创新和不断突破，已承担24项重点政府科技项目，获得各类知识产权200余项（含发明专利9项）、科技成果奖14项，整体开发、创新能力行业领先。凭借强大的技术、创新优势，公司分别通过了ISO9001质量管理体系认证、ISO14001环境管理体系认证和ISO45001职业健康安全管理体系认证，荣获“国家高新技术企业”、“国家级专精特新‘小巨人’企业”、中国机床行业最高奖“春燕奖”、“中国机床工具行业‘产品质量十佳’”、“中国机械工业科技进步二等奖”等80多项重点荣誉。

Shandong Deed Precision Machine Tool Co., Ltd. is a high-end equipment enterprise integratd with R&D, production and sales. It is located in Yanzhou District, Jining City, with more than 500 people, is currently the governing unit of "China Machine Tool Industry Association " and the governing unit of "Shandong Machine Tool General Machinery Industry Association". The company takes high-speed vertical machining center, large gantry machining center, high-efficiency drilling and tapping machining center, high-precision turning center, high-precision five-axis linkage machining center, horizontal milling and boring machining center and horizontal machining center as the leading products, and serves a wide range of domestic and foreign key industries such as aviation, aerospace, military, shipbuilding, automobile, construction machinery, rail transit, 5G, precision mold and other key fields. 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 and jointly explore the global high-end market. It has set up a high-end machine tool R & D center and manufacturing base in Germany - "Hipreed Technology GmbH", fully implemented international operations, and achieved perfect combination of German technology and Chinese-German manufacturing. The company has set up five domestic and foreign R & D centers, and six provincial and municipal innovation platforms, with high-grade machine tool research and development, new material development, advanced technology testing and reliability improvement and comprehensive R & D, experiment, testing, manufacturing advantages. Through continuous innovation and breakthrough, it has undertaken 24 key governmental science and technology projects, obtained more than 200 intellectual property rights (including 9 invention patents), and 14 scientific and technological achievement awards, and leading overall development and innovation ability of 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 the "National High-Tech Enterprise", "National Special New 'little giant' Enterprise", the highest award of China's machine tool industry "Spring Swallow Award", "China Machine Tool Industry 'Top 10 Product Quality'", "China Machinery Industry Science and Technology Progress 2nd Award" and more than 80 key honors.



G-MB系列 动梁龙门镗铣加工中心

G-MB Series Moving Beam Gantry Boring & Milling Machining Center

用于重型、超重型基础零件的加工

For heavy, super heavy basic parts processing

G-MB系列用于重型、超重型基础零件的加工，特别适用于零件本身重量大、工件长度较长的黑色金属和有色金属的各种平面、曲面、空间曲面和孔的数控加工，广泛应用于机械制造行业各种板类、箱体类、机架类等复杂零件的粗、精加工。

G-MB series is designed for heavy and super-heavy basic parts processing, especially for CNC machining of various planes, curved surfaces, space surfaces and holes of ferrous and non-ferrous metals with large weight and long workpiece length. It can be widely used in rough and finish machining of complex parts such as plates, box-type parts and frames in machinery manufacturing industries.

CONTENTS

04

G-MB系列动梁龙门镗铣加工中心

G-MB SERIES MOVING BEAM GANTRY BORING & MILLING MACHINING CENTER

用于重型、超重型基础零件的加工
FOR HEAVY, SUPER HEAVY BASIC PARTS PROCESSING

08

G-MC系列动柱龙门镗铣加工中心

G-MC SERIES MOVING COLUMN GANTRY BORING & MILLING MACHINING CENTER

用于中大型零件的加工
FOR MEDIUM AND LARGE PARTS PROCESSING

12

售后服务 AFTER-SALES SERVICE

24/7 全天候不间断服务
24/7 NON-STOP SERVICE



产品优势

PRODUCT ADVANTAGES



机床的主要基础件床身采用新型矿物质铸件材料，具有极强的吸振性，极佳的热稳定性，降低扭曲变形，保证机床抗振能力和稳定性。

The main base part,machine bed, is made of new mineral casting material, which has strong vibration absorption and excellent thermal stability. It can help reduce distortion and ensure vibration resistance and stability of the machines.



