品质·服务·创新
QUALITY·SERVICE·INNOVATION

杭州川禾机械有限公司
Hangzhou Chuanhe Machinery Co., Ltd.

CNC

精密车床

PRECISION LATHE

专注于双主轴双刀塔车铣复合、车床自动化的研发与制造
Focusing on the R & D and manufacture of dual spindle and dual turret turning and milling, lathe automation

www.hz-ch.com

电话 TEL
400-060-1698

邮箱 E-MAIL
sales@hz-chjx.com

地址 ADD
中国浙江省杭州市萧山区红山大道177号
No.177 Hongshan Avenue, Xiaoshan District,
Hangzhou, Zhejiang, China

样本参数及信息如有变化不另行通知。如需更多详情，请联系川禾机械。
Sample parameters and information are subject to change without notice.
For more details, please contact Chuanhe Machinery.

-川禾公众号-

-川禾抖音-

ABOUT

关于川禾

专注于双主轴双刀塔车铣复合
车床自动化的研发与制造

Focusing on the R & D and manufacture of dual spindle and dual turret turning and milling, lathe automation

品质 · 服务 · 创新
QUALITY · SERVICE · INNOVATION

发展历程
DEVELOPMENT HISTORY

2009	2015	2019	2022	2023	FUTURE
排刀车床 刀塔车床	车铣复合 自动化专机	车床自动化线 轴承圈车削专机自动化	数控平面磨床， 实现智能立体仓储物流	双主轴双刀塔 车铣系列	开启数字化 工厂新篇章

杭州川禾机械有限公司是一家集研发、制造、销售高端数控机床、柔性生产加工线、数控精密磨床和装配线的企业，公司设有大陆和台湾两个研发场所，通过不断引进国内外精益的技术以及与西交大、浙大等高校合作输送优质人才，为客户提供智能化制造及数字化工厂的解决方案。公司具有大量工程经验和与国内外高端数控机床同步的设计制造技术，并被评为国家高新技术企业、中小科技型企业、最具成长型企业。

Hangzhou Chuanhe Machinery Co., Ltd. is an enterprise that integrates R&D, manufacturing and sales of high-end CNC machine tools, flexible production processing lines, CNC precision grinding machines and assembly lines. The company has two R & D sites in Chinese Mainland And Taiwan. By continuously introducing lean technologies at home and abroad and cooperating with universities such as West Jiaotong University and Zhejiang University to transport high-quality talents, the company provides customers with solutions for intelligent manufacturing and digital factories.The company has a lot of engineering experience and design and manufacturing technology synchronized with high-end CNC machine tools at home and abroad, and has been rated as a national high-tech enterprise, a small and medium-sized science and technology enterprise, and the most growing enterprise!

公司一直贯彻“品质、服务、创新”的经营理念，牢牢以“为客户提供有价值的产品”为导向，为客户提供售前、售中、售后的交钥匙工程。

The company has always implemented the business philosophy of "quality, service, innovation", firmly guided by "providing customers with valuable products", and providing customers with turnkey projects before, during and after sales.

公司所有产品的研发、设计、制造、售后服务环节严格执行ISO9001-2000质量管理体系，制造过程的各个环节都有品管介入确保产品的稳定性。

The company strictly implements the ISO9001-2000 quality management system in the R&D, design, manufacturing and after-sales services of all products, and quality control is involved in all aspects of the manufacturing process to ensure the stability of the products.

公司以整洁的工厂、先进的管理、严谨的态度、优质的服务，为员工提供了一个好的工作环境，为客户提供了优良的产品。川禾人以饱满的精神来迎接每一个挑战。

With neat factory, advanced management, rigorous attitude and high-quality service, the company provides a good working environment for employees and excellent products for customers. Chuanhe people meet every challenge with full spirit.

川禾使命：数智装备 服务全球

川禾愿景：打造世界级智能机床品牌

价值观：品质为本 创新突破 客户至上 合作共赢

专利证书
Patent Certificate

管理体制证书
Management System Certificate

目录
CONTENT

排刀车床
Gang tool lathe
01-04

刀塔车床
Turret lathe
04-08

车铣复合
Turn-mill compound
09-12

双主轴
Dual spindle
13-14

车床自动化线
Lathe automation line
15-16

7

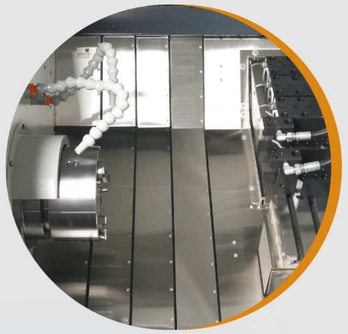
排刀车床 系列
GANG TOOL LATHE SERIES

P120 / P160 / P200

01

本机为卧式数控车床，底座与床身一体式铸件设计，床身导轨面45°整体斜床身设计，具有较大承载截面，可保证高精度切削加工。高刚性，低重心，主轴近距离的结构特点。

This machine is a horizontal CNC lathe, with integrated casting design of base and bed, 45 ° overall inclined bed design of bed guide surface, with a large load-bearing section, which can ensure high-precision cutting processing. Structural features of high rigidity, low center of gravity, and close spindle.



