



中国兵器红阳集团



华恩智能装备

智能制造 · 科技华恩 · 品质永恒

Intelligent manufacturing
Technology Huaen
Eternal quality

华恩智能装备

河南省华恩智能装备有限公司
Henan Huaen Intelligent Equipment Co., Ltd

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Henan Huaen Intelligent Equipment Co., Ltd



企业简介

COMPANY PRPFILE



河南省华恩智能装备有限公司隶属于中国兵器红阳集团，位于河南省南阳市高新区中关村科技产业园，集数控机床研发、生产、销售为一体，也是中部地区重要的数控机床制造基地。

Henan Huen Intelligent Equipment Co., Ltd. belongs to China Ordnance Hongyang Group, located in Zhongguancun Science and Technology Industrial Park, High-tech Zone, Nanyang City, Henan Province, set CNC machine tool research and development, production and salesAs one, it is also an important CNC machine tool manufacturing base in the central region.

公司占地面积5万多平方米，拥有国际先进的制造、检测设备，并与多家世界一流的数控系统及重要的机床核心配件供应商建立了紧密的合作关系，确保了产品品质的稳定可靠。公司主要产品有:钻攻中心系列、立式加工中心系列、卧式加工中心系列、龙门加工中心系列、五轴加工中心系列等，产品具有高刚性、高精度、高效率，高稳定性的特征。已广泛应用于航空航天、军工、电子、通讯、医疗、模具、汽车零部件、智能化制造等多个领域。

公司本着“将先进技术与客户需求完美结合”、“速度和精度完美结合”的产品理念，“品质第一，客户至上”的企业精神，致力于为客户提供满意的产品，公司依托一批长期从事数控机床研发与生产的专业技术队伍，秉持质量为本、信誉至上、服务为先的宗旨，以雄厚的技术力量，先进的加工检测设备及专业的ERP管理系统，有效的保证了高品质的机床质量和快捷的交货期，从而使公司“华恩(HUAEN)”品牌及产品在市场上赢得了良好的声誉，得到了广大客户的认可和赞誉。

公司可以提供成套的产品解决方案，并为客户提供完善无忧的售前、售中、售后服务，热烈欢迎各界朋友莅临公司参观指导和业务洽谈。

The company covers an area of more than 50,000 square meters, with international advanced manufacturing and testing equipment, and with a number of world-classCNC system and important machine tool core parts suppliers to establish a close relationship of cooperation, to ensure the stability of product qualityMust be reliable. The company's main products are: drilling center series, vertical machining center series, horizontal machining center series, dragonDoor machining center series, five-axis machining center series, etc., the products have high rigidity, high precision, high efficiency and high stabilitySexual characteristics. Has been widely used in aerospace, military, electronics, communications, medical, mold, auto parts, Intelligent manufacturing and other fields.

In line with the product concept of "perfect combination of advanced technology and customer demand" and "perfect combination of speed and precision","Quality first, customer first" spirit of enterprise, committed to providing customers with satisfactory products, the company relies on a number ofLong-term engaged in CNC machine tool research and development and production of business technical team, uphold the quality of the first, reputation first, service first The purpose, with strong technical force, advanced undertaking and testing equipment and enterprise ERP management system, effective protection Certified high quality machine tool quality and fast delivery time, so that the company "HUAEN" brand and productsIt has won a good reputation in the market and has been recognized and praised by our customers.

The company can provide complete sets of product solutions, and provide customers with perfect worry-free pre-sale, sale and after-sales service, warmly welcome friends from all walks of life to visit the company for guidance and business negotiations.

HUAEN 华恩

企业服务 Enterprise service

提供更优质的产品和服务,我们一直在努力并永远坚持不懈,诚实守信和互惠双赢。

Provide better quality products andService, we've been tryingAnd always be persistent and honest Trustworthiness and mutual benefit.

品质控制 Quality control

我们的产品通过ISO9002的品质体系和ISO1400环境管理体系。

Our products pass ISO9002 quality system and ISO1400 Environmental Management System.

售后服务 After-sales service

遍布全国的售后服务网络。

After-sales service all over the countryThe Internet.

研发创新

RESEARCH AND INNOVATION

融合德智勇勤，创新其乐无穷，我们以全方面的思考做更深度的发展。研发人员不墨守成规、敢于改变思维、善于学习，并根据客户的需求设计创新产品，使其达到兼具产品功能与生产效率的智能机器。用心创新是我们的精神，企业面向世界顶尖是我们努力的目标。

Integrating morality, wisdom,courage and diligence, innovation is endless fun. We will make further development with all-roundthinking. The r & d personnel are not insincere, dare to change their thinking, good at learning , and according to customer needsto design innovative products, so that it can achieve both product functions and production efficiency of the intelligent machineHeart innovation is our spirit, the enterprise to the world's top is our goal.

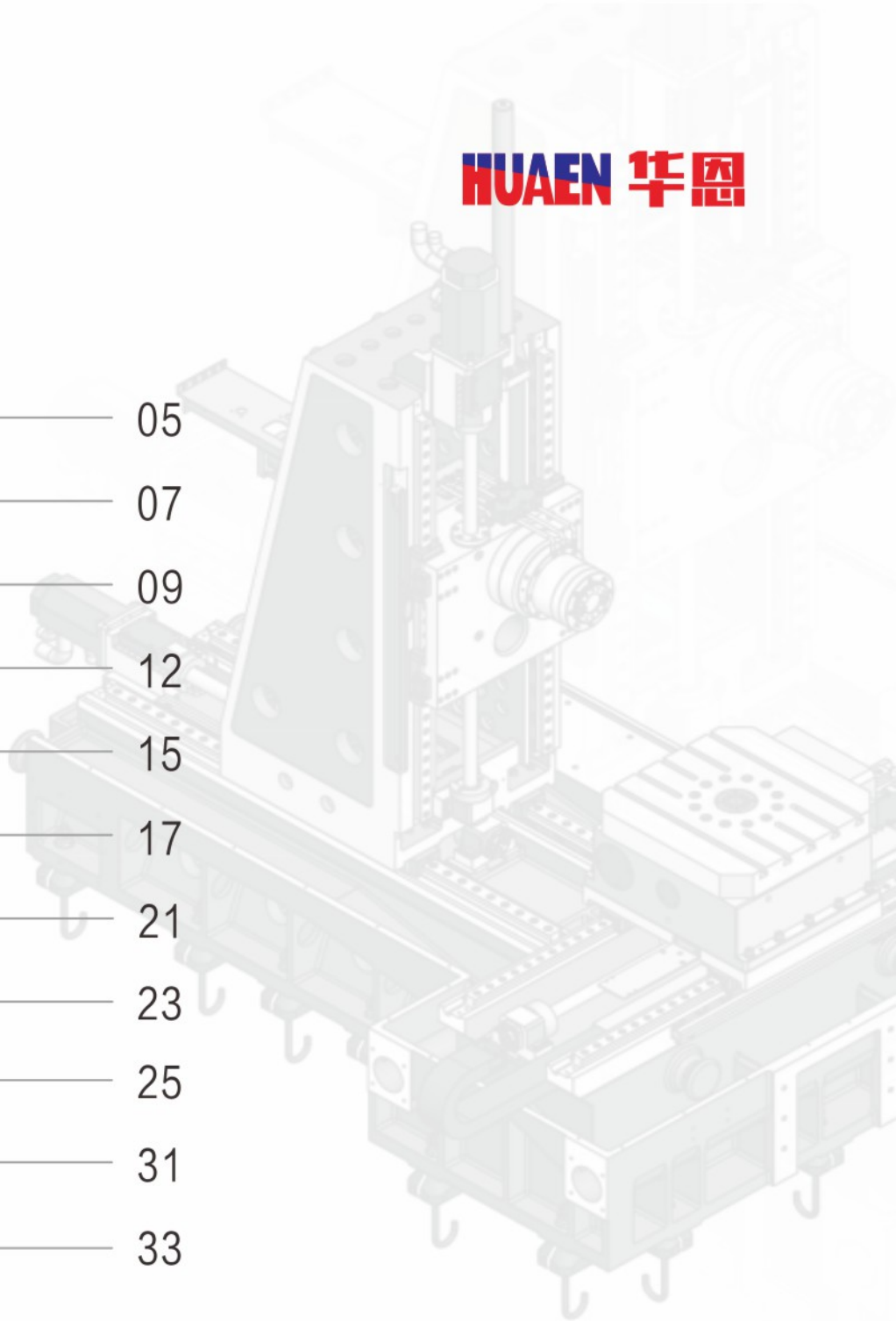
企业理念: 信任、技术、品质成就品牌，诚信铸就未来。
Enterprise philosophy: Trust, technology, quality achievements brand, integrity cast the future.



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05

Workshop display

车间展示



GANTRY WORKSHOP EXHIBITION
龙门车间展示



STRICTLY ENSURE A FULL SET OF ZERO DEFECT INSPECTION FOR EACH MACHINE

严格确保每台机器全套零缺陷检验

品质检验 **100%**
Quality inspection



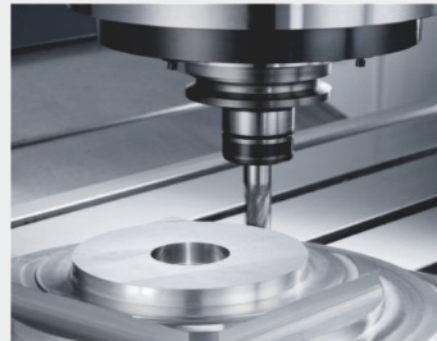
几何精度检测
Geometric accuracy test



球杆仪真圆度检测
True roundness measurement of ball instrument



3D半球检测
3D hemisphere test



实际加工检测
Actual machining inspection



主轴拉力检测
Spindle tension test

SPINDLE TEST ROD CHECKS MAXIMUM CUTTER DIAMETER

主轴检测棒检验最大刀径



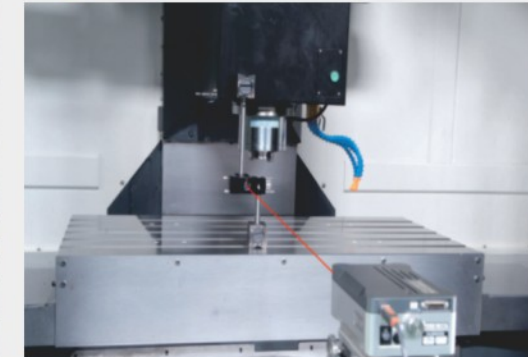
▲ 主轴检测棒检验 Inspection of spindle check rod