Y、Z、W轴采用滚珠丝杠，通过交流伺服电机、高精度行星齿轮减速器减速传动。

Y, Z, W axis equipped with ball screws, gearing down via AC servo motor and high precision planetary gear reducer.



500×500mm大截面方滑枕，刚性好、强度高、变形小，确保强力切削的刚性和稳定性。

500x500mm large section square ram, high rigidity ,high strength, small deformation, help ensure rigidity and stability of strong cutting.



X/Y/Z轴运动部件均采用重载滚柱直线导轨结构，运行速度快、承载大、抗振能力强、运动精度高，确保机床精度稳定持久。

X/Y/Z axis moving parts adopt heavy-duty roller linear guide structure, fast running speed, big load capacity, strong vibration resistance capacity, high moving precision, ensure machine precision stability and persistence.



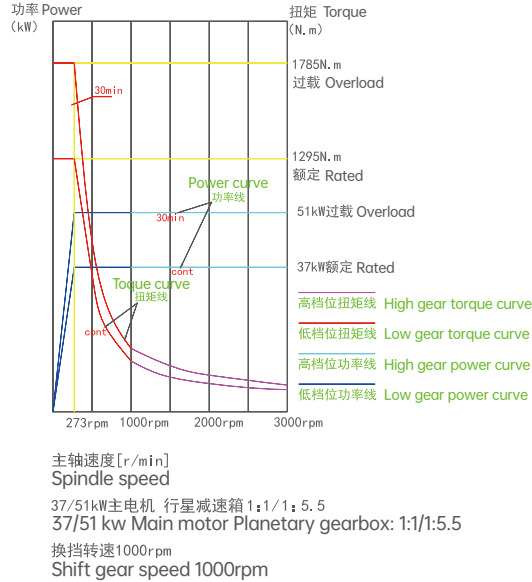
横梁升降，通过双伺服电机双边驱动及光栅尺双边闭环检测技术，实现同步调平；立柱与横梁因载荷作用使导轨变形，采用反变形加工技术，使导轨达到精度要求。

Beam lifting, through double servo motor double-side drive and grating ruler double-side closed-loop detection technology to achieve synchronous leveling; The column and beams may deform the guideway due to loading, and anti-deformation processing technology is adopted to make the guideway meet the accuracy requirements.



X轴采用双减速机齿轮—齿条传动结构，通过双电机电气控制自动消除双向运动间隙，提高定位精度和重复定位精度。

X axis adopts double reducer gear and rack transmission structure and automatically eliminates bidirectional movement clearance through double motor electrical control ,can help improve positioning and repeatability.



技术参数

TECHNICAL PARAMETER

配置 Configuration		型号 Model	单位 Unit	G10540MB
加工范围 Processing Range	X轴行程 X axis travel		mm	10500
	Y轴行程 Y axis travel		mm	4600
	Z轴行程 Z axis travel		mm	1250
	W轴行程 W axis travel		mm	2400
	主轴鼻端至工作台面距离 Spindle nose to table		mm	0~2600
	门宽 Door width		mm	4000
工作台 Table	工作台尺寸 Table size		mm	10000×3000
	工作台最大载重 Table max. load		kg	40000
	T型槽 T-slot		mm	36×250
进给 Feed	X/Y/Z/W 轴快速进给速度 X/Y/Z/W rapid feed rate		m/min	10/10/10/2
	X/Y/Z/W 轴工作进给速度 X/Y/Z/W working feed rate		m/min	6/6/6/2
主轴 Spindle	驱动方式 Drive mode		/	直联式+减速机 Direct drive+reduction gearbox
	主轴锥度 Spindle taper		/	BT50
	最高工作转速 Max. working speed		rpm	3000
	功率(额定/30min) Power(rated/30min)		kW	37/51
	扭矩(额定/30min) Torque(rated/30min)		N·m	1295/1785