P160内部图

P160选配动力头

02

排刀设计，排刀座直线排刀，换刀快速精准，节省加工时间，减少维护成本。

Tool arrangement design, linear tool arrangement on tool post, fast and accurate tool change, saving processing time, and reducing maintenance costs.

03

单元主轴，轴径向刚性高，主轴热温升稳定，热变形小，动态回转精度高。

The unit spindle has high radial rigidity, stable thermal temperature rise, small thermal deformation, and high dynamic rotation accuracy.

P160选配刀塔

04

能够对各类零件完成内外圆柱面，圆锥面，圆弧面，端面，切槽，内外螺纹倒角等工序的切削加工。

Able to complete cutting processes for various types of parts, such as inner and outer cylindrical surfaces, conical surfaces, arc surfaces, end faces, grooves, and chamfering of internal and external threads.

主要应用行业
Main application industries

轴承圈
Bearing Ring

新能源汽车
New energy vehicles

半导体材料加工
Semiconductor material processing

小模数齿坯
Small module gear blank

排刀车床 系列
GANG TOOL LATHE SERIES

产品参数
Product Parameters

	P120	P160	P200
加工范围 Processing Range			
床鞍上最大旋径 Max swing diameter over saddle	Φ320mm	Φ400mm	Φ400mm
最大车削直径 Max turning diameter	Φ300mm	Φ300mm	Φ300mm
标准车削直径 Standard turning diameter	Φ120mm	Φ150mm	Φ150mm
拖板上回转直径 Swing diameter over cross slide	Φ126mm	Φ126mm	Φ126mm
最大车削长度 Max turning length	300mm	340mm	320mm
卡盘尺寸 Chuck size	5'	6'	8'
棒材容径 Bar capacity diameter	Φ36mm	Φ46mm	Φ52mm
主轴 Spindle			
主轴鼻端 Spindle nose	A 2-4	A 2-5	A 2-6
主轴轴承型号 Spindle bearing model	7014	7016	NN3020+100BAR +NN3018
主轴通孔径 Spindle bore diameter	Φ46mm	Φ46mm	Φ66mm
主轴传动方式 Spindle transmission mode	直驱 Direct drive	皮带传动 Belt drive	皮带传动 Belt drive
主轴传动比 Spindle transmission ratio	1：1	1：1	1：1
主轴最高转速 Max spindle speed	6000rpm	6000rpm	4200rpm
主轴额定扭矩 Rated torque of spindle	35.8Nm	63Nm	65Nm

	P120	P160	P200
X&Z轴 X&Z Axis			
X/Z轴最大行程 X/Z axis max travel	350/320mm	460/340mm	460/340mm
X/Z轴快速进给 X/Z axis rapid feed	30m/min	30m/min	30m/min
X/Z轴滑轨形式 X/Z axis slideway form	30mm 线轨 Wire track	35mm 线轨 Wire track	35mm 线轨 Wire track
X/Z轴滚珠螺杆直径/螺距 X/Z axis ball screw diameter/pitch	Φ25/32 mm/Pitch10	Φ32mm/Pitch10	Φ32mm/Pitch10
X/Z轴定位精度 X/Z axis positioning accuracy	0.008mm/1000mm	0.008mm/1000mm	0.008mm/1000mm
X/Z轴重复定位精度 X/Z axis repeat positioning accuracy	≤0.005mm	≤0.005mm	≤0.005mm
电机功率 Motor Power			
主轴马达功率 Spindle motor power	7.5kW	11kW	11kW
X轴伺服马达额定扭矩 Rated torque of X-axis servo motor	8.34Nm	8Nm	8Nm
Z轴伺服马达额定扭矩 Rated torque of Z-axis servo motor	8.34Nm	8Nm	8Nm
液压站电机 Hydraulic station motor	0.75kW	0.75kW	0.75kW
水泵电机 Water pump motor	0.55kW	0.55kW	0.55kW
热冷交换机 Hot cold exchanger	300W	300W	300W
其他参数 Other Parameters			
标准控制器 Standard controller	SYNTEC 22TA	SYNTEC 22TA	SYNTEC 22TA
刀库 Tool magazine	6排刀座 6 Rows of tool holders	6排刀座 6 Rows of tool holders	5排刀座 5 Rows of tool holders
四方型刀具 Square tool	≤20mm	≤20mm	≤25mm
圆形刀具 Round tool	Φ25mm	Φ25mm	Φ32mm
电压/功率需求 Voltage/power demand	380V/15kVA	380V/19kVA	380V/19kVA
油压箱容量 Hydraulic tank capacity	30L	30L	30L
机器重量 Machine weight	2000kg	2800kg	2800kg
外观尺寸(长X宽X高) External sizes (L*W*H)	2100×1600×1700mm	2200×1600×1700mm	2200×1600×1700mm

7

刀塔车床 系列
TURRET LATHE SERIES

C160 / C200 / C250 / C300 / C360

主要应用行业
Main application industries

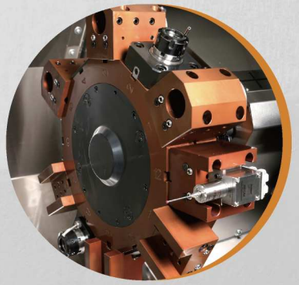
汽车轮毂单元
Automotive wheel hub unit

装备行业
Equipment Industry

减速机
Reducer

产品特点
Product Features

C160内部图


C200-500内部图

C300-1000内部图

01

本系列数控车床,整体30°斜床身设计,有效的抑制因重切削或高速运动产生的震动和变形,确保了机床足够的刚性和稳定性。

This series of CNC lathes is designed with an overall 30 ° inclined bed, effectively suppressing vibration and deformation caused by heavy cutting or high-speed motion, ensuring sufficient rigidity and stability of the machine tool.