▲ 在线平衡调试 Online dynamic balancing test



▲ 主轴振动检验 Spindle vibration test



▲ 镭射检验 Laser inspection



▲ 主轴温升检验 Spindle temperature rise test

09

T SERIES HIGH SPEED DRILLING AND TAPPING CENTER MACHINE T系列高速钻孔攻牙中心机

» 产品特点 Product features

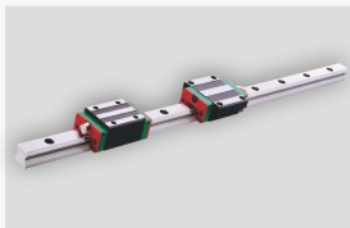
1. 超宽底座、鞍座、工作台、立柱，主轴箱等主结构铸件采用高级米汉铸铁并经二次退火处理，并经过三个月以上的时效处理，保证铸件材质稳定确保机台能长期保持最佳精度，确保结构高刚性稳定性。
Super wide base, saddle, table, column, spindle box and other main structure castings are made of advanced Meehan cast iron and after secondary annealing treatment, and after more than three months of aging treatment, to ensure the stability of the casting material to ensure that the machine can maintain the best accuracy for a long time, to ensure the structure of high rigidity stability.
2. 高精度主轴，采用P4 级轴承组装，转速最高可达24000rpm。
High precision spindle, assembled with P4 bearing, up to 24000rpm.
3. 后冲水排屑，冷却液循环冲水;减少屑的堆积，便于机床内部屑的清理。
After flushing to remove chips, coolant circulation flushing; Reduce the accumulation of chips and facilitate the cleaning of chips inside the machine tool.
4. 全密闭式外罩钣金设计，避免因高速加工产生的油雾,影响车间环境及员工的身体健康，符合环保要求及人性化设计。
Fully closed cover sheet metal design to avoid oil mist caused by high-speed processing, Affect the workshop environment and the health of employees, in line with environmental requirements and humanized design.
5. 21T 夹臂式刀库，换刀效率高。
21T clamping tool library, fast tool change efficiency.
6. 三轴驱动系统采用直结式传动,C3级精密滚珠丝杠及P级滚珠导轨，高刚性、低摩擦、低噪音。
Three-axis drive system adopts straight-junction transmission, C3 precision ball screw and P ball guide rail, high rigidity, low friction and low noise.
7. 可选配台制四轴联动分度盘或五轴分度盘，可应对客户多样化加工需求。
Optional table four-axis linkage indexing plate or five-axis indexing plate, can meet the diversified processing needs of customers.

» 适用范围 Scope of application

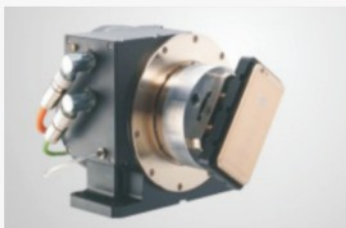
该系列产品主要应用于小型金属结构件、3C、汽车消费类产品、5G 通讯腔体及相关组件等产业。
This series of products are mainly used in small metal structural parts, 3C, automotive consumer products, 5G communication cavity and related components and other industries.



A. 高速直联主轴20000rpm
A. High speed direct spindle 20000rpm



B. 三轴高性能P级滚柱线轨
B, three-axis high-performance P-class roller rail



C. 配备高速DDR转台
C. Equipped with high-speed DDR turntable

» 高性能的主轴单元 High performance spindle unit

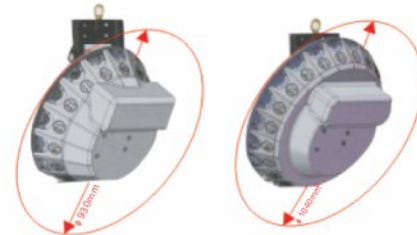


主轴转速
Spindle speed
标准20000 rpm
Standard 20000 rpm
特殊24000 rpm
Special 24,000 rpm
16/21T伺服刀库
16/21T servo knife library
三轴48/64米位移速度
Three axis 48/64 m displacement velocity

HUAEN 华恩



DETAILED DESCRIPTIONS



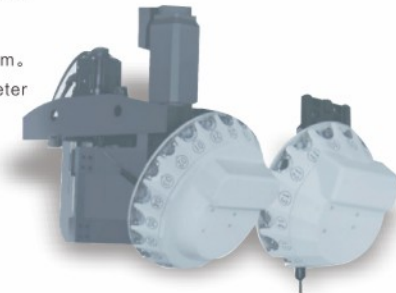
TDS3016T於刀长250mm时，旋径仅930mm。
With 250mm tool length, the rotation diameter of TDS3016T is only 930mm.

TDS3021T於刀长250mm时，旋径仅1040mm。
With 250mm tool length, the rotation diameter of TDS3021T is only 1040mm.



TD30与TDS30共用相同刀库支架,仅更换刀库形式,让生产线调配作业顺畅。

Td30 and TDS30 employ a same bracket for convenience in replacing magazine, with makes your peoductionline smooth.



D. 气滤系统
D. Air filtration system

气滤电磁阀搭配三点组合单元具压力感知，当压力不足系统则会产生报警讯息，以确保机器正常运作，大幅度延长主控其他单元寿命。

The air filter solenoid valve is equipped with a three-point combination unit to detect the pressure, and the insufficient pressure appreciation system will generate an alarm message to ensure the normal operation of the machine and greatly extend the life of other main control units.



E. 自动润滑系统
D. Air filtration system

采用集中润滑系统,提供传动系统元件润滑，以确保精度。当传动系统停止一段预设的时间，润滑系统会暂停供油，以达节能的效果。

A centralized lubrication system is used to provide lubrication of transmission system components to ensure accuracy. When the transmission system stops for a preset period of time, the lubrication system will suspend the oil supply to achieve energy saving.



F. 发那科OI-MF控制系统
F. FANUC Series oi-MF Plus

采用日本FANUC最新版本控制系统,使精密零件加工高速度、高精度、高效率。
The use of Japan FANUC latest version control system, precision parts processing high speed, high precision, high efficiency.



整合伺服马达及驱动器
A perfect combination of servo motor and driver.



铝合金一体式刀夹组,组装、更换快速、精度高。
Aluminum alloy one-piece constructed tool jaw is fast to assemble and replace with high precision.

产品规格 Product specification		
刀位数控 Tool position NC	16	21
刀具规格 Tool specification	BT30	
最大刀长 Maximum knife length	250mm	
最大刀径 Maximum knife diameter	80mm	
最大刀重 Maximum knife weight	3kg	
刀仓最大偏载 Maximum offset load of cutter bin	12kg	15kg
刀仓最大载重 Maximum load of cutter bin	25kg	35kg
单刀进行时间 Single knife time	0.3sec	
刀盘进行方式 Cutter head mode	SANJET 伺服电机	

T系列高速钻孔攻牙中心机

T SERIES HIGH SPEED
DRILLING ATTACKTOOTH
CENTER MACHINE

※ 控制系统 Control system

标配：发那科系统
Standard: Fanuc system

选配：三菱、华中、新代
Options: Mitsubishi, Central China,
New generation

※ 备注 Remark

1、以上部分机型参数，个别机型含特殊附件，订货时请知悉。
Some of the above model parameters, individual models include special accessories, please know when ordering.

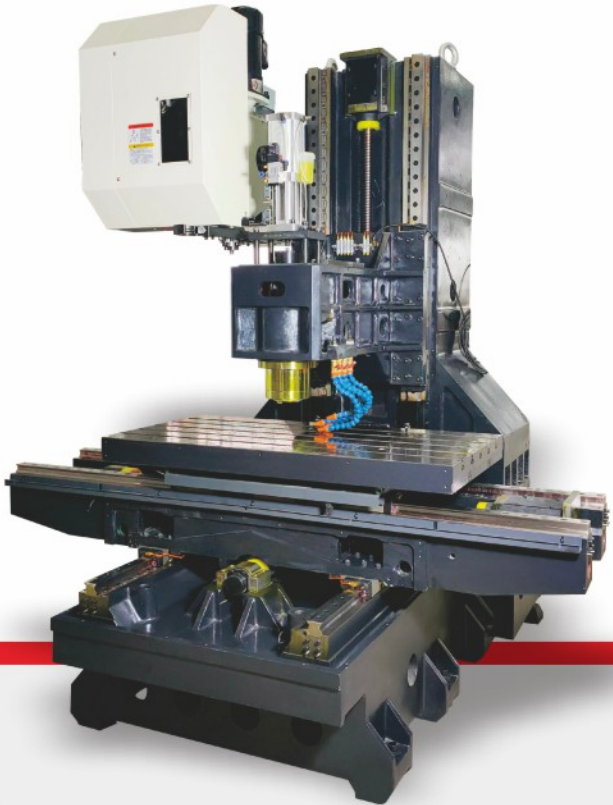
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Technical specifications are subject to change without prior notice, the picture parameters in the sample are for reference only, the right of interpretation belongs to Hua En Company.