标准配置

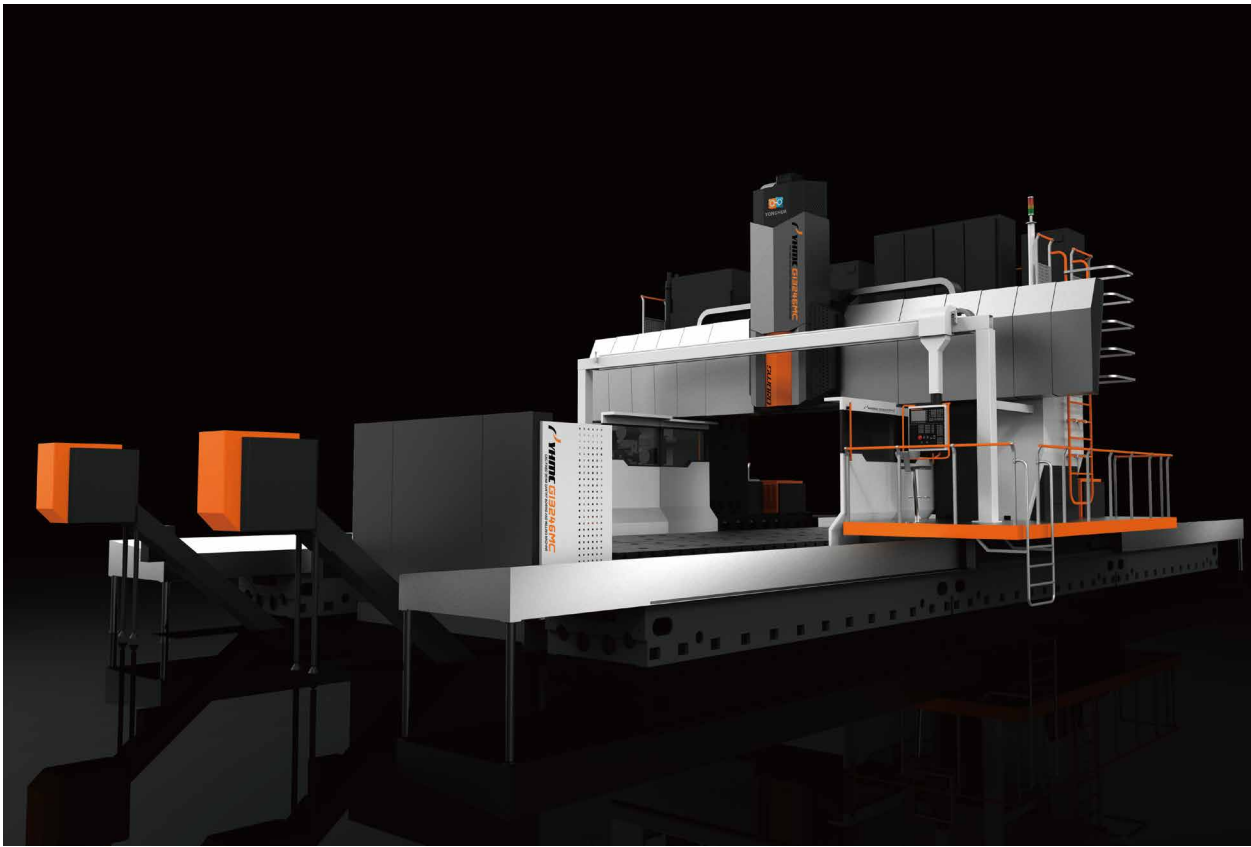
STANDARD CONFIGURATION

序号 Serial number	名称 Name	序号 No.	名称 Name
1	SIEMENS ONE	9	外防护 External protection
2	主轴恒温系统 Spindle constant temperature system	10	清洁气枪 Cleaning air gun
3	自动润滑系统 Automatic lubrication system	11	警示灯 Warning light
4	Z轴平衡系统 Z axis balance system	12	工作灯 Working light
5	工件气冷系统 Workpiece air cooling system	13	电柜空调 Electric cabinet air conditioner
6	工件水冷系统 Workpiece water cooling system	14	主轴气幕防尘 spindle air curtain dust-proof
7	自动排屑装置 Automatic chip removal device	15	标准附件 standard accessories
8	内防护 Interal protection	16	光栅尺 Grating ruler

