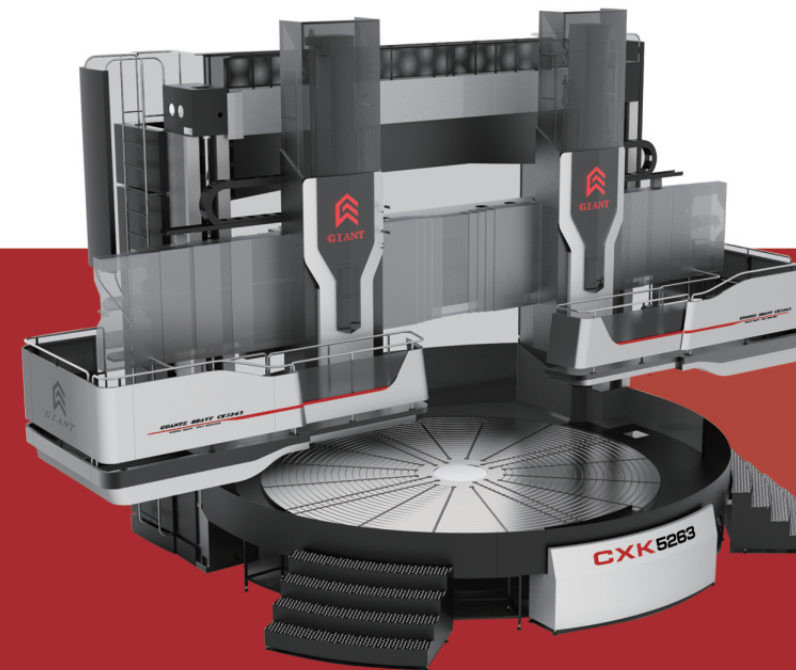




MADE | 中国制造 中国创造
IN CHINA, CREATED IN CHINA



**EQUIPMENT CHINA
SERVING THE WORLD**
装备中国 服务全球

优质的服务 回馈社会
QUALITY SERVICE TO SOCIETY



巨人重工机械有限公司
GIANTS HEAVY MACHINERY CO.,LTD

Tel: +86 18603173000 / +86 13701186704

Email: vea@jrtcl.com

Add: 河北省沧州市泊头市工业开发区巨人重工大街南首

[http: //www.jrtcl.com](http://www.jrtcl.com)



巨人重工机械有限公司
GIANTS HEAVY MACHINERY CO.,LTD

CONTENTS

P01	企业简介 COMPANY INTRODUCTION
P03	数控单柱立式车铣复合加工中心 CNC SINGLE COLUMN VERTICAL TURNING AND MILLING MACHINING CENTER
P05	数控双柱立式车床 CNC DOUBLE COLUMN VERTICAL LATHE
P07	数控双柱立式车铣复合机床 CNC DOUBLE COLUMN VERTICAL TURNING AND MILLING MACHINE
P09	龙门移动式立式车铣复合加工中心 COLUMN MOVE VERTICAL TURNING AND MILLING MACHINING CENTER
P11	龙门移动式立式车铣复合加工中心(带方工作台) COLUMN MOVE VERTICAL TURNING AND MILLING MACHINING CENTER(WITH SQUARE WORKTABLE)
P13	数控龙门加工中心 CNC GANTRY MILLING MACHINING CENTER
P15	五轴联动龙门镗铣加工中心 FIVE-AXIS SIMULTANEOUS CNC GANTRY BORING AND MILLING MACHINING CENTER
P17	数控刨台式铣镗系列 CNC PLANER TABLE MILLING AND BORING SERIES
P19	数控落地铣镗床 CNC FLOOR TYPE MILLING AND BORING MACHINE
P21	PDC 石油钻头车铣磨复合加工中心 PDC MATRIX BIT CNC TURNING MILLING AND GRINDING MACHINING CENTER
P23	五轴叶片铣削加工中心 FIVE AXIS BLADE MILLING MACHNING CENTER
P25	大叶片五轴铣削加工中心 FIVE AXIS BIG BLADE MILLING MACHINING CENTER
P27	立式五轴联动加工中心 VERTICAL FIVE AXIS SIMULTAN-EOUSLY MILLING MACHINING CENTER
P31	功能附件 FUNCTION ATTACHMENTS
P33	产品案例 PRODU CTCASES



企业简介 >>> COMPANY INTRODUCTION

巨人重工机械有限公司，是一家始终秉持技术创新理念、集研发、生产、销售于一体的综合型重工业企业。公司厂区坐落于享有“中国铸造业名城”美誉的河北省泊头市，其前身是一家颇具规模的大型铸造企业，采用国际领先的树脂砂铸造工艺，长期为沈阳、大连、齐齐哈尔、上海等国内大型机床制造企业，供应高品质的机床机身。

自 2004 年成立以来，巨人重工广纳贤才，高薪聘请国内外知名高级工程师与专业设计人员，专注于各类中高端数控卧式车床、数控立式车床、五轴车铣复合加工中心、数控龙门镗铣加工中心等高端精密及重型机床的研发与生产。公司凭借精湛的装配工艺、严格的检测体系，确保产品从外观到内在品质均属上乘。

近年来，巨人重工积极顺应国际化工业改革潮流，引入欧洲先进的高精检测设备，构建起科学完善的质量保证体系，先后荣获 “ISO9001–2000 质量体系认证” “ISO14001 环境 / OHSAS18001 安全管理认证” “CE 认证” “国军标认证”，并斩获多项技术发明专利。这一系列完善的质量保障措施与科学严谨的制造工艺，不仅有力地确保了产品质量，还显著提升了公司的产业地位与商业价值。

凭借卓越的产品与品牌实力，巨人重工机械有限公司被评定为 “中国铸造产品出口基地会员企业” “河北省著名商标企业”，并在机床大赛中屡获殊荣，如 “IF 设计奖” “红点奖” 等。2016 年，河北新闻联播对公司作为重点企业进行了特别报道。

在技术合作与产品创新方面，2008 年公司与意大利企业携手，成功研发生产出第一台立式车铣复合 CXK5263；2015 年，自主生产出第一台 10 米立式车铣复合加工中心；2020 年，第一台 12.5 米车铣复合加工中心问世；2021 年，依托国际先进技术，以市场需求为导向，推出第一台五轴叶片加工中心。如今，公司产品畅销全球，远销世界各地。

截至目前，为了给客户提供更优质、高效的服务，我司已在土耳其、俄罗斯、美国、韩国等地区设立办事处，构建起更为贴近客户的服务网络，以便精准对接各地客户需求，及时响应并解决问题。 没有挑剔的顾客 只有不完美的产品。

361° — 多一度的服务是巨人重工的标准。
“巨人重工 只做精品” 是巨人重工的座右铭。
“用户效益最大化，用户满意最大化” 是巨人重工的不懈追求。

Giants Heavy Machinery Co., Ltd. is a comprehensive heavy industry enterprise that always adheres to the concept of technological innovation and integrates research and development, production, and sales.

The factory is located in Botou City, Hebei Province, which enjoys the reputation of "Famous City of Foundry Industry in China". to ensure the casting quality, Giant also has its own casting factory.

Since establishment in 2004, Giant has extensively recruited senior engineers and professional designers both at home and abroad. It focuses on the research, development, and production of various high-end and mid-range CNC horizontal lathes, CNC vertical lathes, five-axis turning and milling machining centers, CNC gantry boring and milling machining centers, and other high-precision and heavy-duty machine tools.

As far now, It has successively obtained the "ISO9001-2000 Quality System Certification", "ISO14001 Environmental/OHSAS18001 Safety Management Certification", "CE Certification", and "Military Standard Certification", and has won a number of technical invention patents. With its outstanding product quality and brand strength, Giant has been rated as a "Member Enterprise of the Export Base of Foundry Products in China" and a "Famous Trademark Enterprise in Hebei Province", and has won many awards in machine tool competitions, such as the "IF Design Award" and the "Red Dot Award". In terms of technical cooperation and product innovation, in 2008, Giant cooperated with Italy company, developed and produced the first vertical turning and milling machining center CXK5263, In 2015, it independently produced the first 10-meter vertical turning and milling machining center. In 2020, the first 12.5-meter turning and milling machining center came out. In 2021, relying on international advanced technology and guided by market demand, it launched the first five-axis blade machining center. Now, the company's products are selling well globally and are exported to various parts of the world.

Up to now, in order to provide customers with higher-quality and more efficient services, our company has established offices in regions such as Turkey, Russia, the United States, and South Korea, and has built a service network that is closer to customers, so as to accurately meet the needs of customers in different regions and respond to and solve problems in a timely manner.





CNC SINGLE
COLUMN
VERTICAL
TURNING AND
MILLING
MACHINING
CENTER
数控单柱立式
车铣复合加工中心

- 工作台采用高精度、高刚性、大承载进口交叉滚柱轴承，可确保长时间重切削，精度高，稳定性好。
- 进给系统X轴、Z轴均采用硬轨（也可选配线轨），精度保持性和稳定性高。
- 立柱采用分级定位装置，实现横梁在立柱上精确定位。
- ATC刀库：采用刀库自动换刀机构,内藏式切削水装置，可以确实冷却刀片进而延长刀片使用寿命。
- 电器箱采用CE 标准并配备空调，有效降低电气箱内部环境温度，确保系统稳定。



- The table adopts high-precision, high-rigidity and large-load imported cross roller bearings, which can ensure long-term heavy cutting, high precision and good stability of the machine.
- X/Z axis adopt boxway(Roller guideway is optional), which ensure machine high accuracy and stability.
- The Vertical column adopt stage positioning device, which ensure the crossbeam position on the column precisely.
- Adopt ATC, automatic tool change, with cutting liquid device, which can cooling the tools and ensure tool long service life.
- Electrical cabinet adopt CE standard and is equipped with air conditioner to effectively reduce the internal temperature, which ensure the stability of the system