机型 Machine type	单位 Unit	HN-T500	HN-T600	HN-T700
行程 Journey				
X轴左右行程 X axis left and right travel	mm	500	600	700
Y轴前后行程 Y-axis forward and backward travel	mm	400	400	400
Z轴上下行程 Z-axis up and down travel	mm	300	300	350
主轴鼻端至工作台距离 Distance from spindle nose to table	mm	150-480	150-450	150-450
主轴中心至立柱距离 Distance from spindle center to column	mm	420	450	470
工作台 Workbench				
工作台面积 Table area	mm	650*400	700*400	780*420
最大载重 Maximum load	kg	300	350	500
T型槽（宽*槽数*间距） T-slot (width * Number of slots * spacing)	mm “个” mm	14*3*125	14*3*125	18*3*125
轴向进给 Axial feed				
X、Y、Z轴快速进给 X, Y, Z axis fast feed	m/min	48/(64)	48/(64)	48/(64)
主轴 Principal axis				
刀库单元 Tool library unit	ACT	16/21T(伺服夹臂式)	16/21T(伺服夹臂式)	16/21T(伺服夹臂式)
主轴转速 Spindle speed	rpm/min	12000/15000/20000/24000		
主轴规格 Spindle specification	BT	BT-30	BT-30	BT-30
主轴马达 Spindle motor	Kw	5.5	5.5	5.5
一般资料 General information				
三轴功率 Triaxial power	Kw	1.5/1.5/3	1.5/1.5/3	1.5/1.5/3
定位精度 Positioning accuracy	mm	±0.005/300	±0.005/300	±0.005/300
重复精度 repeatability	mm	±0.003/300	±0.003/300	±0.003/300
切削进给速度 Cutting feed speed	mm/min	1-12000	1-12000	1-12000
电力需求 Electricity demand	KVA	15	15	15
气压需求 Barometric demand	Kg/bar	6-7	6-7	6-7
泵浦需求 Pumping demand	Pcs	2	2	2
机械占地尺寸 Machine footprint	mm	1700*2100*2500	1750*2500*2500	1880*2450*2460
机械重量 Mechanical weight	kg	3500	3600	3700

SV SERIES MACHINING CENTER MACHINE SV系列加工中心机



SV系列光机展示 SV series optical machine display



» 结构特点 Structural characteristics

1. 底座宽大厚实，立柱为箱型结构刚性好。
The base is wide and thick, and the column is a box-type structure with good rigidity.
2. 主轴箱内部以肋骨强化结构，合理的立柱与主轴箱接触长度，提供主轴之稳固支撑。
The interior of the headstock is reinforced with ribs, and reasonable contact length between the column and the headstock provides stable support for the main shaft.
3. 三轴导轨采用原装精密线性导轨，具有高刚性，低噪音，低摩擦系数特性，适合高速，高精度加工需要。
Three-axis guide rail adopts original precision linear guide rail, with high rigidity, low noise, low friction coefficient characteristics, suitable for high-speed, high-precision machining needs.
4. 三轴马达与精密高速滚珠丝杆直联传动及装配，增强刚性并提高精密度。支持高速位移，节省非加工时间。
Three-axis motor and precision high-speed ball screw direct transmission and assembly, enhance rigidity and improve precision. Supports high-speed displacement and saves non-machining time.
5. 主轴可根据加工需求选择皮带式或直联式高速主轴，无论在高速或低速铣钻，均能保持精度稳定，切削效率大大提高。
The spindle can be selected according to the processing needs of the belt type or direct-connected high-speed spindle, whether at high speed or low speed milling and drilling, can maintain stable accuracy, cutting efficiency is greatly improved.

» 适用范围 Scope of application

主要运用于航空航天、汽车零部件、电器仪表、摩托车、工具、五金、电机等行业的模具、零件加工，可用于中小批量零件的高效加工制造，对复杂、高精度零件的加工。
Mainly used in aerospace, auto parts, electrical instruments, motorcycles, tools, hardware, motor and other industries of mold, parts processing, can be used for small and medium-sized batch parts of efficient processing and manufacturing, processing of complex, high-precision parts.

SV SERIES VERTICAL MACHINING CENTER MACHINE PARAMETERS
SV系列立式加工中心机



机型 Machine type	单位 Unit	HN-SV855	HN-SV1160	HN-SV1370
行程 Journey				
X轴左右行程 X-axis left and right travel	mm	800	1100	1300
Y轴前后行程 Y-axis forward and backward travel	mm	550	600	700
Z轴上下行程 Z-axis up and down travel	mm	550	600	780
主轴鼻端至工作台距离 Distance from spindle nose to table	mm	120-670	120-720	130-910
主轴中心至立柱距离 Distance from spindle center to column	mm	590	650	784
工作台 Workbench				
工作台面积 Table area	mm	1000*550	1200*600	1500*700
最大载重 Maximum load	kg	800	800	1000
T型槽（宽*槽数*间距） T-slot (width * Number of slots * spacing)	mm “个” mm	18*5*90	18*5*100	18*5*135
轴向进给 Axial feed				
X、Y、Z轴快速进给 X, Y, Z axis fast feed	m/min	36*36*36	36*36*36	24*24*24
主轴/刀库 Spindle/tool library				
圆盘刀库 Disk cutter library	ACT	24T	24T	24T
主轴转速 Spindle speed	rpm/min	10000/12000/15000		
主轴规格 Spindle specification	BT	BT-40	BT-40	BT-40/BT-50
主轴马达 Spindle motor	Kw	11-15	11-15	15-18.5
切削速度 Cutting speed	m/min	1-10000	1-10000	1-10000
三轴功率 Triaxial power	Kw	3/3/3	3/3/3	4.5/4.5/4.5
定位精度 Positioning accuracy	mm	±0.005/300	±0.005/300	±0.005/300
重复精度 repeatability	mm	±0.003/300	±0.003/300	±0.003/300
X/Y/Z轴轨数 Number of X/Y/Z axes		2/2/2	2/2/2	2/2/2(2/4/2)
电力需求 Electricity demand	KVA	25	30	45-50
气压需求 Barometric demand	Kg/bar	6-7	6-7	6-7
泵浦需求 Pumping demand	HP	2/2	2/2	2/2
机械占地尺寸 Machine footprint	mm	2650*2600*2700	3200*2800*2800	3600*3300*2800
机械重量 Mechanical weight	kg	5600	7600	9000-11000

※ 控制系统 Control system

标配：发那科系统
Standard: Fanuc system

选配：三菱、华中、新代
Options: Mitsubishi, Central China,
New generation

※ 特殊选配 Control system

- 1、刀具测量系统
Tool measuring system
- 2、三轴光栅尺
Triaxial grating ruler
- 3、主轴中心出水系统
Spindle center outlet syste
- 4、链条式排削机
Chain stripper
- 5、油水分离机
Oil and water separator
- 6、NC旋转工作台(四轴/五轴)
NC rotary table (four axis/five axis)
- 7、立柱加高200-300mm
200-300mmColumn plus 200-300mm
- 8、自动刀长测量与破损检测器
Automatic tool length measurement
& breakage detector

SL SERIES MOLD PARTS INTEGRATED PROCESSING CENTER MACHINE

SL系列模具零件综合加工中心机

高刚性重切削

High Rigidity And Heavy Cutting

两线一硬

Two lines and one hard

» X 轴两条线性导轨

X axis two linear guides

» Y 轴四条线性导轨

Y axis four linear guides

» Z 轴平面矩形导轨

Z axis plane rectangular guide



大型模型加工利器
Large model processing tool
SL-1270 ⇄ SL-1890

» 结构特点 Structural characteristics

1. 具有Z向采用方型滑动导轨形式，X、Y轴导轨副采用进口滚动直线导轨，动静摩擦力小，灵敏度高，高速振动小，低速无爬行，定位精度高，伺服驱动性能优，提高机床的精度和精度稳定性。

With Z direction using square sliding guide, X, Y axis guide pair using imported rolling linear guide, low static and static friction, high sensitivity, low speed vibration, no crawling, high positioning accuracy, servo drive performance is excellent, improve the accuracy of the machine tool and precision stability.

2. 具有高速度、高精度、高强度、高刚性等特性，能够实现对各种盘类、板类、壳体、模具等复杂零件在一次装夹中完成钻、铣、镗、扩、铰、攻丝等多种工序加工。

With high speed, high precision, high strength, high rigidity and other characteristics, can achieve a variety of disc, plate, shell, mold and other complex parts in a clamping to complete drilling, milling, boring, expanding, reaming, tapping and other processes.

» 适用范围 Scope of application

广泛应用于航空航天、汽车零部件、电器仪表、摩托车、工具、五金、电机等行业的模具、零件加工，可用于中小批量零件的高效加工制造，对复杂、高精度零件的加工。

Widely used in aerospace, auto parts, electrical instruments, motorcycles, tools, hardware, motor and other industries of mold, parts processing, can be used for small and medium-sized batch parts of efficient processing and manufacturing, processing of complex, high-precision parts.

机型 Machine type	单位 Unit	HN-SL850	HN-SL1160	HN-SL1270	HN-SL1370	HN-SL1580	HN-SL1690	HN-SL1890
行程 Journey								
X轴左右行程 X axis left and right travel	mm	800	1100	1200	1300	1500	1600	1800
Y轴前后行程 Y-axis forward and backward travel	mm	500	600	700	700	800	900	900
Z轴上下行程 Z-axis up and down travel	mm	500	600	650	700	700	800	800
主轴鼻端至工作台距离 Distance from spindle nose to table	mm	110-610	100-700	100-750	200-900	130-730	180-980	210-1000
主轴中心至立柱距离 Distance from spindle center to column	mm	560	660	750	900	810	1000	970
工作台 Workbench								
工作台面积 Table area	mm	1000*500	1300*600	1300*700	1400*700	1700*800	1800*900	2000*900
最大载重 Maximum load	kg	600	800	1000	1200	1500	2800	1600
T型槽（宽*槽数*间距） T-slot (width * Number of slots * spacing)	mm “个” mm	18*5*90	18*5*100	18*5*122	18*5*135	22*5*135	22*5*165	22*5*165
轴向进给 Axial feed								
X、Y、Z轴快速进给 X, Y, Z axis fast feed	m/min	24*24*18	24*24*18	24*24*18	20*20*15	20*20*15	20*20*15	20*20*15
主轴 Principal axis								
圆盘刀库 Disk cutter library	ACT	24T	24T	24T	24T	24T/32T	24T/32T	24T/32T
主轴转速 Spindle speed	rpm/min	8000/10000	8000/10000	8000/10000	6000/8000	6000/8000	6000/8000	6000/8000
主轴规格 Spindle specification	BT	BT-40	BT-40/BT-50	BT-50	BT-50	BT-50	BT-50	BT-50
主电机功率 Main motor power	Kw	11-15Kw	11-15Kw	15-18.5Kw	15-18.5Kw	15-18.5Kw	15-18.5Kw	15-18.5Kw
切削速度 Cutting speed	m/min	1-10000	1-10000	1-10000	1-8000	1-8000	1-8000	1-8000
三轴功率 Triaxial power	Kw	3/3/3	3/3/3	3/3/3	3/3/3	4.5/4.5/4.5	4.5/4.5/4.5	4.5/7.0/4.5
定位精度 Positioning accuracy	mm	±0.005/300	±0.005/300	±0.005/300	±0.005/300	±0.005/300	±0.005/300	±0.005/300
重复精度 repeatability	mm	±0.003/300	±0.003/300	±0.003/300	±0.003/300	±0.003/300	±0.003/300	±0.003/300
电力需求 Electricity demand	KVA	20	30	30	30	40	40	45
气压需求 Barometric demand	Kg/bar	6-7	6-7	6-7	6-7	6-7	6-7	6-7
泵浦需求 Pumping demand	HP	2P	2P	2P	2P	2P	2P	2P
机械占地尺寸 Machine footprint	mm	2700*2400*2500	3200*2800*2800	3700*3500*3200	3850*3000*3300	4300*3300*3300	4500*3500*3500	6000*3800*3800
机械重量 Mechanical weight	kg	6000	8000	10000	11000	12500	14000	14800
控制系统 Control system		FANUC Series oi-MF Pius		MITSUBISHIELECTRIC M80		SINUMERIK 828D		

Note : 1. S stands for XY two lines, L stands for Z-axis hard rail. Some of the above model parameters, individual models include special accessories, please know before ordering.
2. Technical specifications are subject to change without prior notice, the picture parameters in the sample are for reference only, the right of interpretation belongs to Hua En Company.