选购配置

OPTIONS

序号 Serial number	名称 Name	序号 No.	名称 Name
1	FANUC 0i-MF /31i、SIEMENS 828D	12	手动附件铣头：直角头、延长头、万向头、直角 延长头、双头直角铣头、立卧头、可选齿盘定位 Manual accessory milling head: right-angle head, extension head, universal head, right-angle extension head, double-head right-angle milling head, vertical horizontal head,optional gear disc positioning.
2	圆盘刀库24T/30T Disc tool magazine 24T/30T		
3	链式刀库32T/40T Chain type tool magazine 32T/40T	13	自动/半自动附件铣头： 直角头、延长头、万向头、直角延长头 Automatic/semi-automatic accessories milling head: right-angle head, extension head, universal head, right-angle extension head.
4	立卧刀库40T/60T Vertical horizontal tool magazine 40T/60T		
5	立柱整体加高200mm Column heightened 200mm overall	14	在线测量 Online measurement
6	立柱整体加高400mm Column heightened 400mm	15	对刀仪 Tool setter
7	Z轴行程加长 Z axis travel lengthened	16	工件清洁水枪 Workpiece cleaning water gun
8	中心出水20/30/50bar CTS 20/30/50bar	17	主轴环喷 Spindle ring spray
9	稳压器 Voltage stabilizer	18	地基下沉 Foundation sink
10	封闭式操作室 Enclosed operation room	19	数控回转工作台（第四轴） CNC rotary table (4th-axis)
11	油水分离装置 Oil water separating device	/	/



G-MC系列

动柱龙门镗铣加工中心

G-MC Series

Moving Column Gantry Boring & Milling Machining Center

用于中大型零件的加工

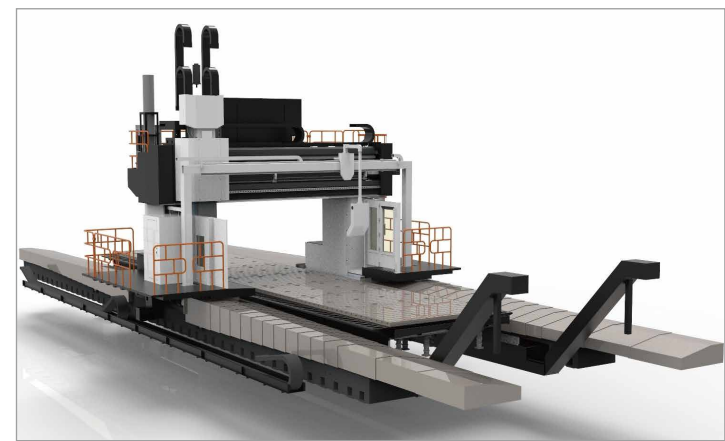
For medium and large parts processing

机床具有大功率、大扭矩、大行程、高效率、高精度、高刚性、重切削、承载强、占地小的结构特点，铣削、镗削、钻削、攻丝、镗孔及三轴联动加工等功能，广泛适用于能源、工程、铸造、交通运输、航空航天、军工船舶等行业的中大型零件的加工。

This series is designed to be big-power, big-torque, large-travel, high-efficiency, high-precision, high-rigidity, heavy-cutting, big load capacity and small footprint, it can do milling, cutting, drilling, tapping and 3-axis simultaneous processing, can be widely used in energy, engineering, casting, transportation, aerospace, military, shipbuilding and other industries for medium and large parts processing.