主要规格和技术参数
SPECIFICATION

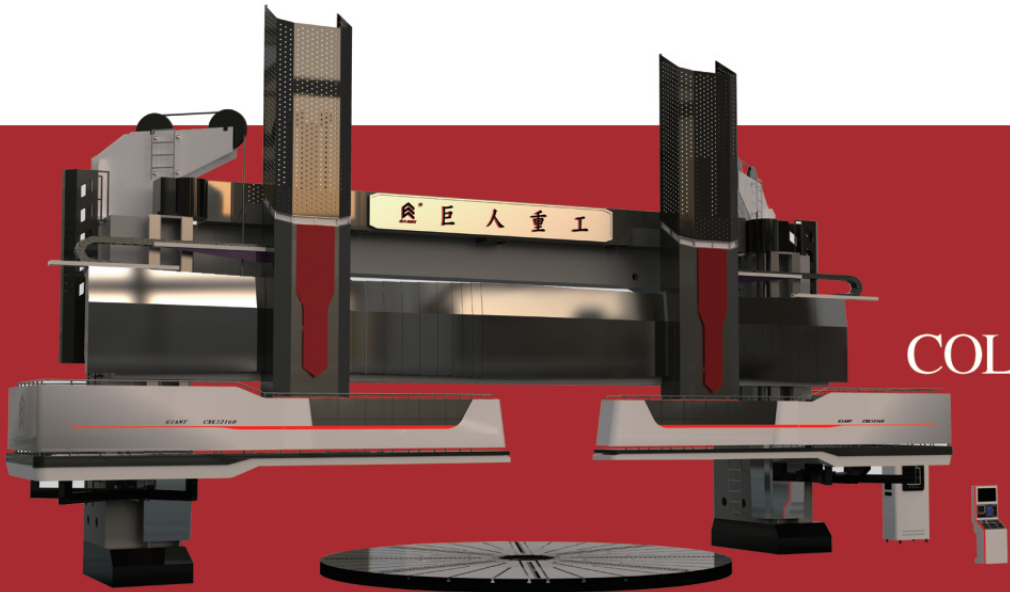
参数名称 Items	VL-1000ATC	VL-1000 ATC+C	VL-1250 ATC	VL-1250 ATC+C	VL1600ATC	VL1600ATC +C	VL2000ATC	VL2000 ATC+C	VL2500ATC	UNIT
最大回转直径 Max swing diameter	1350	1350	1600	1600	2000	2000	2500	2500	3000	mm
最大车削直径 Max turning diameter	1100	1100	1600	1600	2000	2000	2500	2500	2800	mm
最大工件高度 Max workpiece height	800	800	1200	1200	1200	1200	1600	1600	1800	mm
最大工件重量 Max load capacity	5000	5000	5000	5000	8000	8000	12000	12000	15000	kg
工作台直径 Worktable diameter	1000	1000	1250	1250	1600	1600	2000	2000	2500	mm
X轴行程 X Axis Travel	+700, -350	+700, -550	+950, -500	+950, -800	+1150, -500	+1150, -1000	+1400, -1000	+1400, -1000	+1570, -1000	mm
Z轴行程 Z Axis Travel	900	900	900	900	900	900	1200	1200	1200	mm
横梁行程 Crossbeam travel	500	500	800(200*4)	800(200*4)	800(200*4)	800(200*4)	1200(200*6)	1200(200*6)	1200(200*6)	mm
工作台转速 Worktable speed	低速档 29-176 高速档 160-600	低速档 29-176 高速档 160-600	低速档 1-99 高速档 99-300	低速档 1-99 高速档 99-300	低速档 1-65 高速档 64-250	低速档 1-65 高速档 64-250	低速档 10-42 高速档 43-169	低速档 10-42 高速档 43-169	低速档 10-42 高速档 43-169	rpm
第二主轴转速 Milling spindle speed	-	低速档 437-1200 高速档 1750-2400	-	低速档 100-1200 高速档 400-2400	-	低速档 100-1200 高速档 400-2400	-	低速档 100-1200 高速档 400-2400	-	rpm
刀库形式 tool magazine type	ATC	ATC+C	ATC	ATC+C	ATC	ATC+C	ATC	ATC+C	ATC	
刀具数量 Tool stations	12	16	12	16	12	16	12	16	12	pcs
刀具尺寸 Tool size	□32 Φ 50	□32 Φ 50	□32 Φ 50	□32 Φ 50	□32 Φ 50	□32 Φ 50	□32 Φ 50	□32 Φ 50	□32 Φ 50	mm
主电机功率 Main motor power	37/45	37/45	37/45	37/45	37/45	37/45	60/75	60/75	60/75	kw
第二主轴功率 The second milling spindle power	-	5.5/7.5	-	15/18.5	-	15/18.5	-	15/18.5	-	kw
数控系统 CNC System	FANUC 0i-T	FANUC 0i-T	FANUC 0i-T	FANUC 0i-T	FANUC 0i-T	FANUC 0i-T	FANUC 0i-T	FANUC 0i-T	FANUC 0i-T	

标准配置Standard:

- 防溅钣金 Semi closed protection cover
- 链式排屑器+集屑车 Chain type chip conveyor+cart
- 电器柜带空调 electrical cabinet with air conditioner
- 主轴配油冷机 spindle with oil cooling machine
- 切削水装置 cutting liquid
- 自动润滑系统 automatic lubrication system
- 工作灯 working light
- 三色指示灯 warning light (R/Y/G)
- 地脚螺栓和垫铁 Foundation bolts and pads
- 工具箱 tool box
- 发那科系统

选择配置：optional

- X/Z轴配光栅尺 X/Z axis with optical scale
- 对刀仪（雷尼绍）tool measurement system(Renishaw)
- 工件测量系统（雷尼绍）workpiece measurement system(Renishaw)
- 中心出水 20-70bar：High pressure coolant through spindle (20-70bar)
- 全防护 full closed protection cover
- 油雾收集器 oil mist collector (仅在全防护下选用，only used with full closed protection cover)
- 西门子系统 Siemens system
- 自动门 automatic door
- 刀库容量加大 enlarge tool magazine capacity



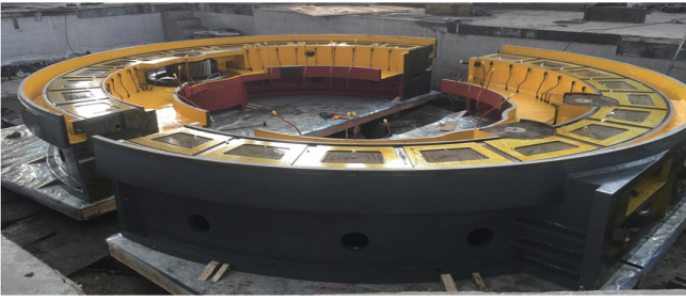
CNC DOUBLE
COLUMN VERTICAL
LATHE
数控双柱立式车床

主要特点

- 1. 机床主传动由直流电机驱动，机械两档无级调速，液压控制自动变速，实现工作台的转速范围。
- 2. 工作台主轴中心带编码器，可实现车螺纹，恒线速切削功能。
- 3. 工作台采用恒流静压导轨，承载能力大，抗震性好。并配油温冷却装置，使工作台具有旋转精度高，承载能力大，热变形小等特点。
- 4. 机床可配置西门子，发那科，广数等数控系统。

MAIN FEATURES

- 1.The main drive of the machine tool is driven by a DC motor, mechanical two shifts stepless speed regulation
- 2.The worktable spindle center adopt encoder, which can realized threading, constant speed cutting function
- 3.The worktable adopt hydro-static guideway, with big load capacity and good anti -knock features. And equipped with oil temperature cooling device, so that the table has the characteristics of high rotation accuracy, large bearing capacity, small thermal deformation.
- 4.Customer can choose Siemens, FANUC, GSK or other system.



主要规格和技术参数
SPECIFICATION

参数名称 Items	CK5225	CK5235	CK5240	CK5245	CK5250	CK5263	CK5280	CK52100	CK52125	CK52160	单位
最大车削直径 Max turning diameter	2500	3500	4000	4500	5000	6300	8000	10000	12500	16000	mm
最大工件高度 Max workpiece height	1600	2000/2500	2000/2500	2000/2500 3150	2500/3150	3150/4000	4000/5000	5500/6000	5500/6000	5500/6000	mm
最大工件重量 Max load capacity	10/32	10/32	10/32/50	50	50	63/100	100/160	150/250	150/250	250/400	Tons
工作台直径 Worktable diameter	2250	2850	3600	4000	4500	5700	7100	7500	8000	10000	mm
工作台转速级数 Worktable speed steps	两档无级 (stepless in shift)	两档无级 (stepless in shift)	两档无级 (stepless in shift)	两档无级 (stepless in shift)	两档无级 (stepless in shift)	两档无级 (stepless in shift)	两档无级 (stepless in shift)	两档无级 (stepless in shift)	两档无级 (stepless in shift)	两档无级 (stepless in shift)	
工作台转速范围 Worktable speed range	2-63	0.63-63	0.5-50	0.5-50	0.5-50	0.32-32	0.2-25	0.16-16	0.16-16	0.16-16	rpm
刀架垂直行程 Tool post vertical travel	1000	1000/1250	1000/1250 /1600	1250/1400 /1600	1250/1600	1600/2000	2000/2500	2760/3180	2760/3180	2760/3180	mm
主电机功率 Main motor power	55	55	55/75	75	75	90	90/110	132	160	160	KW

- 注：1. 数控系统可选配发那科、海德汉、广数、凯恩帝等
2. 刀库可选配
3. 冷却系统、排屑系统和外防护系统均为选配
4. X/Z轴光栅尺为选配项
5. 注：最大车削直径，加工高度，等可以根据客户具体需求订制

1. CNC System, FANUC, HEIDENHAIN、GSK, KND is optional
2. Tool magazine is optional
3. Cooling system, chip conveyor and protection cover are optional
4. Linear scale for X/Z axis are optional
5. Max turning diameter, workpiece height can be customized



CNC DOUBLE
COLUMN
VERTICAL TURNING
AND MILLING
MACHINE
数控双柱立式车
铣复合机床

该设备适用于高速钢、硬质合金、各种铸铁及陶瓷刀具等，对各种黑色金属、有色金属及部分非金属材料制成的零件粗、精加工。在配置附件铣头的情况下，可在工件一次装卡中完成多种工序的加工，适用于航空、风电、造船、发电、机床、印刷、模具等制造业半精加工和精加工，也可用于粗加工。

The machine is suitable for high speed steel, hard alloy, all kinds of cast iron and ceramic cutting tools., rough and finish the parts which made of ferrous, non-ferrous metal and some non-metallic materials On the condition of equipped with milling head, the machine can finish machining different processes workpiece after one time clamping, suitable for aviation, wind power, shipbuilding, power generation, machine tools, printing, mold and other manufacturing , semi-finishing and finishing, can also be used for rough processing.

主要特点

- 1.工作台采用恒流静压导轨，带有C轴箱，具有分度功能。
- 2.镗铣刀架滑座水平移动采用闭式静压导轨，高精度滚珠丝杠传动（也可采用高精度齿轮齿条传动），全闭环控制（X轴）。
- 3.镗铣刀架滑枕垂直移动采用滑动导轨（也可采用静压导轨），全闭环控制（Z轴）
- 4. 可实现四轴联动。

MAIN FEATURES

- 1.The worktable adopts hydrostatic guideway , with C axis which has indexing function
- 2.The milling ram slide horizontal move adopt hydrostatic guideway,driven by high precision ball screw (gear-rack drive is optional), full closed loop control (X axis)
- 3.The milling ram vertical move adopt slide guideway (hyarostatic guideway is optional), full closed loop control (Z axis)
- 4. Achieve four axis linkage



主要规格和技术参数
SPECIFICATION

参数名称 Items	CXK5225	CXK5235	CXK5245	CXK5250	CXK5263	CXK5280	CXK52100	CXK52125	CXK52160	单 位
最大车削直径 Max turning diameter	2500	3500	4500	5000	6300	8000	10000	12500	16000	mm
最大工件高度 Max workpiece height	1600	2000/2500	2000/2500/ 3150	2500/3150	3150/4000	4000/5000	5500/6000	5500/6000	5500/6000	mm
最大工件重量 Max load capacity	10/32	10/32	50	50	63/100	100/160	150/250	150/250	250/400	Tons
工作台直径 Worktable diameter	2250	2850	4000	4500	5700	7100	7500	8000	10000	mm

工作台转速范围 Worktable speed range	车：2.5~63 铣：0.001~1	车：2.5~63 铣：0.001~1	车：0.4-40 铣：0.001-1	车：0.4~40 铣：0.001-1	车：0.32~32 铣：0.001~1	车：0.2~20 铣：0.0025~0.25	车：0.16-16 铣：0.0025~0.25	车：0.16-16 铣：0.001-0.1	车：0.16-16 铣：0.001-0.1	rpm
----------------------------------	-----------------------	-----------------------	-----------------------	-----------------------	------------------------	---------------------------	----------------------------	--------------------------	--------------------------	-----

工作台分度定位 C axis index	任意	任意	任意	任意	任意	任意	360度任意 分度	360度任意 分度	360度任意 分度	
-------------------------	----	----	----	----	----	----	--------------	--------------	--------------	--

垂直刀架水平行程 Tool post horizontal travel	-20~1400	-20~1850	-20~2975	-150~2765	-150 ~ 3415	-50~4250	-150~5650	-150 ~ 6500	-150 ~ 8500	mm
---	----------	----------	----------	-----------	-------------	----------	-----------	-------------	-------------	----

刀架垂直行程 Milling tool post vertical travel	1000	1000/1250	1000/1250/ 1600	1000/1250/ 1600	1600/2000	2000/2500	2500/2760	2760	2760	mm
---	------	-----------	--------------------	--------------------	-----------	-----------	-----------	------	------	----

滑枕截面尺 ram section size	250x250	250x250	250×250/ 280x280	280x280	280x280	280×280/ 360x360	360×360/ 400x400	400x400	400x400	Rpm
---------------------------	---------	---------	---------------------	---------	---------	---------------------	---------------------	---------	---------	-----