备注: 1. S代表XY两线, L代表Z轴硬轨。以上部分机型参数, 个别机型含特殊附件, 订货前请知悉。
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LONGMEN SERIES MACHINING
CENTER MACHINE
龙门系列加工中心机



» 龙门加工中心光机 Gantry machining center light machine

1. 龙门加工中心为立柱固定，工作台移动结构。主要由床身、立柱、横梁、横向滑台、工作台、主轴、丝杆、润滑系统、冷却系统、数控操作面板以及电控系统等部件组成。主要用于平面、曲面和孔的加工。广泛应用于机械制造行业各种板类、箱体类、机架类等中型零件的粗、精加工。

Gantry machining center for the column fixed, workbench moving structure. It is mainly composed of bed, column, beam, transverse slide table, workbench, spindle, screw, lubrication system, cooling system, CNC operating panel and electronic control system. Mainly used for surface, surface and hole processing. It is widely used in the rough and finish machining of medium-sized parts such as board, box and frame in machinery manufacturing industry.

2. 该系列产品在继承传统龙门机床基础框架高刚性、结构对称、稳定性强等很多优点的基础上，引进先进的动静态刚性设计理念，全部采用三维造型设计，机床主要结构均采用有限元分析设计，通过优化床身铸件的布筋结构，合理分布质量优化设计了移动部件。

On the basis of inheriting many advantages of the traditional gantry machine tool base frame, such as high rigidity, structural symmetry and strong stability, the series of products introduces advanced dynamic and static rigid design concept, all adopt three-dimensional modeling design, the main structure of the machine tool adopts finite element analysis and design, and the moving parts are optimized by optimizing the fabric structure of the bed castings and distributing quality reasonably.

GANTRY MACHINING CENTER MACHINE PRODUCT PARAMETERS
龙门加工中心机产品参数

机型 Machine type	单位 Unit	HN-GL1613	HN-GL2013	HN-GL2015	HN-GL2518	HN-GL3018
工作台尺寸 Table size	mm	1100*1800	1100*2200	1300*2000	2500*1600	1620*3000
X轴左右行程 X axis left and right travel	mm	1600	2000	2000	2500	3000
Y轴前后行程 Y-axis forward and backward travel	mm	1300	1300	1600	1800	1800
Z轴上下行程 Z-axis up and down travel	mm	800	800	800	800	800
龙门宽度 Gantry width	mm	1355	1355	1550	1820	1820
主轴端面至工作台面距离 Distance from spindle end face to work surface	mm	145-945	145-945	185-985	200-1000	204-1004
工作台T型槽（数目-尺寸*间距） Table T-slots (Number-size*spacing)	mm	7-22*150	7-22*150	7-22*175	9-22*180	9-22*180
主轴规格 Spindle specification		BT50	BT50	标配 BT50	标配 BT50	标配 长鼻端 BT50
主轴安装直径 Spindle mounting diameter	mm	Φ155	Φ190	Φ190	Φ190	Φ190
主轴传动形式 Spindle drive form		直连主轴 / 齿轮箱主轴 / 皮带主轴				
主轴转速（标配） Spindle speed (standard)	rpm/min	6000 / 8000				
X、Y、Z轴滚珠丝杠规格 X, Y, Z axis ball screw specifications		5512/5010/5010	5521/5010/5010	5512/5010/5010	6310/5512/5010	8016/5512/5010
X、Y、Z轴快速移动速度 X, Y, Z axis fast moving speed	m/min	12/10/10	12/10/10	12/10/10	12/10/10	10/12/12
X轴导轨规格 X-axis guide specification		45#滚柱线轨（6滑块设计）	45#滚柱线轨（6滑块设计）	45#滚柱线轨（8滑块设计）	45#滚柱线轨（10滑块设计）	45#滚柱线轨（12滑块设计）
Y轴导轨规格 Y-axis guide specification		45#滚柱线轨（5滑块设计）	45#滚柱线轨（5滑块设计）	45#滚柱线轨（5滑块设计）	45#滚柱线轨（5滑块设计）	45#滚柱线轨（5滑块设计）
Z轴导轨规格 Z-axis guide specification		矩形导轨	矩形导轨	矩形导轨	矩形导轨	矩形导轨
X、Y、Z电机连接方式 X, Y, Z motor connection mode		皮带传动 / 直连传动 / 减速机传动				
主电机参数 Main motor parameter	kw	15-18.5	15-18.5	15-18.5	15-18.5	15-18.5
X、Y、Z轴电机参数 X, Y, Z axis motor parameters	Nm	40/30/30(抱闸)	40/30/30(带抱闸)	40/30/30(带抱闸)	40/30/30(带抱闸)	45/30/30(带抱闸)
刀库容量 Tool storage capacity	T	24T/32T/64T				
工作台承重 Table bearing	kg	3000	4000	5000	6000	7000
机械占地尺寸 Machine footprint	mm	4200*3000*3300	5000*3600*3500	5000*3800*3500	6200*4500*4000	6800*4500*4000
机械重量约 Mechanical weight approximate	kg	13000	16000	18000	25000	28000

※ 控制系统 Control system

标配：发那科系统
Standard: Fanuc system

选配：三菱、西门子
Options: Mitsubishi, Siemens

※ 备注 Remark

1、以上部分机型参数，个别机型含特殊附件，订货时请知悉。

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LONGMEN SERIES MACHINING CENTER MACHINE

龙门系列加工中心机



» 龙门加工中心优点 Gantry machining center advantages

- 稳定:** 固定式横梁、分体立柱。
Stable: fixed beam, split column.
- 灵活:** 主轴箱可随溜板或横梁上下、左右移动，实现三轴联动。
Flexible: the headstock can be moved up and down, left and right with the slide or beam to achieve three-axis linkage.
- 高配:** 配置台湾原装进口研磨丝杆、台湾高承载滚柱线轨，多种品牌系统供您选择。
High configuration: Taiwan imported grinding screw, Taiwan high bearing roller rail, a variety of brand systems for you to choose.
- 多功能:** 机床具有铣削、镗削、钻削、铰孔等功能。
Multi-function: The machine has the functions of milling, boring, drilling, countersinking and so on.
- 适用广:** 适用于机械、钢铁、能源、汽车、航空、兵器、船舶等行业的大、中型零件的加工。
Wide application: Suitable for machinery, steel, energy, automobile, aviation, weapons, ships and other industries of large and medium-sized parts processing
- 效率高:** 配备附件铣头后可实现工件的一次装夹，多面加工。
High efficiency: equipped with the accessory milling head can achieve a workpiece clamping, multi-sided processing.

GANTRY MACHINING CENTER MACHINE PRODUCT PARAMETERS

龙门加工中心机产品参数

机型 Machine type	单位 Unit	HN-GL3022	HN-GL3025	HN-GL4025	HN-GL6032	HN-GL8035
工作台尺寸 Table size	mm	1800*3000	3000*2300	2300*4000	2800*6000	8000*3000
X轴左右行程 X axis left and right travel	mm	3000	3000	4000	6000	8000
Y轴前后行程 Y-axis forward and backward travel	mm	2200	2500	2500	3200	3500
Z轴上下行程 Z-axis up and down travel	mm	1000	1000	1000	1250	1200
龙门宽度 Gantry width	mm	2250	2550	2550	3250	3550
主轴端面至工作台面距离 Distance from spindle end face to work surface	mm	215-1215	215-1215	215-1215	245-1495	300-1500
工作台T型槽（数目-尺寸*间距） Table T-slots (Number - size * spacing)	mm	9-22*180	9-22*180	9-22*180两侧 两条为2-22*150	15-28(两侧边2-140, 中间14-180)	11-28*50
主轴规格 Spindle specification		标配 BT50	标配 BT50	标配 BT50	标配 BT50	标配 BT50
主轴安装直径 Spindle mounting diameter	mm	Φ190	Φ190	Φ190	Φ200	Φ200
主轴传动形式 Spindle drive form		皮带主轴	皮带主轴	皮带主轴	皮带主轴	皮带主轴
主轴转速（标配） Spindle speed (standard)	rpm/min	6000	6000	6000	6000	6000
X、Y、Z轴滚珠丝杠规格 X, Y, Z axis ball screw specifications		8016/6310/5010	8016/6310/5010	8020/6310/5010	10020/8016/5010	X:动螺母: 10020 (6:1)、 Y: R8016、Z: 5010 (2:1)
X、Y、Z轴快速移动速度 X, Y, Z axis fast moving speed	m/min	12/12/12	12/12/12	12/12/10	6/12/12	6/8/8
X轴导轨规格 X-axis guide specification		55#滚柱线轨（10滑块设计）	55#滚柱线轨（10滑块设计）	55#滚柱线轨（12滑块设计）	55#滚柱线轨（12滑块设计）	55规格重载滚柱线轨（4轨）
Y轴导轨规格 Y-axis guide specification		55#滚柱线轨（5滑块设计）	55#滚柱线轨（5滑块设计）	55#滚柱线轨（5滑块设计）	55#滚柱线轨（5滑块设计）	55规格重载滚柱线轨（2轨）
Z轴导轨规格 Z-axis guide specification		矩形导轨	矩形导轨	矩形导轨	矩形导轨	矩形滑轨
X、Y、Z电机连接方式 X, Y, Z motor connection mode		电机直连	电机直连	电机直连	X: 2比1皮带传动/ Y:电机直连/Z: 2比1皮带	X: 皮带+减速机、 Y: 直连、Z: 皮带
主电机参数 Main motor parameter	kw	15-18.5	22	22	22	阿尔法电机22KW
X、Y、Z轴电机参数 X, Y, Z axis motor parameters	Nm	X/≥45+4: 1减速机 Y/30、Z/30(抱闸)	X/≥45+4: 1减速机 Y/30、Z/30(抱闸)	X/≥45+4: 1减速机 Y/30、Z/30(抱闸)	X/≥60+3: 1减速机 Y/30、Z/30(抱闸)	X≥75、Y/40、 Z/40(抱闸)
刀库容量 Tool storage capacity	T	24T/32T/64T				
工作台承重 Table bearing	kg	10000	10000	12000	23000	26000
机械占地尺寸 Machine footprint	mm	7500*4800*4600	7500*5000*5000	10000*5000*4600	15000*7000*5500	17500*7500*6000
机械重量约 Mechanical weight approximate	kg	30000	39000	42000	75000	98000