02

采用高级米汉纳铸铁,所有铸件均采用HT300材料,经过人工时效(热处理)及自然时效方式去除内应力,为最佳刚性稳定性及精度保持性提供了保障。

Using advanced Meehanite cast iron, all castings are made of HT300 material, which has undergone artificial aging (heat treatment) and natural aging to remove internal stress, providing assurance for optimal rigidity stability and accuracy retention.

03

高精度单元主轴,轴径向刚性高,主轴热温升稳定,热变形小,动态回转精度高。

High precision unit spindle with high radial rigidity, stable thermal temperature rise of the spindle, small thermal deformation, and high dynamic rotation accuracy.

04

伺服刀塔,精密液压尾座,能够对长短轴类和盘类零件自动完成内外圆柱面,内外螺纹,圆锥面,圆弧面,端面,切槽,倒角等工序。

Servo turret, precision hydraulic tailstock, capable of automatically completing processes such as inner and outer cylindrical surfaces, inner and outer threads, conical surfaces, arc surfaces, end faces, grooving, chamfering, etc. for long and short axis and disc parts.

刀塔车床 系列
TURRET LATHE SERIES

	C160	C200		C250		C300			C360	
加工范围 Processing Range		300	500	500	1000	1000	1500	2000	2000	3000
床鞍上最大旋径 Max swing diameter over saddle	Φ400mm	Φ400mm	Φ560mm	Φ560mm	Φ580mm	Φ730mm	Φ730mm	Φ730mm	Φ770mm	Φ770mm
最大车削直径 Max turning diameter	Φ320mm	Φ320mm	Φ400mm	Φ400mm	Φ500mm	Φ620mm	Φ620mm	Φ640mm	Φ650mm	Φ650mm
标准车削直径 Standard turning diameter	Φ150mm	Φ200mm	Φ200mm	Φ250mm	Φ300mm	Φ300mm	Φ300mm	Φ300mm	Φ260mm	Φ260mm
拖板上回转直径 Swing diameter over cross slide	Φ300mm	Φ300mm	Φ300mm	Φ300mm	Φ300mm	Φ440mm	Φ440mm	Φ440mm	Φ500mm	Φ500mm
最大车削长度 Max turning length	300mm	300mm	488mm	488mm	1000mm	1000mm	1500mm	2240mm	2240mm	3100mm
卡盘尺寸 Chuck size	6'	8'	8'	10'	10'	12'	12'	12'	15'	15'
棒材容径 Bar capacity diameter	Φ42mm	Φ52mm	Φ52mm	Φ52mm	Φ72mm	Φ75mm	Φ75mm	Φ75mm	Φ165mm	Φ165mm
主轴 Spindle		300	500	500	1000	1000	1500	2000	2000	3000
主轴鼻端 Spindle nose	A 2-5	A 2-6		A 2-6	A 2-8	A 2-8			A 2-11	
主轴轴承型号 Spindle bearing model	NSK7016A5	NN3020+100BAR +NN3018		NN3020+ 100BAR +NN3018	NN3024+ 120BAR +NN3022	NN结构系列轴承 NN Structure series bearings			NN结构系列轴承 NN Structure series bearings	
主轴通孔径 Spindle bore diameter	Φ56mm	Φ66mm		Φ66mm	Φ86mm	Φ87mm	Φ105mm	Φ87mm	Φ131mm	
主轴传动方式 Spindle transmission mode	皮带传动 Belt drive	皮带传动 Belt drive		皮带传动 Belt drive	同步带传动 Synchronous belt drive	皮带传动 Belt drive			皮带传动 Belt drive	
主轴传动比 Spindle transmission ratio	1 : 1	1 : 1		1 : 1	1 : 1	1:2			1:2	
额定扭矩 Rated torque	63Nm	65Nm	89.5Nm	89.5Nm	151Nm	230Nm	230Nm	230Nm	230Nm	230Nm
主轴最高转速 Max spindle speed	6000rpm	4200rpm		4200rpm	3500rpm	2500rpm	2500rpm	2500rpm	2500rpm	2500rpm
电机功率 Motor power		300	500	500	1000	1000	1500	2000	2000	3000
主轴电机 Spindle motor	11kW	11kW		15kW		18.5kW			18.5kW	
X轴伺服马达额定扭矩 Rated torque of X-axis servo motor	8.34Nm	8.34Nm	11.5Nm	11.5Nm		20Nm			38Nm	
Z轴伺服马达额定扭矩 Rated torque of Z-axis servo motor	8.34Nm	8.34Nm	11.5Nm	11.5Nm		27Nm			38Nm	
液压站电机 Hydraulic station motor	1.5kW	1.5kW		1.5kW		1.5kW			1.5kW	
水泵电机 Water pump motor	0.55kW	0.55kW		0.55kW		0.55kW			0.55kW	
空调 Air-conditioning	300W	300W		300W		300W			300W	