镗铣主轴转速范围 Milling spindle speed range	10-4000	10-2400	10-2400	10-1200	10-1200	10-1000	10-1000	1-1000	1-1000	Rpm
---	---------	---------	---------	---------	---------	---------	---------	--------	--------	-----

镗铣主轴锥孔 Milling spindle taper hole	BT50	BT50	BT50	BT50	BT50	BT50	BT50	BT50	BT50	
--------------------------------------	------	------	------	------	------	------	------	------	------	--

刀库 Tool magazine	选配optional									
---------------------	------------	--	--	--	--	--	--	--	--	--

数控系统 CNC system	西门子828D (三菱，发那科，海德汉，广数系统等为选配) Siemens 828d (Mitsubishi, FANUC, Heidenhain. GSK system is optional)									
--------------------	--	--	--	--	--	--	--	--	--	--

- 注：1. 数控系统可选配发那科、海德汉等

2.可选配各种附件头（如直角铣头、万向铣头等）

3.刀库可选配

4.冷却系统、排屑系统和外防护系统均为选配
- 1.CNC System, FANUC, HEIDENHAIN is optional

2.This machine can equipped with special accessories (such as 90 degree milling head, universal milling head)

3.Tool magazine is optional

4.Cooling system, chip conveyor and protection cover are optional



COLUMN MOVE
VERTICAL
TURNING AND
MILLING
MACHINE
CENTER
龙门移动式立式
车铣复合加工中心

该设备适用于高速钢、硬质合金、各种铸铁及陶瓷刀具等，对各种黑色金属、有色金属及部分非金属材料制成的零件粗、精加工。在配置附件铣头的情况下，可在工件一次装卡中完成多种工序的加工，适用于航空、风电、造船、发电、机床、印刷、模具等制造业半精加工和精加工，也可用于粗加工。

The machine is suitable for high speed steel, hard alloy, all kinds of cast iron and ceramic cutting tools., rough and finish the parts which made of ferrous, non-ferrous metal and some non-metallic materials On the condition of equipped with milling head, the machine can finish machining different processes workpeice after one time clamping, suitable for aviation, wind power, shipbuilding, power generation, machine tools, printing, mold and other manufacturing , semi-finishing and finishing, can also be used for rough processing.

主要特点

- 1.采用龙门移动式，横梁上下移动（也可采用横梁固定）的结构
- 2.工作台采用交叉滚柱轴承，并且具有分度功能。采用双伺服电机主从控制，铣削时，通过双电机进行电气消除控制工作台进行无隙分度，使工作台分度精度稳定性更高。
- 3.床身采用矩形静压导轨，双伺服同步驱动，全闭环控制（Y轴）。
- 4.镗铣刀架滑座水平移动采用闭式静压导轨，高精度滚珠丝杠传动（也可采用高精度齿轮齿条传动），全闭环控制（X轴）。
- 5.镗铣刀架滑枕垂直移动采用滑动导轨（也可采用静压导轨），全闭环控制（Z轴）
- 6.可实现四轴联动。

MAIN FEATURES

- 1.Adopt column move, cross beam move structure (fixed beam is optional)
- 2.The worktable adopts cross roller type bearings and has indexing function . adopt Double servo motor master-slave control. when milling, through the double motor for electricalbacklash elimination and control worktable indexing, which ensure high indexing accuracy.
- 3.The lathe bed adopt hydrostatic guideway synchronous drive by double servo motor, full closed loop control. (Y axis)



- 4.The milling ram slide horizontal move adopt hydrostatic guideway,driven by high precision ball screw (gear-rack drive is optional), full closed loop control (X axis)
- 5.The milling ram vertical move adopt slide guideway (hyarostatic guideway is optional), full closed loop control (Z axis)
- 6.Achieve four axis linkage

主要规格和技术参数
SPECIFICATION

参数名称 Items	LMCK250	LMCK300	LMCK350	LMCK400	LMCK500	单 位
最大车削直径 Max turning diameter	2500	3000	3500	4000	5000	mm
最大工件高度 Max workpiece height	1600	1600	1600	2000	2500	mm
最大工件重量 Max load capacity	16	20	25	30	32/65	Tons
工作台直径 Worktable diameter	2000	2500	3000	3500	4500	mm

工作台转速级数 Worktable speed steps	两档无级 two shift (stepless in shift)	两档无级 two shift (stepless in shift)	两档无级 two shift (stepless in shift)	两档无级 two shift (stepless in shift)	两档无级 two shift (stepless in shift)	
----------------------------------	--	--	--	--	--	--

工作台转速范围 Worktable speed range	车:1-200 铣：0.001~1	车:160 铣：0.001~1	车：120 铣：0.001~1	车：80 铣：0.001-1	车：50 铣：0.001-1	rpm
龙门前后移动行程（Y轴） Column longitudinal travel（Y AXIS）	可定制	可定制	可定制	可定制	可定制	mm
垂直刀架水平行程（X轴） Tool post horizontal travel（X axis）	-20~1400	-20~1650	-20~1850	-20~2250	-150~2765	mm
镗铣刀架垂直行程（Z轴） Milling tool post vertical travel（Z axis）	1000	1000	1000	1000	1300	mm
滑枕截面尺寸 Ram section size	250x250	250x250	250x250	280x280	280x280	mm
镗铣主轴转速范围 Milling spindle speed range	10-2400 (4000 Op.)	10-2400 (4000 Op.)	10-2400 (4000 Op.)	10-2400 (4000 Op.)	10-2400 (4000 Op.)	Rpm
镗铣主轴锥孔 Milling spindle taper hole	BT50	BT50	BT50	BT50	BT50	
横梁最大行程（W轴） Beam vertical travel（W axis）	1250	1250	1250	1650	2150	mm
工作台分度定位精度（C轴） Worktable indexing positioning accuracy (c axis)	±8"	±8"	±8"	±8"	±8"	
工作台分度重复定位精度 Worktable indexing repeat positioning accuracy	±5"	±5"	±5"	±5"	±5"	
数控系统 CNC system	西门子828d	西门子828d	西门子828d	西门子828d	西门子828d	

- 备注：

 - 1. 数控系统可选配发那科、海德汉等
 - 2. 可选配各种附件头（如直角铣头、万向铣头等）
 - 3. 刀库可选配
 - 4. 冷却系统、排屑系统和外防护系统均为选配
- 1.CNC System, FANUC, HEIDENHAIN is optional
 - 2.This machine can equipped with special accessories (such as 90 degree milling head, universal milling head)
 - 3.Tool magazine is optional
 - 4.Cooling system, chip conveyor and protection cover are optional



COLUMN MOVE
VERTICAL TURNING AND
MILLING MACHINING CENTER
WITH SQUARE WORKTABLE
龙门移动式立式车铣复合加工中心
(带方工作台)

该设备适用于高速钢、硬质合金、各种铸铁及陶瓷刀具等，对各种黑色金属、有色金属及部分非金属材料制成的零件粗、精加工。在配置附件铣头的情况下，可在工件一次装卡中完成多种工序的加工，适用于航空、风电、造船、发电、机床、印刷、模具等制造业半精加工和精加工，也可用于粗加工。

The machine is suitable for high speed steel, hard alloy, all kinds of cast iron and ceramic cutting tools., rough and finish the parts which made of ferrous, non-ferrous metal and some non-metallic materials On the condition of equipped with milling head, the machine can finish machining different processes workpeice after one time clamping, suitable for aviation, wind power, shipbuilding, power generation, machine tools, printing, mold and other manufacturing , semi-finishing and finishing, can also be used for rough processing.

主要特点

- 1.采用龙门移动式，横梁上下移动（也可采用横梁固定）的结构
- 2.工作台采用恒流静压导轨，并且具有分度功能。采用双伺服电机主从控制，铣削时，通过双电机进行电气消隙控制工作台进行无隙分度，使工作台分度精度稳定性更高。
- 3.床身采用矩形静压导轨，双伺服同步驱动，全闭环控制（Y轴）。
- 4.镗铣刀架滑座水平移动采用闭式静压导轨，高精度滚珠丝杠传动（也可采用高精度齿轮齿条传动），全闭环控制（X轴）。
- 5.镗铣刀架滑枕垂直移动采用滑动导轨（也可采用静压导轨），全闭环控制（Z轴）
- 6.可实现四轴联动。

MAIN FEATURES

- 1.Adopt column move, cross beam move structure (fixed beam is optional)
- 2.The worktable adopts hydrostatic guideway and has indexing function . adopt Double servo motor master-slave control. when milling, through the double motor for electrical backlash elimination and control worktable indexing, which ensure high indexing accuracy.

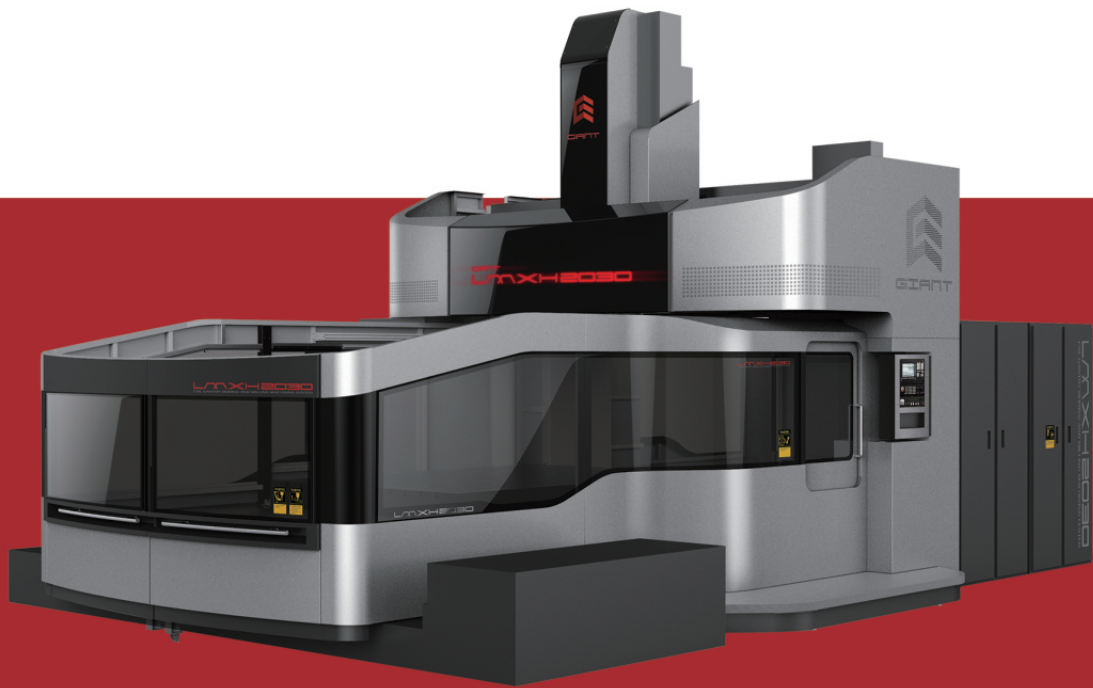
- 3.The lathe bed adopt hydrostatic guideway synchronous drive by double servo motor, full closed loop control. (Y axis)
- 4.The milling ram slide horizontal move adopt hydrostatic guideway,driven by high precision ball screw (gear-rack drive is optional), full closed loopcontrol (X axis)
- 5.The milling ram vertical move adopt slide guideway (hyarostatic guideway is optional), full closed loop control (Z axis)
- 6.Achieve four axis linkage