※ 控制系统 Control system

标配: 发那科系统
Standard: Fanuc system

选配: 三菱、西门子
Options: Mitsubishi, Siemens

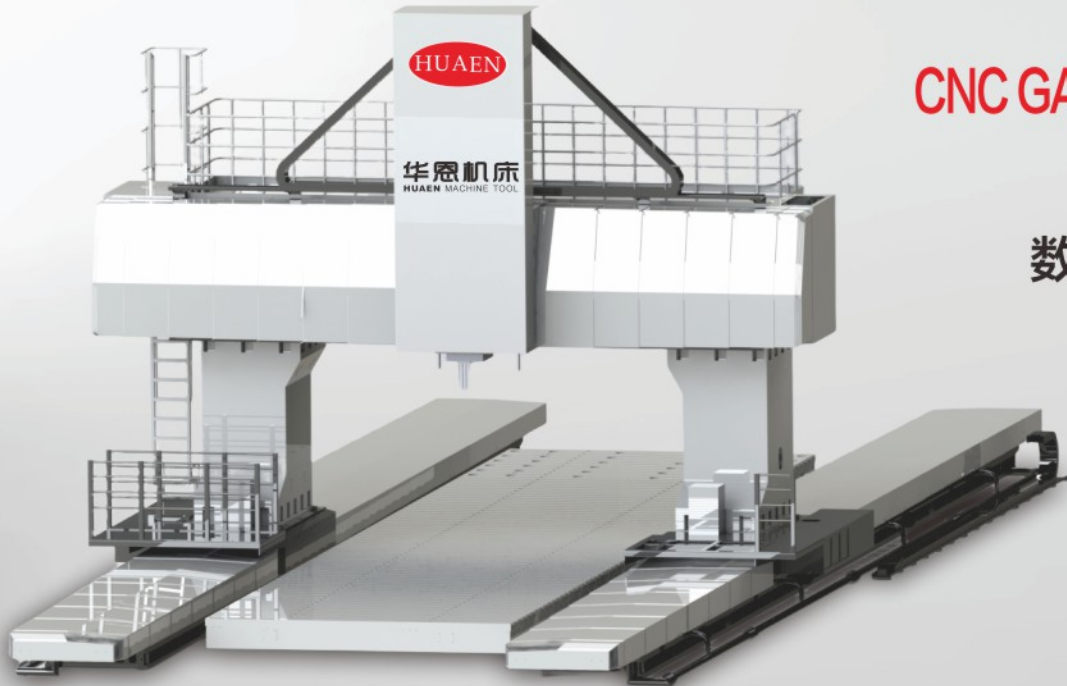
※ 备注 Remark

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CNC GANTRY MACHINING CENTER
MOVING COLUMN TYPE
数控龙门加工中心(动柱式)

» 龙门加工中心优点 Gantry machining center advantages

1. 该系列机床在结构设计和制造技术领域吸收了国内外先进技术、床身、工作台、立柱、横梁等大件均采用优质铸件、封闭箱型结构、具有较高的抗弯、抗扭强度、满足重负荷切屑加工要求。

This series of machine tools in the field of structural design and manufacturing technology to absorb advanced technology at home and abroad, bed, table, column, beam and other large parts are made of high quality castings, closed box structure, with high bending and torsional strength, to meet the requirements of heavy load chip processing.
2. XYZ导轨均采用大规格重载滚柱直线导轨

XYZ guide rails are all linear guides with large specifications and heavy duty rollers
3. 滑枕采用QT600-3优质球墨铸铁

The ram is made of QT600-3 high quality ductile iron
4. 可搭载刀库、垂直头、万能头、伸长头等附件实现五面加工

It can be equipped with tools, vertical head, universal head, elongation and other accessories to achieve five-sided processing
5. 机床结构：龙门移动

Machine structure: gantry moving

GANTRY MACHINING CENTER MACHINE PRODUCT PARAMETERS

龙门加工中心机(动柱式)产品参数

型 号	单 位	KMT7240	KMT7245	KMT7270
主轴 principal axis				
滑枕截面 Sliding pillow section	mm	450x450	450x450	500x500
主轴锥孔 Spindle taper hole	/	ISO50	ISO50	ISO50
主轴转速 Spindle speed	rpm	3000	3000	3000
主电机功率 Main motor power	KW	30/52	30/52	52
主轴最大输出扭矩 Maximum output torque of the spindle	N.m	1400-2400	2400	2400
行程 stroke				
X轴（龙门前后移动） X-axis (gantry moving forward and backward)	mm	8500	12500	12500
Y轴（主轴箱左右移动） Y-axis (spindle box moves left and right)	mm	4800	5800	7800
Z轴（主轴箱上下移动） Z-axis (spindle box moves up and down)	mm	1250/1500	1250/1500	1250/1500
龙门有效过宽 The effective width of the gantry is too wide	mm	4500	5500	7500
主轴端面至工作台的距离 Distance from spindle end face to workbench	mm	250-1500/250-1750	250-1500/250-1750	250-1500/250-1750
工作台 Workbench				
工作台尺寸（宽X长） Workbench size (width x length)	mm	3000X8000	4000X12000	6000X16000
工作台最大承重 Maximum load capacity of workbench	T	15	15	25
进给速度 Feed rate				
快速X/Y/Z Fast X/Y/Z	mm/min	10000	10000	10000
切削速度X/Y/Z Cutting speed X/Y/Z	mm/min	6000	6000	6000

※ 控制系统Control system

标配：西门子828D
Standard: Siemens 828D

※ 备注 Remark

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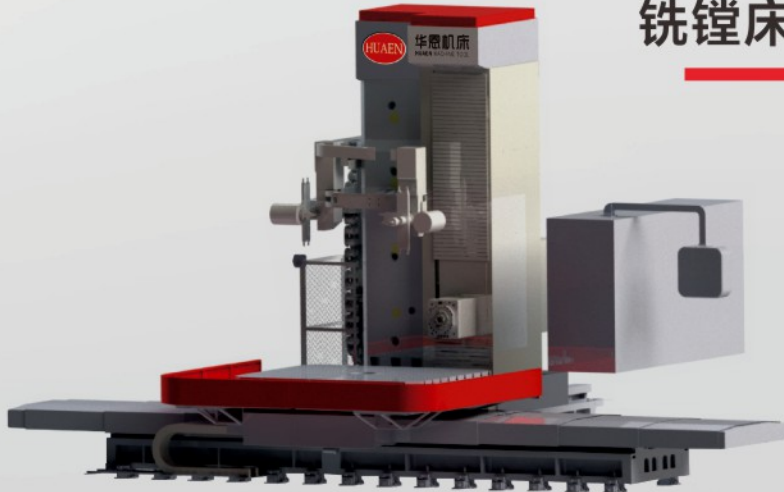
数控卧式铣镗床系列

CNC HORIZONTAL MILLING AND BORING MACHINE SERIES

结构特点 Structural characteristics

- 床身采用整体封闭式箱型结构（床身主/辅导轨为整体铸造成型），合理布置加强内筋，采用多点支承方式，刚性高,抗倾覆能力强,整机精度高、稳定性好。
The bed adopts the whole closed box structure (the main/guide rail of the bed is cast as a whole), reasonable arrangement to strengthen the internal reinforcement, the use of multi-point support, high rigidity, strong anti-overturning ability, high precision and good stability.
- 机床立柱固定在床身上，立柱采用矩形截面结构，内筋呈纵、横交错形式，抗弯、抗扭刚度高。
The machine column is fixed on the bed body, the column adopts rectangular section structure, the internal reinforcement is longitudinal and transverse, and the bending and torsional stiffness is high.
- 机床工作台采用十字滑台结构进行驱动，工作台的运动由拖板驱动,拖板又分为上、下拖板,其中上拖板实现工作台×方向的运动，下拖板实现工作台Z方向的运动。上、下拖板结构保证了机床具有较高的几何精度。工作台台面为方箱型结构设计，内筋呈纵、横交错形式，具有布局合理,抗弯、抗扭刚度高,承载能力强的特点。
The machine column is fixed on the bed body, the column adopts rectangular section structure, the internal reinforcement is longitudinal and transverse, and the bending and torsional stiffness is high.

MILLING AND BORING MACHINE SERIES
铣镗床系列



数控刨台式铣镗床系列

CNC PLANER TYPE MILLING AND BORING MACHINE SERIES

结构特点 Structural characteristics

- 机床总体布局为刨台式侧挂主轴箱结构，前后床身分离、倒“T”型结构布局。基础大件均采用有限元分析。
The overall layout of the machine tool is the planer side hanging headstock structure, the front and rear bed are separated and the inverted "T" structure layout. The basic large parts are analyzed by finite element method.
- 床身为封闭箱型结构、采用多点支撑形式。立柱为大截面尺寸设计、内部纵横加强筋，具有足够的抗弯、抗扭强度。
The bed is closed box structure and adopts multi-point support form. The column is designed with large section size, internal vertical and horizontal reinforcement, and has sufficient bending and torsional strength.
- 机床导轨有滚滑复合导轨和重载线轨结构形式。
The machine tool guide rail has the form of rolling slide composite guide rail and heavy load line rail structure.
- 该系列机床:130、160有主轴箱式和带方滑枕结构。
This series of machine tools :130, 160 have spindle box type and square ram structure.