	C160	C200		C250		C300			C360	
X&Z轴 X&Z Axis		300	500	500	1000	1000	1500	2000	2000	3000
X/Z轴最大行程 X/Z axis max travel	175+10/320mm	175+10 /320mm	230+15/ 530mm	230+15 /530mm	230+15 /530mm	300+20 /1085mm	190+6 /1600mm	300+30 /2285mm	360/2250 mm	360/2250 mm
X/Z轴快速进给 X/Z axis rapid feed	30m/min	30m/min		30m/min		20/25 m/min	24/24 m/min	20/25 m/min	12/20 m/min	
X/Z轴滑轨形式 X/Z axis slideway form	30mm 线轨 Wire track	30mm 线轨 Wire track	45mm 线轨 Wire track	45mm 线轨 Wire track	45mm 线轨 Wire track	硬轨 Hard track			硬轨 Hard track	
X/Z轴滚珠螺杆直径/螺距 X/Z axis ball screw diameter/pitch	Φ32mm/Pitch10	Φ32mm /Pitch10	Φ32/40mm *Pitch10	Φ32/40mm *Pitch10	Φ32/40mm *Pitch10	Φ40*Pitch 08/50mm *Pitch10	Φ32*Pitch 10/40mm *Pitch10	Φ40*Pitch 08/50mm *Pitch10	X轴Φ40mm/Pitch 06 X axis Φ40mm/Pitch 06 Z轴Φ50mm/Pitch 10 Z axis Φ50mm/Pitch 10	
X/Z轴定位精度 X/Z axis positioning accuracy	0.008/1000mm	0.008/1000mm		0.008/1000mm		0.008/ 1000mm	0.008/ 1000mm	0.01/ 1000mm	0.01/1000mm	
X/Z轴重复定位精度 X/Z axis repeat positioning accuracy	≤0.005mm	≤0.005mm		≤0.005mm		≤0.005mm	≤0.005mm	≤0.008mm	≤0.008mm	
刀塔 Turret		300	500	500	1000	1000	1500	2000	2000	3000
刀塔型号 Turret model	80-8T	80-8T	100-12T	100-12T		125-12T			125-12T	
换刀速度(相邻刀/对边刀) Tool change speed (adjacent tool/opposite tool)	0.27s/0.57s	0.27s/0.57s		0.27s/0.57s		0.37s/0.95s			0.37s/0.95s	
圆形刀具 Round tool	Φ32mm	Φ32mm	Φ40mm	Φ40mm		Φ50mm	Φ40mm	Φ50mm	Φ60mm	
四方型刀具 Square tool	≤25mm	≤25mm		≤25mm		≤32mm	≤25mm	≤32mm	≤32mm	
尾座 Tailstock		300	500	500	1000	1000	1500	2000	2000	3000
心轴内锥孔 Spindle taper hole	MT#4	MT#4	MT#5	MT#5	MT#5	MT#5/ 100mm/ Φ80mm	MT#6/ 105mm/ Φ100mm	MT#5/ 100mm/ Φ80mm	MT#5/ 100mm/ Φ80mm	MT#5/ 100mm/ Φ80mm
心轴控制方式 Spindle control method	液压可程式 Hydraulic programmable									
尾座本体行程 Travel of the tailstock body	200mm	200mm	400mm	400mm	400mm	915mm	1200mm	2285mm	2200mm	3285mm
尾座本体移动方式 Tailstock body movement mode	机械 Machinery									
其他参数 Other Parameters		300	500	500	1000	1000	1500	2000	2000	3000
标准控制器 Standard controller	FAUNC OI-TF					FAUNC OI-TF				
电压/功率需求 Voltage/power demand	380V/20kVA	380V/ 20kVA	380V/ 25kVA	380V/25kVA		380V/ 40kVA	380V/ 32kVA	380V/ 40kVA	380V/45kVA	
水箱容量 Water tank capacity	300L	300L		300L		300L	400L	300L	380L	
油压箱容量 Hydraulic tank capacity	60L	60L		60L		60L			60L	
机器重量 Machine weight	3000kg	3100kg	4000kg	4000kg	4100kg	6500kg			11000kg	16000kg
外观尺寸(长X宽X高) External sizes (L*W*H)	2200×1600 ×1700mm	2200×1600 ×1700mm	2600×1800 ×1900mm	2600×1800 ×1900mm	2600×1800 ×1900mm	4155×1910 ×1980mm	4128×1875 ×1907mm	4155×1910 ×1980mm	5228×2320 ×2207mm	6028×2320 ×2207mm