主要规格和技术参数
SPECIFICATION

参数名称 Items	LMCXK250	LMCXK300	LMCXK350	LMCXK400	LMCXK500	LMCXK630	单 位
最大车削直径 Max turning diameter	2500	3000	3500	4000	5000	6300	mm
最大工件高度 Max workpiece height	1600	1600	1600	2000	2500	3150	mm
最大工件重量 Max load capacity	20	20	32	32	50	65/80	Tons
圆工作台直径 Round worktable diameter	2000	2500	2800	3500	4500	5700	mm
方工作台尺寸 Square worktable size (W/L)	2250X (L customized 长度可定制)	2500X (L customized 长度可定制)	2800X (L customized 长度可定制)	3500X (L customized 长度可定制)	4500X (L customized 长度可定制)	5700X (L customized 长度可定制)	mm
工作台转速级数 WORKTABLE SPEED STEPS	两档无级 two shift (stepless in shift)	两档无级 two shift (stepless in shift)	两档无级 two shift (stepless in shift)	两档无级 two shift (stepless in shift)	两档无级 two shift (stepless in shift)	两档无级 two shift (stepless in shift)	
工作台转速范围 Worktable speed range	车:车：2.5~63 (200 Op.) 铣：0.001~1	车:2.5~63 (160 Op.) 铣：0.001~1	车：2.5-63 (120 Op.) 铣：0.001~1	车：0.5-50 (80 Op.) 铣：0.001-1	车：0.5~50 铣：0.001-1	车：0.5~32 铣：0.001~1	rpm
龙门前后移动行程（Y轴） Column longitudinal travel (Y axis)	可定制	可定制	可定制	可定制	可定制	可定制	mm
垂直刀架水平行程（X轴） Tool post horizontal travel（X axis）	-20~1400	-20~1650	-20~1850	-20~2250	-150~2765	-150 ~ 3415	mm
镗铣刀架垂直行程（Z轴） Milling tool post vertical travel（Z axis）	1000	1000	1000	1000	1300	1600	mm
滑枕截面尺寸 Ram section size	250x250	250x250	250x250	280x280	280x280	280x280	mm
镗铣主轴转速范围 Milling spindle speed range	10-2400 (4000 Op.)	10-2400 (4000 Op.)	10-2400 (4000 Op.)	10-2400 (4000 Op.)	10-2400 (4000 Op.)	10-2000	Rpm
镗铣主轴锥孔 Milling spindle taper hole	BT50	BT50	BT50	BT50	BT50	BT50	
横梁最大行程（W轴） Beam vertical travel（W axis）	1250	1250	1250	1650	2150	2800	mm
工作台分度定位精度（C轴） Worktable indexing positioning accuracy (c axis)	±8″	±8″	±8″	±8″	±8″	±8″	
工作台分度重复定位精度 Worktable indexing repeat positioning accuracy	±5″	±5″	±5″	±5″	±5″	±5″	
数控系统 CNC system	西门子828d	西门子828d	西门子828d	西门子828d	西门子828d	西门子828d	

- 备注：
- 1. 数控系统可选配发那科、海德汉等
 - 2. 可选配各种附件头（如直角铣头、万向铣头等）
 - 3. 刀库容量可选配
 - 4. 冷却系统、排屑系统和外防护系统均为选配
 - 5. 高压中心出水为选配，可选配20bar,50bar,70bar

- 1.CNC System, FANUC, HEIDENHAIN is optional
- 2.This machine can equipped with special accessories (such as 90 degree milling head, universal milling head)
- 3. tool magazine stations is optional
- 4.Cooling system, chip conveyor and protection cover are optional
- 5.High pressure coolant though spindle is optional , 20 bar, 50bar, 70bar



CNC GANTRY
MILLING
MACHINING
CENTER
数控龙门
加工中心

- 1、具有门式框架和卧式长床身的大型数控加工设备，配备有刀库和自动换刀装置，可在一次装夹中完成铣、镗、钻、铰、攻丝等多种加工工序。
- 2、床身、立柱、主轴箱等关键零部件均采用精密铸件，经过严密工序加工而成。机床经过有限元分析，结构合理，刚性好，几何精度极佳。
- 3、加工范围广，通过精确的三轴联动，可对零件进行高精度加工，保证表面的光洁度和精度。
- 4、大工作台可加工大型零件，也可一次装夹多个中小型零件，进行高效率加工，可添加直角头进一步增大加工范围。
- 5、适用于航空、风电、汽车、机床、印刷、模具等制造业粗加工、半精加工和精加工。

- 1.The CNC gantry machining center is a large-scale CNC machining equipment with a gantry-type frame and a horizontal long bed. It is equipped with a tool magazine and an automatic tool changer, and can complete a variety of machining processes such as milling, boring, drilling, reaming, and tapping in one clamping.
- 2.Key components such as the bed, column, and spindle box are all made of precision castings and processed through a rigorous series of procedures. The machine tool has undergone finite element analysis, has reasonable structure, excellent rigidity, and extremely high geometric accuracy.
- 3.It has a wide processing range. Through precise three-axis linkage, it can carry out high-precision machining of parts, ensuring the surface finish and accuracy.
- 4.The large worktable allows for the processing of large parts. It can also clamp multiple small and medium-sized parts at one time for high-efficiency machining. A right-angle head can be added to further expand the processing range.
- 5.It is suitable for rough machining, semi-finishing, and finishing in manufacturing industries such as aviation, wind power, automobiles, machine tools, printing, and molds.

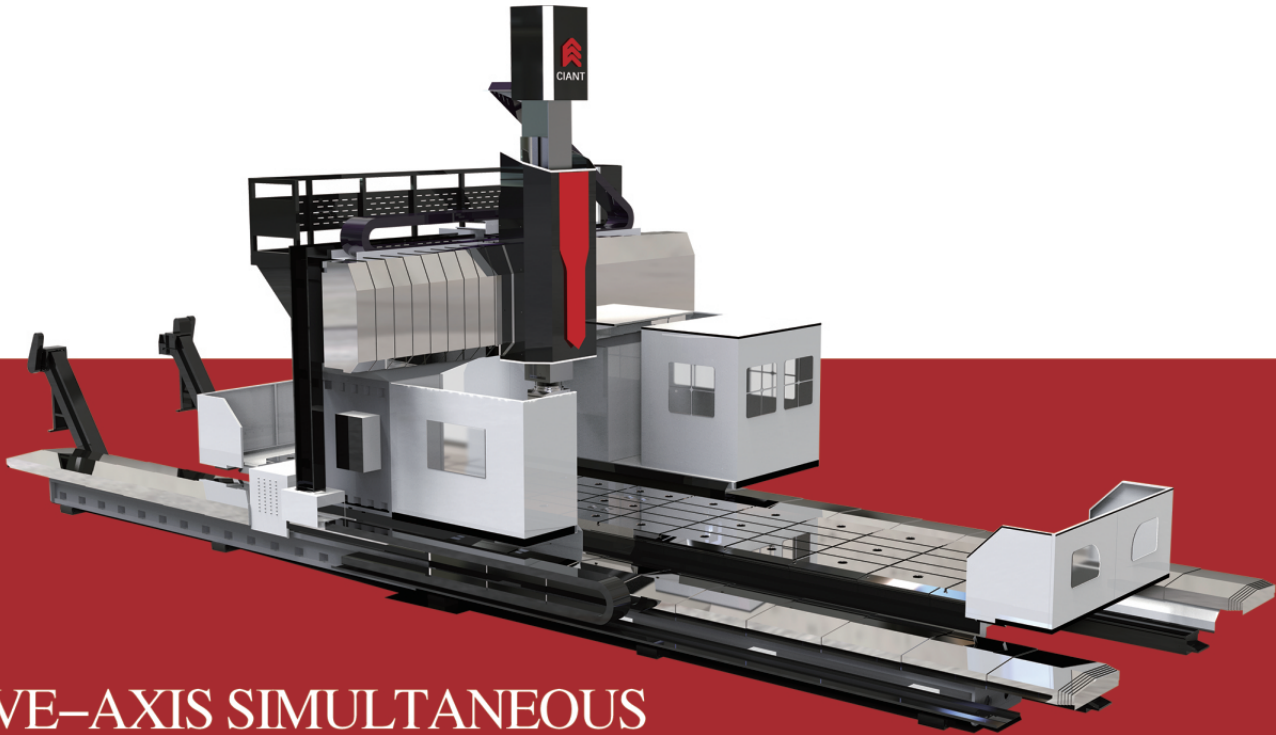


主要规格和技术参数
SPECIFICATION

参数名称 Items	GMC1814	GMC2016	GMC2516	GMC3016	GMC3022	GMC4025	GMC5022	GMC5026	GMC6030	单 位 unit
工作台尺寸 Worktable Size	1800x1300	2000x1400	2500x1400	3000x1400	3000x1800	4000x2200	5000x1800	5000x2600	6000x2500	mm
工作台承重 Worktable load	3500	4500	5500	6500	12000	16000	20000	20000	28000	kg
龙门宽度 Gantry width	1500	1630	1650	1650	2270	2550	2200	2600	3000	mm
三轴快移速度 3-axis rapid Moving speed (X/Y/Z)	15000/15000/15000		12000/12000/12000							mm/ min
切削进给速度 Cutting feed speed			1-8000							mm/ min
三轴额定功率 Rated power of X/Y/Z axis	3/3/3		7/4/4		6/7/7					Kw
三轴额定扭矩 Rated torque of X/Y/Z axis	36/36/36		30/22/22		38/30/30					Nm
三轴行程 X/Y/Z -axis travel	1800x1400 x800	2000x1600 x800	2500x1600 x800	3200x1600 x800	3200x2200 x850	4200x2500 x1000	5000x2200 x1000	5000x2600 x1000	6000x3000 x1000	mm
主轴端面到工作台面 的距离 Distance from spindle end to worktable surface	150-950		200-1050		250-1250					mm
主轴功率 Spindle power	15-18.5		18.5-22		22-26					Kw
主轴锥孔 Spindle taper hole			BT50							
刀库容量 Tool magazine capacity			24							把
最大刀具直径 Max. tool diameter			φ 110 (满刀) / φ 210 (邻位空刀)							mm
最大刀具长度/重量 Max. tool length/weight			350/15							mm/kg
换刀时间 Tool change time			2.2							s
气源流量 /压力 Air flow /pressure			流量150L/min /气压6Bar							mm
总功率 Total power	30		60		60		65			Kw
机床重量 Machine weight	18000	20000	24000	26500	29500	38000	54600	56500	73000	Kg

备注：1. 数控系统标配发那科，可选配西门子、三菱、新代等。
2. 机床标配：机械手刀库、双螺排+链式排屑器、主轴油冷机、主轴气幕、主轴环喷、集中润滑、气源处理、油水分离、热交换器、氮气平衡、水枪、气枪等。
3. 刀库容量可选配
4. 高压中心出水为选配。
5. 更多其他规格，详询销售经理

- 1.The NC system is equipped with Fanuc as the standard configuration, and Siemens, Mitsubishi, SYNTEC, etc. can be selected as optional.
- 2.The standard configurations include:Tool magazine, double screw + chain-type chip conveyor, spindle oil cooler, spindle air curtain, spindle ring spray, centralized lubrication, air source treatment, oil-water separation, heat exchanger, nitrogen balance, water gun, air gun, etc.
3. tool magazine stations is optional
- 4.High pressure coolant though spindle is optional
- 5.For more other specifications, please consult the sales manager for details.



FIVE-AXIS SIMULTANEOUS CNC GANTRY BORING AND MILLING MACHINING CENTER 五轴联动龙门镗铣加工中心

该系列加工中心采用当今世界先进技术研制开发，可实现主轴联动加工。主要应用于航空航天、能源、船舶和模具等行业。机床除具有X、Y、Z三个直线进给轴外，还有A、C摆动轴，通过五个坐标轴联动，实现形状复杂的异形件空间曲面的工序加工，特别适合于航空工业钛合金、铝合金等材料的高精、高效加工。

This series of machining center is developed by adopting world leading technologies, which can realize five-axis simultaneous machining. It is mainly used in industries like aviation and space, energy, shipbuilding and molds industries. In addition to X, Y, and Z linear feed axis, the machine tool has A, C swing axle as well. Then, the processing of complex irregular pieces curved surfaces can be realized through five-axis simultaneous. It is especially suitable for high-accuracy and high-efficiency processing of materials such as aviation titanium industry titanium alloy and aluminum alloy.