CNC HORIZONTAL MILLING AND BORING MACHINE SERIES

数控卧式铣镗床系列

机型 Machine type	单位 Unit	KMT110AS	KMT110BS	KMT130BS
主轴 Principal axis				
主轴直径 Spindle diameter	mm	110	110	130
主轴锥孔 Spindle taper hole	/	ISO50	ISO50	ISO50
主轴转速 Spindle speed	rpm	10-1500	2000-3000	2000-3000
主电机功率 Main motor power	KW	15	19.5	19.5
主轴最大扭矩 Maximum spindle torque	N.m	1000	1600	1600
主轴最大轴向抗力 Maximum axial resistance of spindle	N	15000	15000	15000
平旋盘直径 Flat disc diameter	mm	650	/	/
平旋盘转速 Flat spinning disk speed	rpm	7-165	/	/
平旋盘最大扭矩 Maximum torque of flat spinning disc	rpm	1500	/	/
行程 journey				
X轴（工作台左右移动） X-axis (table moving left and right)	mm	2000	2000	2000
Y轴（主轴箱上下移动） Y-axis (headstock moves up and down)	mm	2000	2000	2000
Z轴（工作台前后移动） Z-axis (table moving forward and backward)	mm	1500	1500	1500
W轴（主轴伸缩） W axis (spindle expansion)	mm	600	600	700
B轴（工作台回转） B axis (table rotation)	度	360	360	360
U轴（滑块径向移动） U-axis (slider radial movement)	mm	200	/	/
工作台 workbench				
工作台尺寸（宽x长） Table size (W x L)	mm	1250x1400	1250x1400	1400x1600
工作台最大承重 Maximum bearing capacity of table	kg	5000	5000	8000
进给速度 Feed rate				
快速X/Y/Z/W Fast X/Y/Z/W	mm/min	10000	10000	10000
快速U Fast U	mm/min	3000	/	/
快速B Fast B	rpm	1	1	1
切削速度X/Y/Z/W Cutting speed X/Y/Z/W	mm/min	6000	6000	6000
切削速度U Cutting speed U	mm/min	1000	/	/
切削速度B Cutting speed B	rpm	0.003-1	0.003-1	0.003-1

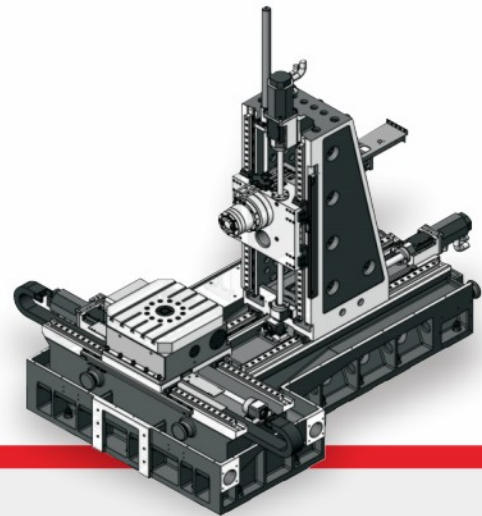
CNC PLANER TYPE MILLING AND BORING MACHINE SERIES

数控刨台式铣镗床系列

机型 Machine type	单位 Unit	KMT110B	KMT130B	KMT160B	TK6513/16
主轴 Principal axis					
主轴直径 Spindle diameter	mm	110	130	160	130/160
主轴锥孔 Spindle taper hole	/	ISO50	ISO50	ISO50	ISO50
主轴转速 Spindle speed	rpm	2000/3000	2500	2000	1500
主电机功率 Main motor power	KW	19.5	31	31	31/44
主轴最大扭矩 Maximum spindle torque	N.m	1600	3100	3800	3400/4800
主轴最大轴向抗力 Maximum axial resistance of spindle	N	15000	25000	25000	25000
方滑枕尺寸 Square ram size	mm	/	/	/	420x480
行程 journey					
X轴（工作台左右移动） X-axis (table moving left and right)	mm	2000/3000	2000/3000/4000	2000/3000/4000	2000/3000/4000
Y轴（主轴箱上下移动） Y-axis (headstock moves up and down)	mm	2000	2000/2500/3000	2000/2500/3000	2000/2500/3000
Z轴（立柱前后移动） Z-axis (column moving forward and backward)	mm	1500	1500/2000	1500/2000	2000
W轴（主轴伸缩） W axis (spindle expansion)	mm	600	700/800/900	900	800
B轴（工作台回转） B axis (table rotation)	度	360	360	360	360
V轴（滑枕前后移动） V-axis (slider moving forward and backward)	mm	/	/	/	800
工作台 workbench					
工作台尺寸（宽x长） Table size (W x L)	mm	1250x1400	1600x1800/1800x2000 2000x2500/2500x3000	1600x1800/1800x2000 2000x2500/2500x3000	1600x1800/1800x2000 2000x2500/2500x3000
工作台最大承重 Maximum bearing capacity of table	kg	5000	15000/25000	20000/40000	20000/40000
进给速度 Feed rate					
快速X/Y/Z/W Fast X/Y/Z/W	mm/min	10000	10000	10000	10000
快速V Fast V	mm/min	/	/	/	10000
快速B Fast B	rpm	1	1	1	1
切削速度X/Y/Z/W Cutting speed X/Y/Z/W	mm/min	6000	6000	6000	6000
切削速度V Cutting speed V	mm/min	/	/	/	6000
切削速度B Cutting speed B	rpm	0.003-1	0.003-1	0.003-1	0.003-1

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HORIZONTAL MACHINING
CENTER MACHINE
卧式加工中心机



HUAEN 华恩

机床用途 Machine tool use

1. 本系列机床标配X、Y、Z三个联动轴及可加回转工作台B轴。主要用于箱体类、盘类、壳体类及模具等精度高，形状复杂的零件。可配自动换刀系统，在一次装夹中连续完成铣、钻、扩、铰、镗、攻丝的精确加工，实现加工程序化，缩短生产周期，从而使用户获得良好的经济效益。
This series of machine tools is equipped with X, Y, Z three linkage axes and B axis can be added rotary table. It is mainly used for parts with high precision and complex shape such as box, plate, shell and mold. It can be equipped with an automatic tool changing system, which can continuously complete the precise processing of milling, drilling, expanding, reaming, boring and tapping in a single clamping process, realize the processing program, shorten the production cycle, so that users can obtain good economic benefits.
2. 本系列机床广泛应用于高精模具、汽车零部件、航空航天件、军工件、五金件等各种机械产品的加工。
This series of machine tools are widely used in the processing of high precision molds, auto parts, aerospace parts, military parts, hardware and other mechanical products.

机床结构特点 Machine tool structure characteristics

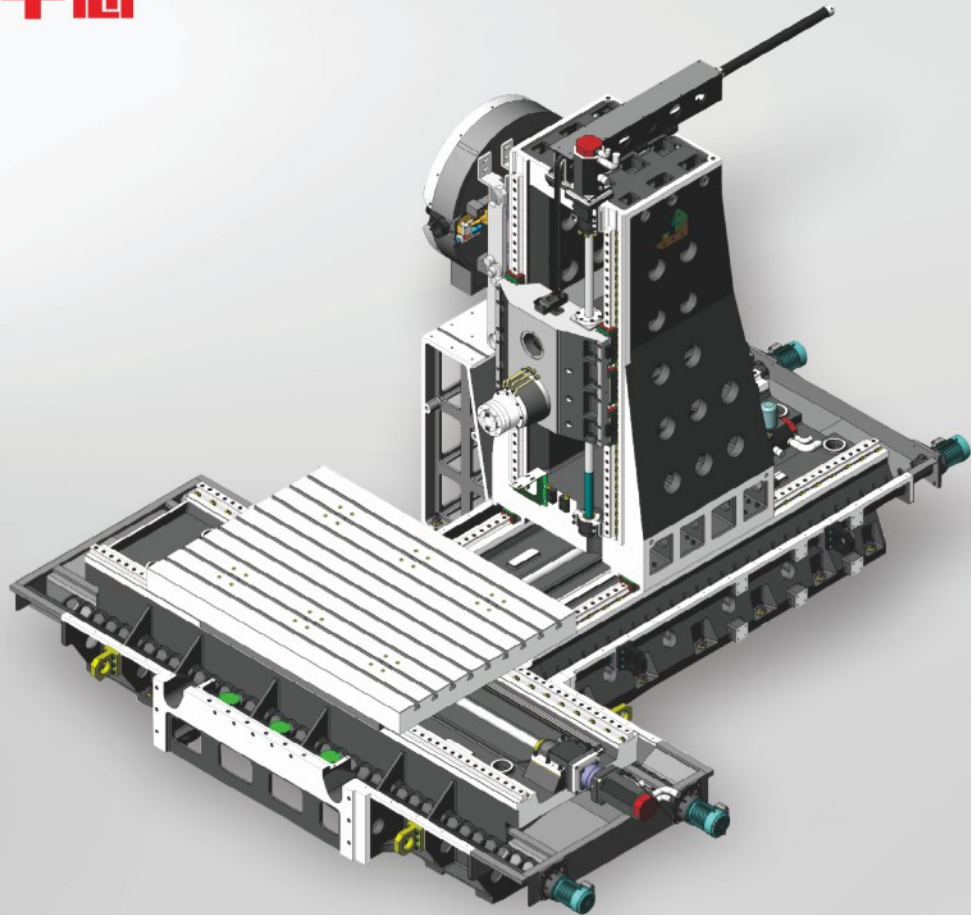
1. 底座、滑鞍、工作台、立柱、主轴箱等大件均采用高强度铸铁材料，造型为树脂砂工艺，两次时效处理消除应力，提高了大件和整机的刚度和稳定性，有效抑制了切削力导致机床的变形和振动。
Base, slide saddle, table, column, spindle box and other large parts are made of high-strength cast iron material, modeling resin sand process, two aging treatment to eliminate stress, improve the stiffness and stability of large parts and the whole machine, effectively inhibit the cutting force caused by the deformation and vibration of the machine.
2. 三轴导轨均采用精密线性滚动导轨，由于导轨副之间摩擦方式为滚动摩擦，摩擦系数小、动静摩擦力差值小，可实现低速无爬行，高速高精度定位。
Precision linear rolling guide rails are adopted for all three-axis guide rails. As the friction mode between guide pairs is rolling friction, the friction coefficient is small and the difference between static and static friction is small, which can realize no crawling at low speed and high-speed and high-precision positioning.
3. 三轴均采用 C3 级精密滚珠丝杠，进口丝杠专用轴承，配合两端支撑座的预拉伸设计，增加丝杠的刚性，降低热变位，消除传动背隙，提升精度，使传动更平稳，具有完美的可靠性和极强耐久性。
The three axes are made of C3 precision ball screw, imported special bearings for the lead screw, with the pre-tensile design of both ends of the support seat, to increase the rigidity of the lead screw, reduce thermal displacement, eliminate transmission backlash, improve accuracy, make the transmission more stable, with perfect reliability and strong durability.
4. 主轴组采用台湾专业厂家生产，具有高精度，高刚性。轴承采用 P4 级主轴专用轴承，整套主轴在恒温条件下组装完成后，均通过动平衡校正及跑合测试，提高了整套主轴的使用寿命及可靠性。
The spindle set is manufactured by professional manufacturers in Taiwan, with high precision and high rigidity. The bearings are P4 special bearings for the main shaft. After the whole spindle is assembled under constant temperature conditions, it passes dynamic balance correction and running test to improve the service life and reliability of the whole spindle.