产品优势

PRODUCT ADVANTAGES



该系列机型采用固定式工作台，由左右拖板、左右立柱和横梁组成刚性龙门框架结构，龙门框架沿左、右床身导轨水平纵向移动（X轴），横梁上配备滑座及垂直主轴箱（滑枕式镗头），滑座沿横梁导轨左右运动（Y轴），垂直主轴箱沿滑座的竖直导轨上下运动（Z轴）。

This series of machine is table-fixed, left&right drag plates, left&right columns and beams formed high-regiity gantry frame structure, the gantry frame can move longitudinally along the left & right base guideways (X axis), the beam is equipped with a slider and a vertical spindle box (ram head), the slider moves left and right along the beam guideway (Y axis), the vertical spindle box moves up and down along the vertical guideways of the slider (Z-axis).



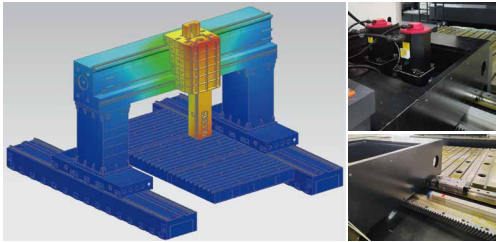
- 左、右两侧床身采用新型矿物铸件材料，相比传统的高耗能铸铁件，具备优异的吸振性、热稳定性、耐腐蚀性和精度保持性；
The left and right side machine bed are made of new mineral casting materials, compared to tradtional high energy consumption iron casting, it has better vibration absorption, thermal stability, corrosion resistance and better precision retaining ability;
- 三轴运动部件均采用重载滚柱直线导轨结构，运行速度快、承载大、抗震能力强、运动精度高，确保机床精度稳定持久；
3-axis moving parts adopt heavy-duty roller linear guide structure, which has fast running speed, big oad capacity, good anti-vibration ability and high motion accuracy to ensure machine tool precision stability and persistence;
- 拼接工作台固定在地基上，具有超强承载能力，龙门框架延床身纵向移动，X轴可实现超大行程加工，满足各类大型、重型零件的加工需求。
The split joint worktable is fixed on the foundation, with super big load capacity, the gantry frame moves along the bed longitudinally, and X-axis can realize ultra-large stroke processing to meet the processing demands of all kinds of large and heavy parts.

- 拖板、横梁、滑座和主轴箱作为运动部件，均采用优质钢板焊接结构，借助有限元分析方法，优化结构，保证刚性同时实现移动部件轻量化设计，满足动静态刚性需求，提高动态响应速度和运动精度；

The moving parts such as carriage, beam, slider and spindle box are all welded with high-quality steel plates. With the help of finite element analysis(FEA), the structure is optimized to ensure rigidity and achieve lightweight design of moving parts, meet the dynamic and static rigidity requirements, and improve dynamic response speed and motion accuracy.

- X轴采用左右各2个伺服电机同步驱动，采用双减速机齿轮—齿条传动结构，通过双电机电气控制自动消除双向运动间隙，提高定位精度和重复定位精度。

X axis is driven synchronously by two servo motors on the left and right side, and adopts the transmission structure of double reducer gear and rack. The bidirectional movement clearance is automatically eliminated through the electrical control of double motors, and the positioning and repeability can be greatly improved.