主要特点

- 1.采用龙门移动式，横梁上下移动（也可采用横梁固定）的结构
- 2.工作台采用恒流静压导轨，并且具有分度功能。采用双伺服电机主从控制，铣削时，通过双电机进行电气消隙控制工作台进行无隙分度，使工作台分度精度稳定性更高。
- 3.床身采用矩形静压导轨，双伺服同步驱动，全闭环控制（Y轴）。
- 4.镗铣刀架滑座水平移动采用闭式静压导轨，高精度滚珠丝杠传动（也可采用高精度齿轮齿条传动），全闭环控制（X轴）。
- 5.镗铣刀架滑枕垂直移动采用滑动导轨（也可采用静压导轨），全闭环控制（Z轴）
- 6.可实现五轴联动。

MAIN FEATURES

- 1.Adopt column move, cross beam move structure (fixed beam is optional)
- 2.The worktable adopts hydrostatic guideway and has indexing function . adopt Double servo motor master-slave control. when milling, through the double motor for electrical backlash elimination and control worktable indexing, which ensure high indexing accuracy.
- 3.The lathe bed adopt hydrostatic guideway synchronous drive by double servo motor, full closed loop control. (Y axis)
- 4.The milling ram slide horizontal move adopt hydrostatic guideway, driven by high precision ball screw (gear-rack drive is optional), full closed loop control (X axis)
- 5.The milling ram vertical move adopt slide guideway (hyarostatic guideway is optional), full closed loop control (Z axis)
- 6.Achieve 5 axis Simultaneously moving

主要规格和技术参数 SPECIFICATION

参数名称 Items	单 位 Unit	LMXK30系列(Series)	LMXK40系列(Series)	LMXK50系列(Series)	LMXK60系列(Series)
工作台 Table					
工作台尺寸 Table size	mm	3000x(6000-12000)	4000x(8000-15000)	5000x(10000-15000)	6000x(14000-20000)
两立柱间距离 Spacing between two columns	mm	3900	4900	5900	6900
允许最大荷重 Max.allowable load	T	7	7	7	7
T型槽尺寸 T-slot size(mm x numbers)	mm x 个	36x12+	36x16+	36x20+	36x28+
加工范围 Machining range					
龙门架最大行程-X1、X2轴 Max. travel of gantry framework - X1、X2 axis	mm	6500-12500	8500-15500	10500-15500	14500-20500
滑鞍最大行程-Y轴 Max.travel of saddle-Y axis	mm	4100	5100	6100	7100
主轴最大行程-Z轴 Max.travel of Spindle-Y axis	mm	1500	1500	1500	1500
主轴端面至工作台面距离 Spindle end to worktable face					
最大 Maximum	mm	1700	1700	1700	1700
最小 Minimum	mm	200	200	200	200
主轴 Spindle					
转速范围 Revolving speed range	R/min	100-18000	100-18000	100-18000	100-18000
最大输出扭矩 Max.output torque	N .m	125	125	125	125
C轴最大转角Max. rotation angle of C-axis	度(Degree)	±360	±360	±360	±360
A轴最大转角Max. rotation angle of A-axis	度(Degree)	±110	±110	±110	±110
主轴电机功率 Spindle motor power	kw	37/51	37/51	37/51	37/51
方滑枕截面尺寸 Cross section area of ram	mm	500x500	500x500	500x500	500x500
进给 Feed					
切削进给速度范围 Cutting feed speed range	Mm/min	1-10000	1-10000	1-10000	1-10000
快速移动 Rapid moving					
X1、X2轴 X1、X2 axis	Mm/min	20	20	20	20
Y轴 Y axis	Mm/min	20	20	20	20
Z轴 Z axis	Mm/min	16	16	16	16
机床定位精度:执行标准JB/T8771.4-1998 Machine tool positioning accuracy : Executive standard JB/T8771.4-1998 (带光栅尺 With optical scale)					
X1、X2轴 X1、X2 axis	mm	0.015/2000	0.015/2000	0.015/2000	0.015/2000
Y轴 Y axis	mm	0.040(0.025)	0.040(0.025)	0.040(0.025)	0.040(0.025)
Z轴 Z axis	mm	0.025(0.015)	0.025(0.015)	0.025(0.015)	0.025(0.015)
执行JIS标准(JISB6330) Execute JIS standard (JISB6330)(带光栅尺 With optical scale)					
X1、X2轴 X1、X2 axis	mm	±0.005/300(±0.003/300)	±0.005/300(±0.003/300)	±0.005/300(±0.003/300)	±0.005/300(±0.003/300)
Y轴 Y axis	mm	±0.005/300(±0.003/300)	±0.005/300(±0.003/300)	±0.005/300(±0.003/300)	±0.005/300(±0.003/300)
Z轴 Z axis	mm	±0.005/300(±0.003/300)	±0.005/300(±0.003/300)	±0.005/300(±0.003/300)	±0.005/300(±0.003/300)
重复定位精度:执行标准JB/T8771.4-1998 Repeaed positioning accuracy:Executive standard JB/T8771.4-1998 (带光栅尺 With optical scale)					
X1、X2轴 X1、X2 axis	mm	0.010/200	0.010/200	0.010/200	0.010/200
Y轴 Y axis	mm	0.026(0.016)	0.026(0.016)	0.026(0.016)	0.026(0.016)
Z轴 Z axis	mm	0.014(0.010)	0.014(0.010)	0.014(0.010)	0.014(0.010)
执行JIS标准(JISB6330) Execute JIS standard (JISB6330)(带光栅尺 With optical scale)					
X1、X2轴 X1、X2 axis	mm	±0.003(±0.002)	±0.003(±0.002)	±0.003(±0.002)	±0.003(±0.002)
Y轴 Y axis	mm	±0.003(±0.002)	±0.003(±0.002)	±0.003(±0.002)	±0.003(±0.002)
Z轴 Z axis	mm	±0.003(±0.002)	±0.003(±0.002)	±0.003(±0.002)	±0.003(±0.002)
数控系统 CNC system		SIEMENS 840D sl	SIEMENS 840D sl	SIEMENS 840D sl	SIEMENS 840D sl



CNC PLANER TABLE MILLING AND BORING SERIES

数控刨台式 铣镗系列

主要特点

- 1、数控刨台式铣镗床分主轴箱式和方滑枕式两种结构。
- 2、主轴箱式结构有带固定平旋盘和可拆卸平旋盘两类
- 3、基础大件均选用HT300
- 4、任意4轴联动，如搭配回转台可五轴联动
- 5、X、Y、Z、 B轴采用光栅尺全闭环控制
- 6、X、Z坐标运动导轨采用重载滚柱直线导轨，切削力大
- 7、可选配多种功能附件，扩大加工范围，提高加工效率

注：型号带B的可配拆卸式的平旋盘，也可配其他附件头带A的是带固定平旋盘结构，不可配任何附件头没有后缀的是方滑枕结构，可配其他附件头

MAIN FEATURES

1. The CNC planer-type milling and boring machine has two structures: the headstock type and the square ram type.
2. The headstock-type structure has two categories: with a fixed facing head and a detachable facing head.
3. HT300 is selected for all the major basic components.
4. It enables arbitrary four-axis linkage, and five-axis linkage is available when equipped with a rotary table.
5. The X, Y, Z and B axes adopt full closed-loop control with grating scales.
6. The linear guideways with heavy-duty rollers are applied to the motion guideways of X and Z axes, which can have strong cutting force.
7. A variety of functional accessories can be optionally configured to expand the machining range and improve the machining efficiency.

Note:

"B" type can equipped with removable facing head, and some other milling head etc.

"A" type means with a fixed facing head structure, this type can't equipped with any other milling head.

Without suffix means with square ram

主要规格和技术参数 SPECIFICATION

型号Items	TK6511A(固定平旋盘) TK6513A(固定平旋盘) TK6516A(固定平旋盘) TK6511A(Fixed Rotating table)TK6513A(Fixed Rotating table)TK6516A(Fixed Rotating table)			TK6513	TK6516	单位
	TK6511B	TK6513B	TK6516B			
主轴 Spindle						
主轴直径 Spindle diameter	110	130	160	130	160	mm
铣轴端部直径 Milling spindle end diameter	221.44	221.44	260	221.44	260	mm
主轴锥孔 Spindle taper	ISO 50	ISO 50	ISO 50	ISO 50	ISO 50	--
主轴转速 Spindle speed	AB:10-2000 B:10-3000	AB:10-2000 B:10-3000	AB:10-2000 B:10-2500	10-2500	10-2000	rPm
主电机功率 Main motor power	19	25	31	44	58	kw
滑枕截面尺寸 Ram section size	--	--	--	420x480	420x480	mm
主轴箱鼻端尺寸 Spindle nose size	φ360x400	φ380x400	φ420x500	--	--	mm
平旋盘直径 Rotating table diameter	670	800	800	--	--	mm
平旋盘转速 Rotating table speed	7-170	2-130	2-130	--	--	rpm
平旋盘最大扭矩 Max rotating table torque	4000	4000	4000	--	--	Nm
行程 travel						
X轴(工作台左右移动) X axis(table moving left and right)	2 / 3 / 4	2 / 3 / 4 / 5 / 6	2 / 3 / 4 / 5 / 6	2 / 3 / 4 / 5 / 6	2 / 3 / 4 / 5 / 6	m
Y轴(主轴箱上下移动) Y axis(spindle moving up and down)	1600/2000	2000/2500/3000	2000/2500/3000	2500/3000/4000	2500/3000/4000	mm
Z轴(立柱前后移动) Z axis(column moving forward and backward)	1000/1600	1600/2000	1600/2000	2000/2500	2000/2500	mm
W轴(镗轴伸缩) W axis (boring axis telescopic)	600	800	800	800	800	mm
V轴(滑枕伸缩) V axis(Ram telescopic)	--	--	--	1000	1200	
U轴(滑块径向移动) U axis(slider moves radially)	200	300	300	--	--	mm
A轴(工作台回转) A axis(Table rotation)	360°	360°	360°	360°	360°	°
工作台(转台部分可根据需要与主机任意组合) Worktable (turntable part can be combined with the host as needed)						
工作台尺寸(宽x长) worktable size(W*L)	1250x1400 1400x1600	1600x1800 1800x2200	2000x2500 2500x3000	2500x3000 3000x3500	3000x3500 3000x4000	mm
工作台最大承重 Max.worktable load	10000	16000	25000	40000	60000	Kg
选配项 Optional	刀库、铣头、主轴内冷，刀具测量、工件测量、工作台半防护 Tool magazine, variety milling heads, coolant through spindle, tool setter, workpiece measurement,semi-protection of the worktable					



CNC FLOOR
TYPE MILLING
AND BORING
MACHINE
数控落
地铣镗床

数控落地铣镗床具有扭矩大，转速高，转速范围宽等特点。适用不同材质不同尺寸的刀具，可以对不同材质不同尺寸的工件进行重切削和精加工。如配合回转工作台使用，可在一次装夹内完成多面多工序加工。

The CNC floor-type milling and boring machine has the characteristics of large torque, high rotational speed and a wide rotational speed range. It is suitable for cutting tools of different materials and sizes, and can perform heavy cutting and finishing machining on workpieces of different materials and sizes. When used with a rotary table, it can complete multi-sided and multi-process machining in a single clamping.