7

车铣复合 系列
TURN-MILL COMPOUND SERIES

P160Y / P160MY / C160MY / C200MY

主要应用行业
Main application industries

新能源汽车部件
New Energy Vehicle Components

航空插件
Aviation plug-in unit

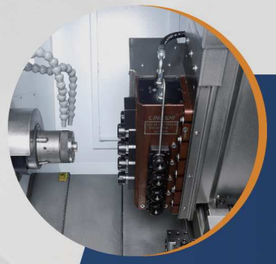
医疗器械
Medical Equipment

产品特点
Product Features

01

引进国际先进机型，设计独具匠心，概念超前，带车、铣、钻、攻、雕等复合加工能力，加工能力非常强大，性价比极高，特别适合于大批量复杂零件的加工。

Introducing internationally advanced models, with unique design and advanced concepts, equipped with composite processing capabilities such as turning, milling, drilling, tapping, and carving. The processing capability is very powerful and cost-effective, making it particularly suitable for processing large quantities of complex parts.


P160MY内部图

02

高精度单元主轴+磁环+碟刹，C轴分度精度高，轴径向刚性高，主轴热温升稳定,热变形小，动态回转精度高。

High precision unit spindle+magnetic ring+disc brake, high C-axis indexing accuracy, high radial rigidity of the shaft, stable thermal temperature rise of the spindle, small thermal deformation, and high dynamic rotation accuracy.

C200MY内部图

03

本机型设计布局合理，配合C轴(主轴)，X.Y.Z. A/B轴数控插补功能，实现多轴联动车铣复合加工。

The design layout of this model is reasonable, combined with the CNC interpolation function of the C-axis (spindle) and X.Y.Z.A/B axis, to achieve multi axis linkage turning and milling composite processing.

04

选配棒材送料机+接料器，实现复杂零件的高效率，高精度自动化加工。

Optional bar feeder+material loader to achieve high efficiency and high precision automatic processing of complex parts.

Y轴标配12工位BMT动力刀塔，可完成对各类长短轴零件的多轴联动复合加工。

The C160/200MY comes standard with a 12 station BMT power turret for the Y-axis, which can complete multi axis linkage composite machining of various long and short axis parts.

车铣复合 系列
TURN-MILL COMPOUND SERIES

	P160Y	P160MY	C160MY	C200MY
加工范围 Processing Range				
床鞍上最大旋径 Max swing diameter over saddle	Φ400mm	Φ480mm	Φ400mm	Φ560mm
最大车削直径 Max turning diameter	Φ320mm	Φ200mm	Φ225mm	Φ330mm
标准车削直径 Standard turning diameter	Φ200mm	Φ150mm	Φ150mm	Φ200mm
拖板上回转直径 Swing diameter over cross slide	Φ300mm	Φ250mm	Φ300mm	Φ300mm
最大车削长度 Max turning length	300mm	300mm	240mm	450mm
卡盘尺寸 Chuck size	6'	6'	6'	8'
棒材容径 Bar capacity diameter	Φ46mm	Φ46mm	Φ46mm	Φ52mm
主轴 Spindle				
主轴鼻端 Spindle nose	A 2-5	A 2-5	A 2-5	A 2-6
主轴轴承型号 Spindle bearing model	同步伺服电主轴 Synchronous servo electric spindle			
主轴通孔径 Spindle bore diameter	Φ66mm	Φ56mm	Φ66mm	Φ66mm
最小主轴定位精度(C轴) Min spindle positioning accuracy (C-axis)	0.001°主轴马达+磁环+碟刹 0.001 ° Spindle motor+Magnetic ring+Disc brake			
动态精度(C轴) Dynamic accuracy (C-axis)	±0.02°主轴马达+磁环+碟刹 ±0.02 ° Spindle motor+Magnetic ring+Disc brake			
额定扭矩 Rated torque	65Nm	125Nm	65Nm	103Nm
主轴最高转速 Max spindle speed	4200rpm	5000rpm	4500rpm	4200rpm
电机功率 Motor power				
主轴电机 Spindle motor	11kW	11kW	11kW	15kW
X/Z轴伺服马达额定扭矩 Rated torque of X/Z-axis servo motor	8.34Nm	11.5Nm/11Nm	8.34Nm	11Nm/ Y轴 Y Axis 10.5Nm
动力电机 Power motor	11Nm	11Nm	11Nm	20Nm
液压站电机 Hydraulic station motor	1.5kW	1.5kW	1.5kW	1.5kW
水泵电机 Water pump motor	0.55kW	0.55kW	0.55kW	0.55kW
空调 Air-conditioning	300W	300W	300W	300W