河南省华恩智能装备有限公司
Henan Huaen Intelligent Equipment Co., Ltd

机型 Machine type	单位 Unit	MV-630	MV-800	MV-1000	MV-2211
X轴行程（工作台左右移动） X-axis travel (workbench moves left and right)	mm	1050	1300	1300/1600	2200
Y轴行程（主轴箱上下移动） Y-axis travel (spindle box moves up and down)	mm	800	1100	1100	1100
Z轴行程（立柱前后移动） Z-axis travel (column moves forward and backward)	mm	900	1300	1300	1300
主轴端面至工作台中心距离 Distance from spindle end face to workbench center	mm	150-1050	225-1525	250-1550	310-1610
主轴中心至工作台台面距离 Distance from spindle center to workbench surface	mm	50-850	30-1130	50-1150	50-1150
旋转工作台面积 Rotating workbench area	mm	630*630	800*800	1000*1000	1400*1600
最大载重 maximum payload	kg	1200	2600	2800	12000
工作台T型槽（数目-尺寸*间距） T-shaped slots on the workbench (number size spacing)	mm	5-18*100	5-8*100	5-22*180	7-28*200
工作台个数分度单位 Number of workbenches/division unit	°	1/一度一分或0.001度	1/一度一分或0.001度	1/一度一分或0.001度	1/一度一分或0.001度
回转直径 Rotating diameter	mm	φ 890	φ 1130	φ 1415	φ 2100
主轴（规格-安装直径-传动形式） Main spindle (specifications installation diameter transmission form)		BT50- φ 190-皮带主轴	BT50- φ 190-皮带主轴	BT50- φ 190-皮带主轴	BT50- φ 190-皮带主轴
主轴转速 Spindle speed	rpm	6000rpm	6000rpm	6000rpm	6000rpm
X/Y/Z轴滚珠丝杆规格 X/Y/Z-axis ball screw specifications		X: 4012; Y、Z: 5010	X、Y、Z: 5012	X、Y、Z: 5010	X: 5512; Y、Z: 5010
X/Y/Z轴瞬间快速移动速度 Instantaneous rapid movement speed of X/Y/Z axis	M/min	24	24	24	X:12、Y、Z: 24
X轴导轨 规格 X-axis guide rail specifications	mm	45#滚柱线规（4滑块）	55#滚柱线规（6滑块）	55#滚柱线规（6滑块）	3*45# 滚柱线轨（9滑块设计）
Y轴导轨 规格 Y-axis guide rail specifications	mm	45#滚柱线规（4滑块）	55#滚柱线规（6滑块设计）	55#滚柱线规（6滑块设计）	2*55# 滚柱线轨（6滑块设计）
Z轴导轨 规格 Z-axis guide rail specifications	mm	55#滚柱线规（4滑块）	55#滚柱线规（6滑块设计）	55#滚柱线规（6滑块设计）	4*45# 滚柱线轨（16滑块设计）
X、Y、Z电机联接方式 X. Connection method of Y and Z motors		直连	直连	直连	直连
主电机参数 功率 Main motor parameter power	kw	15-18.5	15-18.5	15-18.5	18.5-22
X、Y、Z轴电机参数 X、Y and Z-axis motor parameters	NM	X:30/Y:30（抱闸）/Z:30	X:30/Y:30（抱闸）/Z:30	X:30/Y:30（抱闸）/Z:30	X:60/Y:40（抱闸）/Z:60
机械占地尺寸（长×宽×高） Mechanical footprint size (length × wide × High)	MM	3500 × 3000 × 3500	5000 × 4000 × 4000	5000 × 4000 × 4000	5500 × 5000 × 4500
机械重量 Mechanical weight	KG	12000	14000	16000	19000

Note :1. Our standard for single station rotary table, can be optional double station rotary table.
2. Technical specifications are subject to change without prior notice, the picture parameters in the sample are for reference only, the right of interpretation belongs to Hua En Company.

备注:1.我司标准为单工位旋转台，可选配双工位旋转台。
2.技术规格如有变更，恕不另行通知，样本中的图片参数仅供参考，解释权归华恩公司所有。



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HORIZONTAL MACHINING
CENTER MACHINE

卧式加工中心机

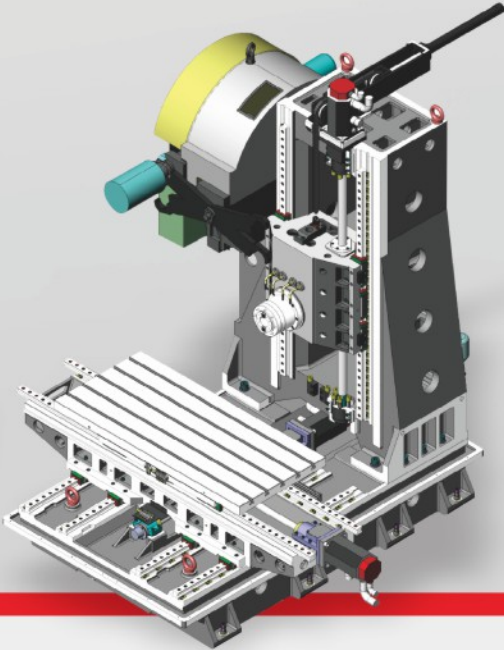
机床用途 Machine tool use

1. 主要用于箱体类、盘类、壳体类及模具等精度高，形状复杂的零件。可配自动换刀系统，在一次装夹中连续完成铣、钻、扩、铰、镗、攻丝的精确加工，实现加工程序化，缩短生产周期，从而使用户获得良好的经济效益。
It is mainly used for parts with high precision and complex shape such as box, plate, shell and mold. It can be equipped with an automatic tool changing system, which can continuously complete the precise processing of milling, drilling, expanding, reaming, boring and tapping in a single clamping process, realize the processing program, shorten the production cycle, so that users can obtain good economic benefits.
2. 本系列机床广泛应用于高精模具、汽车零部件、航空航天件、军工件、五金件等各种机械产品的加工。
This series of machine tools are widely used in the processing of high precision molds, auto parts, aerospace parts, military parts, hardware and other mechanical products.

机型 Machine type	单位 Unit	MV-1811DT	MV-2211DT	MV-2611DT	MV-2616DT	MV-3011DT	MV-63AC5 (五轴转台)
X轴行程（工作台左右移动） X-axis travel (table moving left and right)	mm	1800	2200	2600	2600	3000	1300
Y轴行程（主轴箱上下移动） Y-axis travel (headstock up and down)	mm	1100	1100	1100	1600	1100	800
Z轴行程（立柱前后移动） Z-axis travel (column moving forward and backward)	mm	1300	1300	1300	1300	1300	1300
主轴端面至工作台中心距离 Distance from spindle end face to center of table	mm	350-1650	350-1650	350-1650	350-1650	350-1650	0-800
主轴中心至工作台中心距离 Distance from spindle center to table center	mm	100-1200	100-1200	100-1200	100-1700	100-1200	150-1450
工作台面积 Table area	mm	2000*1400	2400*1400	2800*1400	2800*1400	3200*1400	ø 650(WDS-RTS 650)
最大载重 Maximum load	kg	5000	7000	8000	8000	9000	3000
工作台T型槽（数目-尺寸*间距） Table T-slots (Number-size * spacing)	mm	9-22*140	9-22*140	9-22*140	9-22*140	9-22*140	5-18*100
工作台个数分度单位 Number of workstations \ index unit	°	固定式矩形工作台（非分度）	固定式矩形工作台（非分度）	固定式矩形工作台（非分度）	固定式矩形工作台（非分度）	固定式矩形工作台（非分度）	详情转台技术参数图
主轴（规格-安装直径-传动形式） Spindle (Specification-mounting diameter-transmission form)		BT50-φ 190-皮带主轴	BT50-φ 190-皮带主轴	BT50-φ 190-皮带主轴	BT50-φ 190-皮带主轴	BT50-φ 190-皮带主轴	BT50-φ 190-皮带主轴
主轴转速 Spindle speed	rpm	6000rpm	6000rpm	6000rpm	6000rpm	6000rpm	6000rpm
X/Y/Z轴滚珠丝杆规格 X/Y/Z axis ball screw specification		X: 5512; Y、Z: 5010	X: 5512; Y、Z: 5010	X: 6310; Y、Z: 5010	X: 6316; Y、Z: 5010	X: 6310; Y、Z: 5010	X、Y、Z: 5010
X/Y/Z轴瞬间快速移动速度 X/Y/Z axis instantaneous fast movement speed	M/min	24	24	24	24	24	24
X轴导轨 规格 X-axis guide specification		55#滚柱线规（6滑块设计）	55#滚柱线规（8滑块设计）	55#滚柱线规（10滑块设计）	55#滚柱线规（12滑块设计）	55#滚柱线规（12滑块设计）	55#滚柱线规（6滑块设计）
Y轴导轨 规格 Y-axis guide specification		55#滚柱线规（6滑块设计）	55#滚柱线规（6滑块设计）	55#滚柱线规（6滑块设计）	55#滚柱线规（6滑块设计）	55#滚柱线规（6滑块设计）	55#滚柱线规（6滑块设计）
Z轴导轨 规格 Z-axis guide specification		55#滚柱线规（6滑块设计）	55#滚柱线规（6滑块设计）	55#滚柱线规（6滑块设计）	55#滚柱线规（8滑块设计）	55#滚柱线规（6滑块设计）	55#滚柱线规（6滑块设计）
X、Y、Z电机联接方式 X、Y、Z motor connection mode		直连	直连	直连	直连	直连	直连
主电机参数 功率 Main motor parameter power	kw	15-18.5	15-18.5	15-18.5	15-18.5	15-18.5	15-18.5
X、Y、Z轴电机参数 X、Y、Z axis motor parameters	NM	X:30/Y:30（抱闸）/Z:30	X:30/Y:30（抱闸）/Z:30	X:30/Y:30（抱闸）/Z:30	X:40/Y:40（抱闸）/Z:30	X:40/Y:30（抱闸）/Z:30	X:30/Y:30（抱闸）/Z:30
机械占地尺寸（长×宽×高） Machine area size (length×width×height)	MM	5500×5000×4000	5500×6000×4000	5500×6500×4000	5500×6500×4500	5500×7500×4000	4500×3500×3500
机械重量 Mechanical weight	KG	17000	18000	19000	20000	21000	13000

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HORIZONTAL MACHINING
CENTER MACHINE
卧式加工中心机



机床用途 Machine tool use

1. 主要用于箱体类、盘类、壳体类及模具等精度高，形状复杂的零件。可配自动换刀系统，在一次装夹中连续完成铣、钻、扩、铰、镗、攻丝的精确加工，实现加工程序化，缩短生产周期，从而使用户获得良好的经济效益。

It is mainly used for parts with high precision and complex shape such as box, plate, shell and mold. It can be equipped with an automatic tool changing system, which can continuously complete the precise processing of milling, drilling, expanding, reaming, boring and tapping in a single clamping process, realize the processing program, shorten the production cycle, so that users can obtain good economic benefits.
2. 本系列机床广泛应用于高精模具、汽车零部件、航空航天件、军工件、五金件等各种机械产品的加工。

This series of machine tools are widely used in the processing of high precision molds, auto parts, aerospace parts, military parts, hardware and other mechanical products.