主要特点

- 1.静压导轨
- 2.高刚性床身，多重支撑
- 3.全封闭主轴箱
- 4.Y轴螺母旋转
- 5.X轴齿轮齿条驱动，可选择双电机双齿轮消隙机构，也可选择单电机双齿轮消隙机构
- 6.主传动箱与方滑枕同步进给，具有高速低噪音，高扭矩特点。
- 7.进口钢丝绳配重平衡，先进独有的平衡吊点
- 8.立柱双层设计
- 9.床身立柱导轨全面磨削
- 10.立柱导轨带有卸荷装置
- 11.方滑枕为四面全包形式，自带补偿机构

MAIN FEATURES

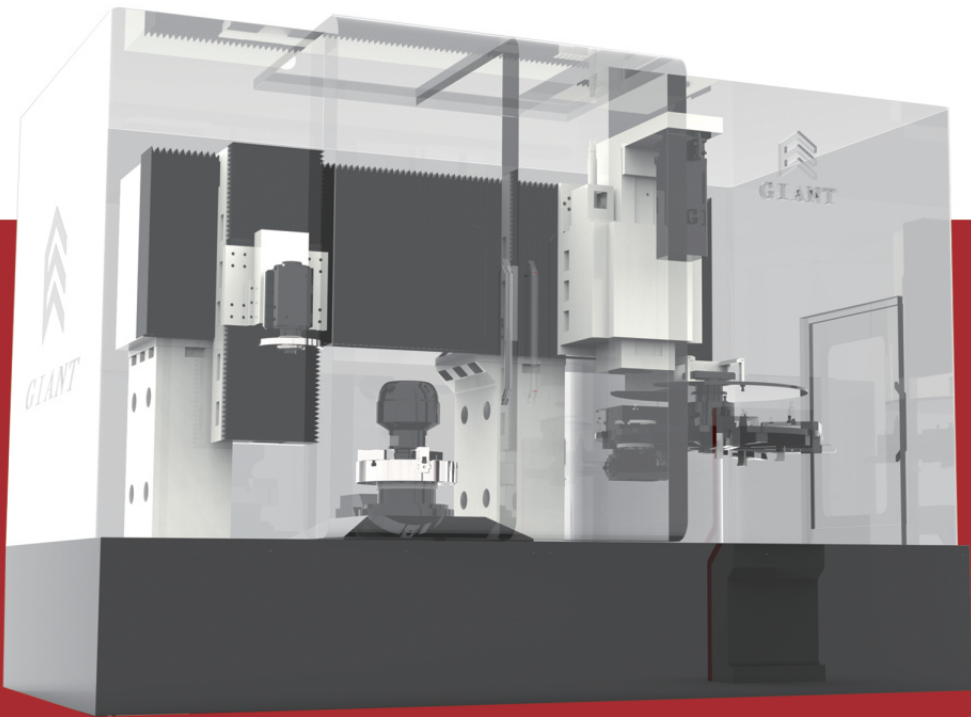
- 1.Hydrostatic guideway
2. High-rigidity bed with multiple supports
3. Fully enclosed headstock
- 4.The nut of the Y-axis rotates
- 5.The X-axis is driven by a gear rack. A dual-motor/ single-motor dual-gear backlash elimination mechanism can be selected.
- 6.The main transmission box and the ram feed synchronously, featuring high speed, low noise and high torque.
7. Imported steel wire rope counterweight balance and advanced and unique balancing suspension points
8. Double-layer design of the column
9. The surface of guideways of the bed and the column are all ground.
- 10.The column guideways are equipped with a unloading device.
11. The ram is in a fully enclosed four-sided form and comes with a self-compensation mechanism.

主要规格和技术参数
SPECIFICATION

参数名称 Items	单位Unit	TK6913	TK6916	Tk6920	TK6926
主轴直径 Spindle Diameter	mm	Φ 130	Φ 160	Φ 200	Φ 260
主轴锥孔 Spindle Taper	ISO	50	50	50	60
主轴转速范围 Spindle Speed	r/min	0.5–1500	0.5–1500	0.5–1500	0.5–1500
铣轴端部尺寸 Milling Spindle End Size	mm	Φ 221.44	Φ 280	Φ 320	Φ 400
滑枕截面尺寸 Ram Section	mm	420 × 460	480 × 520	480 × 520	680 × 800
主电机功率 Main Motor Power	kw	30	55	75	110
立柱行程（X轴） Column Travel	mm	4000+n × 1000	6000+n × 1000	6000+n × 1000	5000+n × 1000
主轴箱垂直行程（Y轴） Headstock Vertical Travel	mm	2000–4000	3000–6000	3000–6000	4000–6000
主轴行程（Z轴） Spindle Travel	mm	700	1200	1200	1600
滑枕行程（W轴） Ram Travel	mm	800	1200	1200	1600
主轴和滑枕总行程 Total Travel of Spindle and Ram	mm	1500	2400	2400	3200
立柱移动速度（X） Column Feed Speed	mm/min	0.5–10000	0.5–8000	0.5–8000	0.5–6000
主轴箱垂直移动速度（Y） Headstock Feed Speed	mm/min	0.5–10000	0.5–8000	0.5–8000	0.5–6000
主轴移动速度(W) Spindle Feed Speed	mm/min	0.5–6000	0.5–6000	0.5–6000	0.5–4500
滑枕移动速度（Z） Ram Feed Speed	mm/min	0.5–6000	0.5–6000	0.5–6000	0.5–4500
数控系统 CNC System	FANUC/SIEMENS				

选配 Optional:

1. 刀库 Tool magazine
- 2.主轴内冷 Coolant through the spindle
- 3.附件头：直角铣头，万能铣头，伸长铣头，平旋盘 Right angle milling head, universal milling head, extended milling head, facing head;Manual/ Automatic
- 4.附件库 Accessory magazine
- 5.独立操作间 Independent operation unit



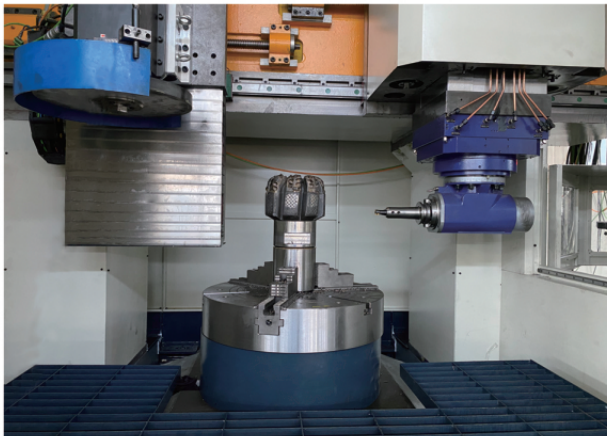
PDC MATRIX
BIT CNC TURNING
MILLING AND
GRINDING
MACHINING
CENTER
PDC 石油钻头
车铣磨复合加工中心

主要特点

- 此设备集合了车床、铣床、磨床的功能，节省占地和人工成本
- 加工效率大大提高，一次装卡完成了三面三次的工序任务，产品精度大大提高
- 配备高精度的测量系统和反馈装置，实时监测和调整加工过程，确保加工精度的稳定性
- CE标准

MAIN FEATURES

- This equipment integrates the functions of a lathe, a milling machine, and a grinder, saving floor space and labor costs.
- Processing efficiency improved ,It enables various machining operations that were previously carried out by multiple separate machines, providing a compact and cost - effective solution for manufacturers, product accuracy improved also.
- equipped with high-precision measurement system and feedback device, which can monitor and adjust the machining process in real time to ensure the stability of machining accuracy.
- CE Standard

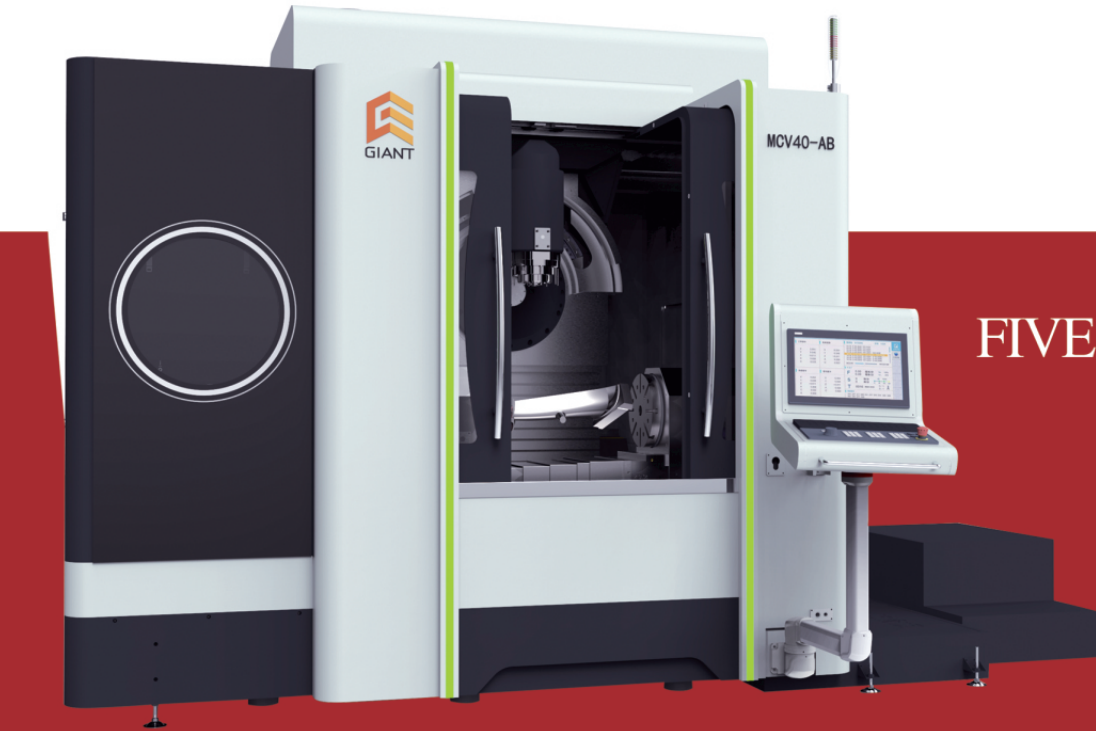


主要规格和技术参数
SPECIFICATION

	项目items	CXM630	unit
主要参数 Main specifications	最大回转直径 Max swing diameter	630	mm
	最大车削直径 Max turning diameter	630	mm
	最大加工高度 Max machining height	650	mm
	工作台最大荷重 Max load capacity of table	500	Kg
工作台 Worktable	工作台类型 Chuck type	液压 hydraulic	
	工作台尺寸 chuck size	630	mm
	额定转速rated speed	350	Rpm
	最高转速 max speed	1000	Rpm
	主轴电机功率 max motor power	22	Kw
	最大扭矩max torque	600	N.m
磨削主轴 Grinding spindle	砂轮直径 grind wheel diameter	500	mm
	磨削主轴最高转速 Max grinding speed	3000	rpm
	磨头自动转角度 Swing angle of grinding head	± 10	°
	磨削电机功率 Grinding motor power	15	KW
	铣削电机功率 Milling motor power	22	KW
铣主轴 Milling spindle	铣削主轴最高转速 Max milling spindle speed	3500	rpm
	铣削主轴最大扭矩 Max milling spindle torque	560	N.m
	工作台前后移动行程（Y轴） The worktable move forward and back (Y axis)	360	mm
行程 travel	右车铣刀架行程（X2） Right turn mill tool post horizontal travel (X2)	100-550 (tool exchange travel + 500)	mm
	左磨削刀架行程（X1） Left grinding tool post Horizontal travel(X1)	0-500	mm
	右车铣刀架垂直行程（Z2） Right turn mill tool post vertical travel (Z2)	350	mm
	左磨削刀架垂直行程（Z1） Left grinding tool post vertical travel(Z1)	600	mm
	主轴鼻端 Tool taper	BT50	
刀库 Tool magazine	刀架型式 Tool magazine type	ATC	
	刀具数量 Tool capacity	8	stations
精度 Accuracy	X/Y/Z 轴定位精度 X/Y/Z positioning accuracy	± 0.01	mm
	C轴 定位精度 C axis positioning accuracy	8	''
	X/Y/Z 轴重复定位精度 X/Y/Z re-positioning accuracy	± 0.007	mm
	C轴重复定位精度 C axis re- positioning accuracy	6	''
	数控系统 CNC system	Siemens One	
其他 others	设备重量（约） Machine weight(about)	25	tons
	设备尺寸 Machine size	5700x3340x3765	mm