	P160Y	P160MY	C160MY	C200MY
X&Z轴 X&Z Axis				
X/Y/Z轴最大行程 X/Y/Z axis max travel	250/70/400mm	450/180/410mm	110/70/250mm	200/100/550mm
X/Y/Z轴快速进给 X/Y/Z axis rapid feed	18/16/18m/min	30/15/30m/min	28/8/28m/min	24/8/24m/min
X/Y/Z轴滑轨形式 X/Y/Z axis slideway form	30mm 线轨 Wire track	30mm 线轨 Wire track	30mm 线轨 Wire track	35m硬轨 Hard track 45mm滚柱 Cylindrical roller
X/Y/Z轴滚珠螺杆直径/螺距 X/Y/Z axis ball screw diameter/pitch	Φ32mm/Pitch10			
X/Y/Z轴定位精度 X/Y/Z axis positioning accuracy	0.008/1000mm	0.008/1000mm	0.008/1000mm	0.008/1000mm
X/Y/Z轴重复定位精度 X/Y/Z axis repeat positioning accuracy	≤0.005mm	≤0.005mm	≤0.005mm	≤0.005mm
刀塔 Turret				
刀塔型号 Turret model	BMT40-15T	BMT40-8T	BMT40-15T	BMT55-12T
换刀速度(相邻刀/对边刀) Tool change speed (adjacent tool/ opposite tool)	0.27s/0.57s	0.27s/0.57s	0.27s/0.57s	0.57s/0.95s
四方型刀具 Square tool	≤20mm			≤25mm
圆形刀具 Round tool	Φ32mm	Φ32mm	Φ32mm	Φ40mm
动力头(刀塔)刀具规格 Power head (turret) tool specifications	ER25(1~13mm)	ER25(1~16mm)	ER25(1~13mm)	ER32(3~22mm)
动力刀座最高转速 Max speed of powered tool holder	5000rpm	5000rpm	5000rpm	4000rpm
尾座 Tailstock				
心轴内锥孔 Spindle taper hole	/	/	MT#4	MT#4
心轴的直径 Diameter of the spindle	/	/	70mm	Φ80mm (套筒式 Sleeve type)
心轴的行程 Travel of the spindle	/	/	100mm	100mm
心轴控制方式 Spindle control method	/	/	液压可程式 Hydraulic programmable	
尾座本体行程 Travel of the tailstock body	/	/	200mm	400mm
尾座本体移动方式 Tailstock body movement mode	/	/	机械 Machinery	
其他参数 Other Parameters				
标准控制器 Standard controller	SYNTEC 22TA	SYNTEC 22TB	SYNTEC 22TB	FANUC 0I-TF
电压/功率需求 Voltage/power demand	380V/20kVA	380V/19kVA	380V/20kVA	380V/30kVA
水箱容量 Water tank capacity	120L	75L	300L	300L
油压箱容量 Hydraulic tank capacity	30L	30L	60L	60L
机器重量 Machine weight	3100kg	2800kg	3200kg	4500kg
外观尺寸(长X宽X高) External sizes (L*W*H)	2200×1600×1700mm	2200×1935×2110mm	2200×1600×1700mm	2650×1600×1900mm

7

双主轴 系列
DUAL SPINDLE SERIES

C200MYS / CX200 / P90S

主要应用行业
Main application industries

新能源汽车部件
New Energy Vehicle Components

电动工具行业
Electric tool industry

农工机械
Agricultural machinery

01

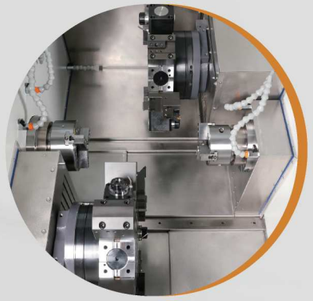
采用双主轴布局形式，相对排列，两组刀塔上下布置，上刀塔带Y轴。机床独特的双通道控制系统可实现双主轴、双刀塔四轴的联动加工。副主轴接续主轴夹持工件，对夹持端继续加工，完成工件的全部加工工序。

Adopting a dual spindle layout with relative arrangement, two sets of turrets are arranged up and down, and the upper and lower turrets are equipped with a Y-axis. The unique dual channel control system of the machine tool can achieve linkage processing of dual spindle and dual turret four axes. The sub-spindle connects the spindle to clamp the workpiece, and continues to process the clamping end to complete all machining processes of the workpiece.

02

可完成一些复杂形状的精密零件的车削、钻削、铣削甚至磨削等工艺。两个不同的零件也可以同时进行车铣复合加工。

It can complete processes such as turning, drilling, milling, and even grinding for precision parts with complex shapes. Two different parts can also be subjected to turning and milling composite processing simultaneously.


双主轴内部图

03

单个刀塔最多可装24把刀，换刀时间短，故障率低。可根据不同加工部件的需要，安装多种刀具。

A single turret can hold up to 24 tools, with a short tool change time and low failure rate. Multiple cutting tools can be installed according to the needs of different processing components.

04

机床配置的动力刀具可以装夹立铣刀，盘铣刀，钻头等刀具，并且可以水平安装，垂直安装，倾斜安装等多种安装位置，以便于从各种方向完成对零件的复合加工。

The power tools configured for the machine tool can be used to clamp end mills, disc mills, drill bits, and other cutting tools, and can be installed in various positions such as horizontal, vertical, and inclined, to facilitate the composite processing of parts from various directions.

05

机床独特的斜床身结构，方便切屑的排放以及冷却液的循环使用。

The unique inclined bed structure of the machine tool facilitates the discharge of chips and the circulation of coolant.

06

机床可配备自动送料机、接料机等附加功能部件，形成柔性加工生产线。

The machine tool can be equipped with additional functional components such as automatic feeder and receiving machine, forming a flexible processing production line.