技术参数

TECHNICAL PARAMETER

配置 Configuration		型号 Model	单位 Unit	G13042MC	G15042MC	G17042MC	G19042MC
加工 范围 Processing Range	X/Y/Z三轴行程 X/Y/Z-axis travel	mm	13000/4600/1500	15000/4600/1500	17000/4600/1500	19000/4600/1500	
	主轴鼻端到工作台面距离 Spindle nose to table	mm	500-2000	500-2000	500-2000	500-2000	
	门宽 Door width	mm	4200	4200	4200	4200	
工作台 Table	工作台尺寸 Table size	mm	12000×3000	14000×3000	16000×3000	18000×3000	
	工作台最大载重 Table max. load	t/m²	15	15	15	15	
	T形槽 T-slot	mm	28	28	28	28	
进给 Feed	X/Y/Z 轴快速移动速度 X/Y/Z/ fast feedrate	m/min	10/10/10	10/10/10	10/10/10	10/10/10	
	X/Y/Z 轴最大切削速度 X/Y/Z/ max. cutting speed	m/min	6/6/6	6/6/6	6/6/6	6/6/6	
主轴 Spindle	驱动方式 Drive mode	/	直联式+减速机 Direct drive+reduction gearbox				
	主轴锥度 Spindle taper	/	BT50	BT50	BT50	BT50	
	最高转速 Max. speed	rpm	4500	4500	4500	4500	
	功率(额定/30min) Power(rated/30min)	kW	30/37	30/37	30/37	30/37	
	扭矩(额定/30min) Torque(rated/30min)	N·m	1368/1688	1368/1688	1368/1688	1368/1688	

标准配置

STANDARD CONFIGURATION

序号 Serial number	名称 Name	序号 No.	名称 Name
1	FANUC Oi-MF	9	外防护 External protection
2	主轴恒温系统 Spindle constant temperature system	10	清洁气枪 Cleaning air gun
3	自动润滑系统 Automatic lubrication system	11	警示灯 Warning light
4	Z轴平衡系统 Z axis balance system	12	工作灯 Working light
5	工件气冷系统 Workpiece air cooling system	13	电柜空调 Electric cabinet air conditioner
6	工件水冷系统 Workpiece water cooling system	14	主轴气幕防尘 Spindle air curtain dust-proof
7	自动排屑装置 Automatic chip removal device	15	标准附件 Standard accessories
8	内防护 Internal protection	16	X轴光栅尺 X axis grating ruler

选购配置

OPTIONS

序号 Serial number	名称 Name	序号 No.	名称 Name
1	SIEMENS 828D、SIEMENS ONE	12	手动附件铣头：直角头、延长头、万向头、直角延长头、双头直角铣头、立卧头、可选齿盘定位 Manual accessory milling head: right-angle head, extension head, universal head, right-angle extension head, double-head right-angle milling head, vertical horizontal head, optional gear disc positioning.
2	圆盘刀库24T/30T Disc tool magazine 24T/30T		
3	链式刀库32T/40T Chain type tool magazine 32T/40T	13	自动/半自动附件铣头： 直角头、延长头、万向头、直角延长头 Automatic/semi-automatic accessories milling head: right-angle head, extension head, universal head, right-angle extension head.
4	立卧刀库40T/60T Vertical horizontal tool magazine 40T/60T		
5	立柱整体加高200mm Column heightened 200mm overall	14	在线测量 Online measurement
6	立柱整体加高400mm Column heightened 400mm	15	对刀仪 Tool setter
7	Z轴行程变化 Z axis travel variation	16	工件清洁水枪 Workpiece cleaning water gun
8	中心出水20/30/50bar CTS 20/30/50bar	17	主轴环喷 Spindle ring spray
9	稳压器 Voltage stabilizer	18	地基下沉 Foundation sink
10	Y/Z全闭环光栅尺 Y/Z fully-closed grating ruler	19	数控回转工作台（第四轴） CNC rotary table (4th-axis)
11	油水分离装置 Oil water separating device	20	封闭式操作室 Enclosed operation room

24/7 全天候不间断服务

24/7 NON-STOP SERVICE

- 售后服务工程师平均具有 10 年机床维修经验, 客户故障 2 小时响应回复;
After-sales engineers averagely have over 10 years machine tool industry service experience, can respond to customer failure within 2 hours ;
- 全国设有 30 个销售及售后服务网点, 售后网点覆盖范围 24 小时内到场服务;
30 sales& serve centers inside of China, can give on-site service within 24 hours in near covering range;
- 提供完善的客户培训计划及操作指南;
Comprehensive training system and operation guidance ;
- 标准化的售后交机及售后服务流程;
Standardized machine delivery and after-sales service process;
- 购买机床, 终身服务。
1-time purchase, life-time service.



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