注：
1.数控系统可选配海德汉，发那科等
2.可选配雷尼绍工件测量和对刀仪
3.刀库数量可根据客户要求扩容 more tool stations are optional

note:
1.Heidenhain, Fanuc system is optional
2.Renishaw workpiece measurement system, tool measurement system are optional
3.more tool stations are optional



FIVE AXIS BLADE
MILLING
MACHINING
CENTER
五轴叶片铣削
加工中心

主要特点

- 可实现五轴联动，能够实现对复杂曲面的高精度加工，满足叶片等精密零件的加工要求
- 配备高精度的测量系统和反馈装置，实时监测和调整加工过程，确保加工精度的稳定性
- 主轴带温度补偿功能
- CE标准

MAIN FEATURES

- The machine can achieve five-axis simultaneous machining, enabling high-precision machining of complex curved surfaces and meeting the machining requirements of precision parts such as blades.
- Equipped with high-precision measurement system and feedback device, which can monitor and adjust the machining process in real time to ensure the stability of machining accuracy.
- The spindle with temperature compensation function
- CE Standard

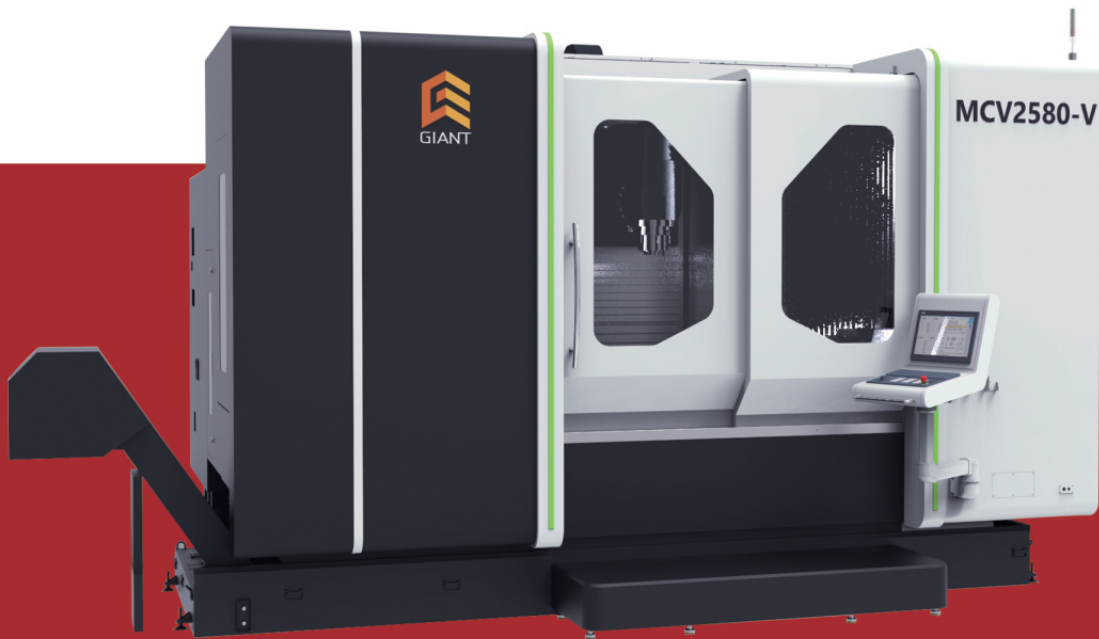


主要规格和技术参数
SPECIFICATION

	项目items	MCV40-AB	MCV80-AB	unit
主要参数 Main specifications	最大回转直径 Max swing diameter	320	400	mm
	盘面最大间距 The distance between two chucks	690	1200	mm
	最大加工尺寸 Max machining size	500	900	mm
	工作台最大荷重 Max load capacity of table	100	200	Kg
行程 travel	X 轴 (X axis)	700	1200	mm
	Y 轴 (Y Axis)	400	400	mm
	Z 轴 (Z axis)	550	550	mm
	U 轴(尾座) U Axis (Tailstock)	350	700	mm
	A/A1轴 (A/A1 axis)	360	360	°
	B axis (摇头头) B Axis (tilting head)	± 50	± 50	°
主轴 spindle	主轴锥孔 spindle taper	HSKA63	HSKA63	
	主轴功率 spindle motor	31.5kw	31.5kw	kw
	主轴转速max spindle speed	18000	18000	Rpm
进给系统 Feed system	X/Y/Z 快移速度 X/Y/Z axis rapid moving speed	30	30	m/min
刀库系统 Tool magazine	刀柄类型 tool taper	HSKA63	HSKA63	
	刀库容量 tool capacity	24 (选配30)	24 (选配30)	把
	最大刀具直径 (满刀/相邻空刀) Max tool diameter(ful tools/adjacent empty tool)l	75/110	75/110	mm
	最大刀重 Max tool weight	8	8	Kg
精度 Accuracy	X/Y/Z 轴定位精度 X/Y/Z positioning accuracy	0.005	0.005	mm
	A/B轴 定位精度 A/B axis positioning accuracy	8	8	''
	X/Y/Z 轴重复定位精度 X/Y/Z re-positioning accuracy	0.003	0.003	mm
	A/B轴重复定位精度 A/B axis re-positioning accuracy	4	4	''
其他 others	数控系统 CNC system	Siemens One	Siemens One	
	设备重量 (约) Machine weight(about)	11	15	tons
	设备尺寸 Machine size	4200 × 3500 × 3500	5500 × 3800 × 3500	mm

注：1.数控系统可选配海德汉，发那科等
2.可选配雷尼绍工件测量和对刀仪
3.可选配主轴防碰撞保护
4.车削功能为选配，实现车铣复合功能为一体，车削转速可达2500rpm

Note: 1.Heidenhain, Fanuc system is optional
2.Renishaw workpiece measurement system, tool measurement system are optional
3.Spindle collision protection function
4.Turning function is optional, achieve turning and milling function, turning speed can up to 2500rpm



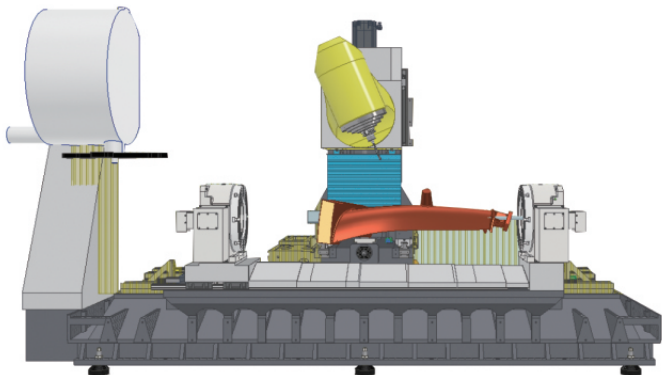
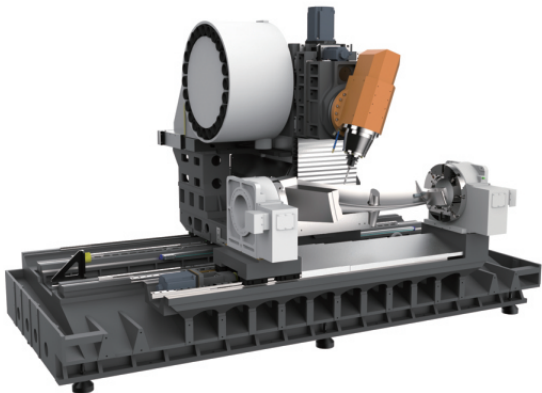
FIVE AXIS
BIG BLADE
MILLING
MACHINING
CENTER
大叶片五轴
铣削加工中心

主要特点

- 可实现五轴联动，能够实现对复杂曲面的高精度加工，满足叶片等精密零件的加工要求
- 配备高精度的测量系统和反馈装置，实时监测和调整加工过程，确保加工精度的稳定性
- 主轴带温度补偿功能
- CE标准

MAIN FEATURES

- The machine can achieve five-axis simultaneous machining, enabling high-precision machining of complex curved surfaces and meeting the machining requirements of precision parts such as blades.
- Equipped with high-precision measurement system and feedback device, which can monitor and adjust the machining process in real time to ensure the stability of machining accuracy.
- The spindle with temperature compensation function
- CE Standard



主要规格和技术参数
SPECIFICATION

	项目items	MCV1580-AB	MCV2580-AB	unit
主要参数 Main specifications	最大回转直径 Max swing diameter	500	700	mm
	盘面最大间距 The distance between two chucks	1500	2000	mm
	最大加工尺寸 Max machining size	1200	1600	mm
	工作台最大荷重 Max load capacity of table	单转台 single chuck: 350 双转台 double chuck: 600	单转台 single chuck: 350 双转台 double chuck: 600	Kg
行程 travel	X 轴 (X axis)	1500	2500	mm
	Y 轴 (Y Axis)	500	800	mm
	Z 轴 (Z axis)	500	850	mm
	U 轴(尾座) U Axis (Tailstock)	800	1600	mm
	A/A1轴 (A/A1 axis)	360	360	°
主轴 spindle	B axis (摇摆头) B Axis (tilting head)	± 50	± 50	°
	主轴锥孔 spindle taper	HSKA100	HSKA100	
	主轴功率 spindle motor	36.7/44	36.7/44	kw
进给系统 Feed system	主轴转速max spindle speed	12000	12000	Rpm
	X/Y/Z 快移速度 X/Y/Z axis rapid moving speed	20	20	m/min
刀库系统 Tool magazine	刀柄类型 tool taper	HSKA100	HSKA100	
	刀库容量 tool capacity	24 (选配30T/40T)	24 (选配30T/40T)	把
	最大刀具直径 (满刀/相邻空刀) Max tool diameter(ful tools/adjacent empty tool)	150	150	mm
	最大刀重 Max tool weight	15	15	Kg
精度 Accuracy	X/Y/Z 轴定位精度 X/Y/Z positioning accuracy	0.012/0.01/0.006	0.015/0.01/0.006	mm
	A/B轴 定位精度 A/B axis positioning accuracy	8	8	“ ”
	X/Y/Z 轴重复定位精度 X/Y/Z re-positioning accuracy	0.008/0.006/0.004	0.01/0.006/0.004	mm
	A/B轴重复定位精度 A/B axis re- positioning accuracy	4	4	“ ”
其他 others	数控系统 CNC system	Siemens One	Siemens One	
	设备重量 (约) Machine weight(about)	18	20	tons
	设备尺寸 Machine size	7000x2600x2600	8000 × 2600 × 2600	mm

注：1.数控系统可选配海德汉，发那科等
2.可选配雷尼绍工件测量和对刀仪
3.可选配主轴防碰撞保护
4.车削功能为选配，实现车铣复合功能为一体，车削转速可达2500rpm

Note: 1.Heidenhain, Fanuc system is optional
2.Renishaw workpiece measurement system, tool measurement system are optional
3.Spindle collision protection function
4.Turning function is optional, achieve turning and milling function, turning speed can up to 2500rpm



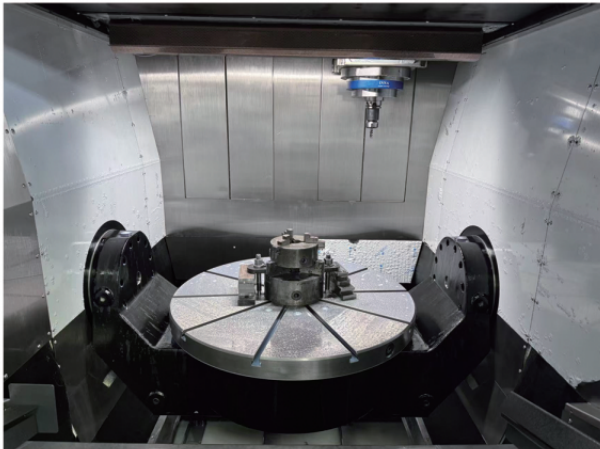
VERTICAL
FIVE AXIS
SIMULTAN-
EOUSLY
MILLING
MACHINING
CENTER
立式五轴
联动加工中心

主要特点

- 天车式五轴加工中心，配备A,C轴摇篮式的五轴转台，高速电主轴等进口功能部件，可实现一次装卡，全序加工，大大提高加工效率
- A 轴采用双力矩电机驱动使传动系统具有很高的运动精度和传动刚性

MAIN FEATURES

- The gantry-type five-axis machining center, with A-C axis tilting five-axis rotary table,high-speed motorized spindle and other imported functional components. It can achieve one-time clamping and full-sequence machining, which greatly improves the machining efficiency.
- The A-axis is driven by dual torque motors, enabling the transmission system to have extremely high motion accuracy and transmission rigidity.