双主轴 系列
DUAL SPINDLE SERIES

主轴 Spindle	C200MYS 单刀塔 Single Turret	CX200 双刀塔 Dual Turret
主轴通孔径 Spindle bore diameter	Φ66mm	Φ66mm
主轴轴承直径 Spindle bearing diameter	NN3020+100BAR +NN3018	NN3020+100BAR +NN3018
油压缸径 Hydraulic cylinder diameter	8'	8'
主轴鼻端 Spindle nose	A 2-6	A 2-6
主轴马达功率 Spindle motor power	22kW	22kW
主轴传动方式 Spindle transmission mode	直驱 Direct drive	直驱 Direct drive
主轴传动比 Spindle transmission ratio	1：1	1：1
主轴转速 Spindle speed	4300rpm	4300rpm
主轴额定输出转速 Rated output speed of spindle	2320rpm(220V)	2320rpm(220V)

副主轴 Subspindle		
主轴通孔径 Spindle bore diameter	Φ56mm	Φ56mm
主轴轴承直径 Spindle bearing diameter	7016/P4	7016/P4
油压缸径 Hydraulic cylinder diameter	6'	6'
主轴鼻端 Spindle nose	A 2-5	A 2-5
主轴马达功率 Spindle motor power	17.5kW (220V)	17.5kW (220V)
主轴传动方式 Spindle transmission mode	直连马达 Direct drive motor	直连马达 Direct drive motor
主轴传动比 Spindle transmission ratio	1：1	1：1
主轴转速 Spindle speed	5500rpm(220V)	5500rpm(220V)
主轴额定输出转速 Rated output speed of spindle	2700rpm(220V)	2700rpm(220V)

其他参数 Other Parameters		
标准控制器 Standard controller	FAUNC OI-TF	FAUNC OI-TF
电压/功率需求 Voltage/power demand	380V/30kVA	380V/55kVA
油压箱容量 Hydraulic tank capacity	60L	80L
机器重量 Machine weight	4500kg	8500kg
外观尺寸(长X宽X高) External sizes (L*W*H)	2650×1600×1900mm	3050×2250×2200mm

X&Y&Z 轴 Axis	C200MYS 单刀塔 Single Turret	CX200 双刀塔 Dual Turret
X/Y/Z轴最大行程 X/Y/Z axis max travel	250/100/550 mm	175 mm 70 mm 515(Z1、Z2)/600(Z3)mm
X/Y/Z轴快速进给 X/Y/Z axis rapid feed	24/8/24m/min	20m/min
X/Y/Z轴滑轨形式 X/Y/Z axis slideway form	35mm/硬轨 Hard track /45mm	35/35/45mm 线轨 Wire track
X/Y/Z轴伺服马达功率 X/Y/Z axis servo motor power	1.8kW	4.5kW
X/Y/Z轴滚珠螺杆直径/螺距 X/Y/Z axis ball screw diameter/pitch	Φ32mm/Pitch 10(X、Z_2) Φ40mm/Pitch 10(Z_1、Y)	ϕ40mm/Pitch10
X/Y/Z轴重复定位精度 X/Y/Z axis repeat positioning accuracy	0.005mm	0.005mm

动力刀塔 Power turret		
刀塔型号 Turret model	BMT55-12T	BMT65
动力刀塔容量(正反刀) Power turret capacity (forward and reverse tools)	12	24×2
动力刀塔马达功率 Power turret motor power	7.5/5.5/3kW (发那科 FANUC)	7.5/5.5/3kW (发那科 FANUC)
动力刀塔马达扭矩 Power turret motor torque	40/24/16Nm (发那科 FANUC)	40/24/16Nm (发那科 FANUC)
驱动马达(换刀) Drive motor (tool change)	汇川 Inovance	汇川 Inovance
换刀速度(相邻刀/对边刀) Tool change speed (adjacent tool/opposite tool)	0.4s/1s	0.4s/1s
四方型刀具 Square tool	25mm	25mm
圆形刀具 Round tool	ϕ40mm	ϕ40mm
动力刀塔刀具规格 Power turret tool specifications	ER32 (3～22mm)	ER32 (3~22mm)
动力刀座转速 Power tool holder speed	4000rpm	5000rpm

主轴 Spindle	P90S
主轴鼻端 Spindle nose	A 2-6
主轴轴承直径 Spindle bearing diameter	NN3020+100BAR +NN3018
主轴传动方式 Spindle transmission mode	同步齿形带传动 Synchronous toothed belt drive
主轴传动比 Spindle transmission ratio	1：1.5
主轴转速 Spindle speed	2000rpm
主轴最高扭矩 Max spindle torque	280Nm

加工范围 Processing Range	
最大车削直径 Max turning diameter	Φ120mm
最大车削长度 Max turning length	330mm
卡盘尺寸 Chuck size	8'
主轴通孔 Spindle bore diameter	66mm

X&Z轴 X&Z Aaxis	
X/Z轴最大行程 X/Z axis max travel	470/330mm
X/Z轴快速进给 X/Z axis rapid feed	20 m/min
X/Z轴滑轨形式 X/Z axis slideway form	35/45mm 滚柱线轨(H级) Cylindrical roller Wire track
X/Z轴滚珠螺杆直径/螺距 X/Z axis ball screw diameter/pitch	Φ32mm/Pitch10(C3级)
X/Z轴定位精度 X/Z axis positioning accuracy	0.008mm/1000mm
X/Z轴重复定位精度 X/Z axis repeat positioning accuracy	≤0.005mm