机型 Machine type	单位 Unit	MV-1290S	MV-1390S	MV-1814S	MV-11A50	MV-13A63
X轴行程（工作台左右移动） X-axis travel (workbench moves left and right)	mm	1200	1300	1800	1100	1300
Y轴行程（主轴箱上下移动） Y-axis travel (spindle box moves up and down)	mm	900	900	1400	900	900
Z轴行程（立柱前后移动） Z-axis travel (column moves forward and backward)	mm	700	700	900	700	700(选配1100)
主轴端面至工作台中心距离 Distance from spindle end face to workbench center	mm	165-865	250-950	200-1100	250-950	250-950
主轴中心至工作台中心距离 Distance from spindle center to workbench surface	mm	75-975	0-900	20-1420	50-900	50-900
工作台面积 Rotating workbench area	mm	1360*700	1500*700	2000*900	500*500	630*630
最大载重 maximum payload	kg	1000	1400	1600Kg	800	1000
工作台T型槽（数目-尺寸*间距） T-shaped slots on the workbench (number size spacing)	mm	5-18*122	5-18*125	5-22x165	5-18*100	5-18*100
工作台个数分度单位 Number of workbenches/division unit	°	固定式矩形工作台（非分度）	固定式矩形工作台（非分度）	固定式矩形工作台（非分度）	1/一度一分	1/一度一分
回转直径 Rotating diameter	mm	-	-	-	φ 710	φ 890
主轴（规格-安装直径-传动形式） Main spindle (specifications installation diameter transmission form)		BT50-φ 190-皮带主轴	BT50-φ 190-皮带主轴	BT50/φ 190皮带主轴	BT50-φ 190-皮带主轴	BT50-φ 190-皮带主轴
主轴转速 Spindle speed	rpm	6000rpm	6000rpm	6000rpm	6000rpm	6000rpm
X/Y/Z轴滚珠丝杆规格 X/Y/Z-axis ball screw specifications		5010	X、Z: 4012; Y: 5010	X、Z: 5512 Y: 5010	X、Z: 4012; Y: 5010	X、Z: 4012; Y: 5010
X/Y/Z轴瞬间快速移动速度 Instantaneous rapid movement speed of X/Y/Z axis	M/min	X、Z: 24; Y: 12	24	X/Z:20 Y:12	24	24
X轴导轨 规格 X-axis guide rail specifications		2*55#滚柱线规（6滑块设计）	2*45#滚柱线规（6滑块设计）	2*55#滚柱线规（6滑块设计）	2*45#滚柱线规（6滑块设计）	2*45#滚柱线规（6滑块设计）
Y轴导轨 规格 Y-axis guide rail specifications		滑动导轨	2*45#滚柱线规（6滑块设计）	矩形淬火导轨	2*45#滚柱线规（6滑块设计）	2*45#滚柱线规（6滑块设计）
Z轴导轨 规格 Z-axis guide rail specifications		4*45#滚珠线规（8滑块设计）	4*45#滚珠线规（8滑块设计）	4*45#滚珠线规（8滑块设计）	4*45#滚珠线规（8滑块设计）	4*45#滚珠线规（8滑块设计）
X、Y、Z电机联接方式 X、Y and Z-axis motor parameters		直连	直连	直连	直连	直连
主电机参数 功率 Main motor parameter power	kw	15-18.5	15-18.5	15-18.5	15-18.5	15-18.5
X、Y、Z轴电机参数 X、Y and Z-axis motor parameters	NM	X:30/Y:30（抱闸）/Y:30	X:30/Y:30（抱闸）/Y:30	X:30/Y:30（抱闸）/Y:30	X:30/Y:30（抱闸）/Y:30	X:30/Y:30（抱闸）/Y:30
机械占地尺寸（长×宽×高） Mechanical footprint size (length × wide × High)	MM	3500×3500×3500	3500×4000×3500	4000×5000×4000	3500×3500×3500	3500×4000×3500
机械重量 Mechanical weight	KG	6000	6500	12000	6500	7000

Technical specifications are subject to change without prior notice, the picture parameters in the sample are for reference only, the right of interpretation belongs to Hua En Company. 技术规格如有变更，恕不另行通知，样本中的图片参数仅供参考，解释权归华恩公司所有。

HN-WZ650B FIVE AXIS MACHINING CENTER MACHINE
HN-WZ650B 五轴加工中心机



- » 高效铣削技术
Efficient milling technology
- » 高刚性床身结构
High rigid bed structure
- » 高精度齿轮传动转台技术
High precision gear drive turntable technology
- » 高响应动态表现
Highly responsive dynamic performance

机型 Machine type	单位 Unit	HN-WZ650B	选配项目 Optional item	备注 Remark
工作台面尺寸 Table size	mm	Φ650		
X轴左右行程 X axis left and right travel	mm	820(左行程: 500mm、右行程: 320mm)		
Y轴前后行程 Y-axis forward and backward travel	mm	520		
Z轴上下行程 Z-axis up and down travel	mm	500		
主轴中心至导轨距离 Distance from spindle center to guide rail	mm	187		
五轴转台品牌 Five axis turntable brand		标配台正: TB-YL-650(BC轴滚子凸轮)	上银RAS-650、德川TDFAI-650H	
B/C行程 B/C travel		± 110° /360°		
主轴端面至工作台面距离 Distance from spindle end face to work surface	mm	150-650		
主轴锥孔 Spindle taper hole	型号/安装尺寸	BT40/Φ150	HSKA-63/Φ150	睿莹
主轴转速 Spindle speed	rpm/min	15000	15000	睿莹
刀库规格 Tool store specification		标配BT40-24T圆盘刀库	HSKA63-24/BT40-30T圆盘刀库	冈田
X.Y.Z轴滚珠丝杆规格 X.Y.Z axis ball screw specifications		4012		
X.Y.Z轴线轨规格 X.Y.Z axis track specifications		45#滚柱线轨		
三轴快移速度 Three axis fast moving speed	m/min	X=24、Y=24、Z=24		
X.Y.Z电机联接方式 X.Y.Z motor connection mode		直联		
主电机参数 Main motor parameters	KW	11KW		
X.Y.Z轴电机参数 X.Y.Z axis motor parameters are selected	NM	22、22、22		
床身垫块高度 Bed pad height	mm	50		
工作台承重（垂直/水平仅参考） Table bearing (vertical/horizontal reference only)	kg	300		
液压站 Hydraulic power station		标配		国产
油冷机 Oil cooler		标配		国产
内、外钣金(含链式排屑机、小推车) Internal and external sheet metal (including chain chip removal machine, trolley)		标配		引兴
整机重量 Machine weight	kg	15000		

※ 控制系统Control system

标配：西门子840D
Standard: Siemens 840D

选配：新代 海德汉
Optional: New generation
Heidelberg

※ 备注 Remark

1、本公司随时在进行研究改进工作，因此保有随时更改技术参数的权力，变更时恕不另行通知。谢谢

The Company is carrying out research and improvement work at any time, so it reserves the right to change the technical parameters at any time without notice. thank you.



服务详细 SERVICE DETAIL

• 售前技术咨询服务 Pre-sales technical advisory services

提供顾问式服务，根据您加工的产品与要求，提供最优的解决方案，达到效率最高，成本最少。并为您提供专业的建议给您参考，让您的产品在生产过程中发挥最佳效果。

Provide consulting services, according to your processing products and requirements, to provide the best solution, to achieve maximum efficiency and minimum cost. And to provide you with professional advice for your reference, so that your products in the production process to play the best effect.



• 售后服务 After-sales service

售后服务人员拥有丰富维修经验，拥有制造全过程实践经验，可为您提供机械前后全方位应用咨询服务、培训、机械加工工艺分析及数控机床各类故障维修。

The after-sales service staff has rich maintenance experience and practical experience in the whole manufacturing process, which can provide you with all-round application consulting services, training, machining process analysis and various types of fault maintenance of CNC machine tools.



» 服务承诺 Performance pledge

1. 我司派人到贵司所在地指导安装、调试、验收、培训工作。
Our company will send people to guide the installation, commissioning, acceptance and training of your company.
2. 我司依照精度检验表验收后，机床方可投入正式使用。
Our company in accordance with the accuracy inspection table acceptance, the machine can be put into formal use.
3. 我司机床的整机保修期内以交机之日起12个月，并提供机床终身有偿服务。
The whole machine warranty period of our company is 12 months from the date of delivery, and we provide lifelong paid service for machine tools.
4. 我司售后服务人员接到客户报修电话8小时内回应，24小时内到达现场。
Our after-sales service personnel received customer repair call within 8 hours to respond, arrived at the scene within 24 hours.

» 销售服务网络 Sales and service network

华恩凭借先进的技术、卓越的品质、诚信共赢的战略合作方针，在国内主要地区设立多个办事处并兼售后服务中心，配置专业的售后服务团队，为客户提供全面、方便、快捷的售后服务支持。

With advanced technology, excellent quality, integrity and win-win strategic cooperation policy, Huain has set up a number of offices and after-sales service centers in major regions of China, and configured professional after-sales service team to provide customers with comprehensive, convenient and fast after-sales service support.