主要规格和技术参数
SPECIFICATION

	类目items	BMU400	BMU500	BMU600	BMU650	BMU800	BMU1000	BMU1250	单位unit
工作台 worktable	工作台直径 Table size	400	500	600	650	800	950	1250	mm
	工作台承重 Load capacity	150	200	500	600	850	2000	2500	kg
	加工范围 Machining range	Ø500×400	Ø600×450	Ø640×500	Ø800×550	Ø980×600	Ø1150×950	Ø1360×700	mm
进给系统 Feed system	X/Y/Z轴行程 X/Y/Z Axis travel	450/550/400	550/650/450	460/600/400	700/800/550	800/800/600	1150/950/950	1250/1300/800	mm
	A轴回转范围 A axis swing angle	±120	±120	±120	±120	±120	±120	±120	°
	C轴旋转范围 C axis swing angle	±360	±360	±360	±360	±360	±360	±360	°
主轴 spindle	主轴锥孔 spindle taper	HSK-A63	HSK-A63	HSK-A63	HSK-A63	HSK-A63	HSK-A100	HSK-A100	
	主轴功率 spindle motor	27.5/33.5	27.5/33.5	27/33	42/46	27.5/33.5	36.7	45/54	Kw
	主轴扭矩 spindle torque	100/120	100/120	65/81	200/220	100/120	200	350/430	Nm
	最大转速 Max speed	18000	18000	18000	12000	18000	12000	10000	rpm
	主轴中心出水压力 High pressure coolant through spindle	40	40	40	40	40	40	40	bar
刀库系统 Tool magazine	刀库容量 Tool capacity	24	24	30	40	40	40	40	pcs
精度 Accuracy	X/Y/Z 轴定位精度 X/Y/Z positioning accuracy	0.006	0.006	0.006	0.006	0.006	0.006	0.006	mm
	A/C轴定位精度 A/C axis positioning accuracy	6	6	6	6	6	6	6	”
	X/Y/Z 轴重复定位精度 X/Y/Z re-positioning accuracy	0.004	0.004	0.004	0.004	0.004	0.004	0.004	mm
	A/C轴重复定位精度 A/C axis re-positioning accuracy	4	4	4	4	4	4	4	”
其他 others	数控系统 CNC system	Siemens one	Siemens one	Siemens one	Siemens one	Siemens one	Siemens one	Siemens one	
	设备重量 (约) Machine weight (about)	6500		10000	12000	13000	16000	35000	
	设备尺寸 Machine size	4x3.2x3.5		4x3.8x3.2	3.8x5x3.6	4x5x4	4.9x3.85x3.3	6.9x5.3x3.5	

- 选择配置：
- 刀库数量根据型号不同，可扩展至40工位，60工位
 - 中心出水压力可选配70bar
 - 主轴温度补偿
 - 主轴转速根据型号不同，可选配
 - 车削功能为选配，实现车铣复合功能

- Optional:
- Tool numbers are optional based on different machine model
 - CTS 70Bar
 - Spindle temperature compensation function
 - Spindle speed is optional
 - Turning function is optional



主要特点

●高刚性的结构设计，配备B,C轴摇篮式的五轴转台，高速电主轴等进口功能部件，可实现一次装卡，全序加工，大大提高加工效率。

MAIN FEATURES

●High rigidity structure design, with B-C axis tilting five-axis rotary table,high-speed motorized spindle and other imported functional components. It can achieve one-time clamping and full-sequence machining, which greatly improves the machining efficiency.



主要规格和技术参数
SPECIFICATION

	类目items	FVC450	FVC650	FVC700	单位unit
工作台 worktable	工作台直径 Table size	450	650	700	mm
	工作台承重 Load capacity	200	300	500	kg
进给系统 Feed system	X/Y/Z轴行程 X/Y/Z Axis travel	400/350/350	620/520/460	720/600/500	mm
	B轴回转范围 B axis swing angle	-50~+110	-50~+110	-65~+120	°
	C轴旋转范围 C axis swing angle	360	360	360	°
主轴 spindle	主轴锥孔 spindle taper	ISO40	ISO40	ISO40	
	主轴功率 spindle motor	5.5/7.5 (Fanuc)	18/21 (Siemens)	18/21(Siemens)	Kw
	最大转速 Max speed	12000	12000	12000	rpm
刀库系统 Tool magazine	刀库容量 Tool capacity	30	30	30	pcs
精度 Accuracy	X/Y/Z 轴定位精度 X/Y/Z positioning accuracy	0.006	0.006	0.006	mm
	A/C轴定位精度 A/C axis positioning accuracy	6	6	6	''
	X/Y/Z 轴重复定位精度 X/Y/Z re-positioning accuracy	0.004	0.004	0.004	mm
	A/C轴重复定位精度 A/C axis re- positioning accuracy	4	4	4	''
其他 others	数控系统 CNC system	FANUC 0i MF	Siemens one	Siemens one	
	设备重量 Machine weight	6000	8800	9500	kg
	设备尺寸 Machine size	4126X2723X3013	3863X2730X3310	4963X2915X3005	mm

选择配置：

- 刀库数量根据型号不同，可扩展至40工位，60工位
- 中心出水压力可选配70bar
- 主轴温度补偿
- 主轴转速根据型号不同，可选配

Optional:

- Tool numbers are optional based on different machine model
- CTS 70Bar
- Spindle temperature compensation function
- Spindle speed is optional

FUNCTION ATTACHMENTS 功能附件



中心内出水
CTS



电主轴
Motorized spindle



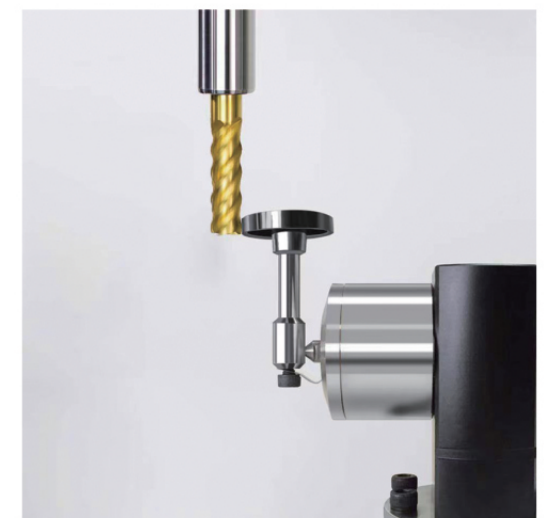
角度头
90 Degree milling head



光栅尺
Optical scale



油冷机
Oil cooling machine



对刀仪
Tool presetter

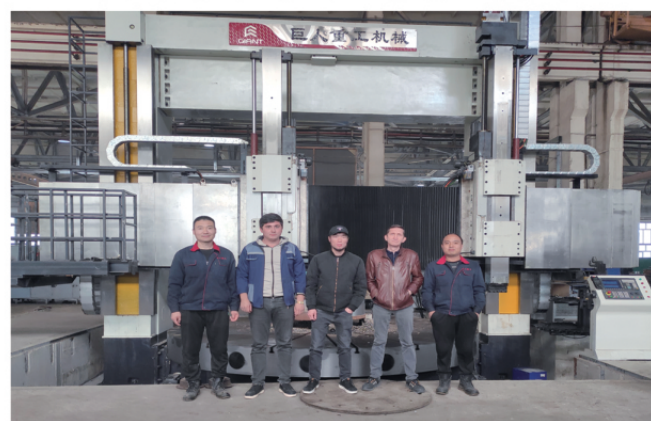
PRODUCT CASES 产品案例



VTL1600ATC+C 数控立式车铣复合加工中心
CNC Vertical Turning And Milling Machining Center



CK5250 数控双柱立式车床
5 meters vertical lathe with side tool post



CXK5250 客户现场
5 meters vertical turning and milling machine



CXM630 石油钻头车铣磨专机
CXM630 Petroleum Drill Bit Turning, Milling and Grinding Machine



CXK5240 数控双柱立式车铣复合
4 meters vertical turning and milling machine



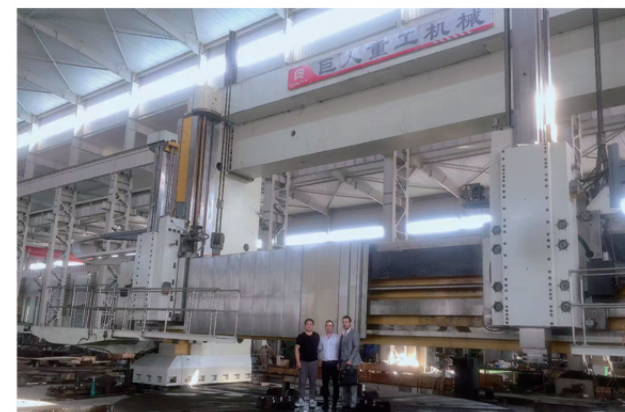
CXK5263 数控双柱立式车铣复合
6.3 meters vertical turning and milling machine
To Russia customer



CXK5280 数控双柱立式车铣复合机床
8 meters vertical turning and milling machine



CXK52100 立式车铣复合加工中心
10 meters vertical turning and milling machine



CXK52125 数控双柱立式车铣复合机床
12.5 meters vertical turning and milling machine



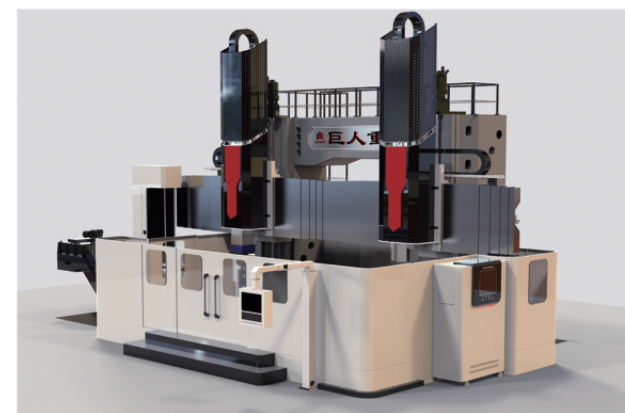
Ck52125 数控双柱立式车床
12.5 meters Double Column Vertical lathe



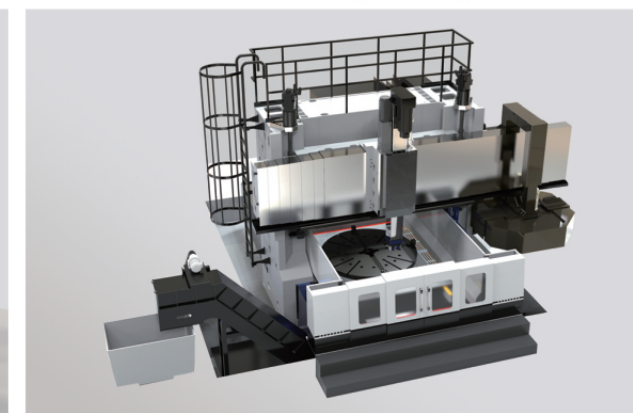
24米双龙门镗铣加工中心
4300x24000 Double Column machining center



五轴叶片铣削加工中心
Five axis blade Milling Machining Center



双柱立式车铣复合加工中心
Vertical turning and milling machining center



LMCXK230 龙门移动式车铣复合加工中心
Column Move Vertical turning and Milling Machining center