电机功率 Motor power	P90S
主轴马达(SFC) Spindle Motor (SFC)	11/15kW/扭矩 Torque 142/192Nm
X轴伺服马达(新代 AM15) X-axis servo motor (SYNTEC AM15)	3.1kW/扭矩 Torque 15Nm
Z轴伺服马达(新代 AM15) Z-axis servo motor (SYNTEC AM15)	3.1kW/扭矩 Torque 15Nm
水泵功率 Water pump power	1.5kW
空调功率 Air conditioning power	600W
液压站电机 Hydraulic station motor	1.5kW

其他参数 Other Parameters	
标准控制器 Standard controller	SYNTEC 21TB
电压/功率需求 Voltage/power demand	380V/40kVA
油压箱容量 Hydraulic tank capacity	60L
机器重量 Machine weight	4550kg
刀座 Tool holder	外圆2，内孔2(加强型刀座) Outer circle 2, Inner hole 2 (Reinforced tool holder)
四方型刀具 Square tool	≤25mm
圆形刀具 Round tool	Φ32mm
外观尺寸(长X宽X高) External sizes (L*W*H)	3210(+1000排屑机Chip conveyor) ×2200(主体)×2200mm

卧式双主轴、双床身数控车床，单个底座上配置两个床身，床身导轨面45度倾斜，具备较大承载截面。

Horizontal double spindle, double bed CNC lathe, two beds are configured on a single base, the guide surface of the bed is inclined 45 degrees, and it has a large load-bearing cross-section.

排刀设计，排刀座直线排刀，换刀快速精准， 节省加工时间， 减少维护成本。

Tool arrangement design, linear tool arrangement on tool post, fast and accurate tool change, saving processing time, and reducing maintenance costs.

能够对外径20-90规格范围内的轴承零件完成内圆，端面，球面圆弧，倒角等工序的切削加工。

The lathe is able to complete the cutting process of inner circle, end face, spherical arc, chamfering and other processes for bearing parts within the range of OD 20-90 specifications.

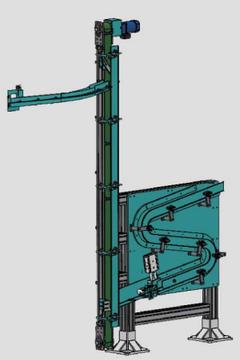
机床采用全封闭防护，后排屑方式，自动上下料，实现“无人化”自动生产。

The machine tool adopts fully enclosed protection, rear chip removal, automatic loading and unloading, realizing "unmanned" automatic production.

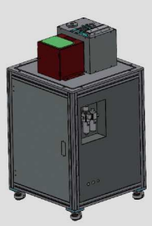
7

车床自动化线 系列
LATHE AUTOMATION LINE SERIES

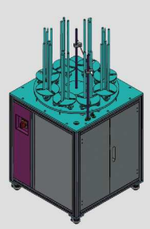
可定制化 Customizable



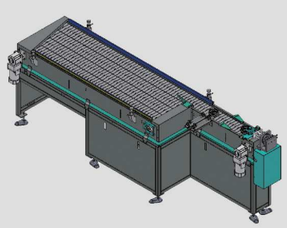
S料道+提升机
S-shaped chip conveyor +Elevator



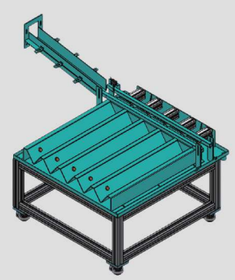
尺寸检测机
Size Inspection Machine



旋转料仓
Rotary hopper



平板料仓
Flatbed silo



轴承圈收料仓
Bearing ring collection silo

主要应用行业
Main application industries

齿轮传动部件
Gear transmission components

新能源汽车部件
New Energy Vehicle Components

汽车轮毂单元
Automotive wheel hub unit

轴承圈
Bearing Ring

01

量身定制高效率和高生产力的智能柔性生产线

Tailor-made intelligent flexible production line with high efficiency and high productivity.

02

桁架机械手与数控车床紧密配合组成自动上下料机加工系统，能够极大的**提高加工效率，降低用工成本，**实现“无人化”的自动化生产，**减少占地面积。**

The gantry robot cooperates closely with the CNC lathe to form an automatic loading and unloading machining system,which can greatly improve the processing efficiency,reduce the labor cost,realize the “unmanned” automatic production and reduce the occupied area.

03

桁架机械手采用齿轮齿条驱动，**刚性强、高稳定性。**
导轨采用润滑脂，**易于维护。**

The gantry robot is driven by gear and rack,which has strong rigidity and high stability.The guide rail is made of grease and is easy to maintain.

04

便捷、简单的智能化一体机，**更低成本、更高效率，**
助力企业实现智能化制造。

Convenient,simple intelligent all-in-one machine,lower cost, higher efficiency, help enterprises to achieve intelligent manufacturing.