

# ZHONGCONG BE THE BEST RIGID CNC LATHE

中聰 · 做剛性最好的走心機 >>



广东中聪智能装备有限公司  
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## SWISS TYPE CNC LATHE CNC LATHE 走心式精密数控车床

广东中聪智能装备有限公司  
GUANGDONG ZHONGCONG INTELLIGENT EQUIPMENT CO., LTD

www.hanbs.com

HS-926/932

HS-820

HS-326

HS-512

HS-1146

HS-P26

HS-W20/M15



东莞工厂 DONGGUAN FACTORY



湖北工厂 HUBEI FACTORY

# COMPANY PROFILE

## 公司简介



广东中聪智能装备有限公司，为国家级高新技术企业，位于粤港澳大湾区的中心地段东莞市大朗镇，公司集数控走心机的研发生产销售与培训于一体，潜心致力于高端精密数控走心机领域，为打造中国民族品牌而努力！本公司创立于2013年，现在专利八十多项，多年来一直用好用材，用好心的二用原则，力求以实际行动，不忘初心，坚持品质，为用户提供精密度高，稳定性好，可靠性强的精密机床，欢迎广大用户亲临指导，现场体验，中聪将带给您不一样的感受！

走心机也称主轴移动式车床，指在加工精密轴类零件时，依靠主轴夹持材料的轴向移动进行车削与铣削的加工，辅以同步导套装置，在主轴移动的过程中，刀具与导套始终保持最近距离，故可加工细长轴类零件且整体精度保持一致。

数控走心机除车削外还有侧面端面等铣削功能，精密复杂零件可一次加工成型，既提高了零件精度又免去了二次装夹等工序，双主轴数控走心机主副轴可分开同时加工，部分加工工艺可均分的零件采用双主轴数控走心机加工，一台相当于二台机床的加工效率，配备自动油膜式送料及收料传送装置，可实现精密制造工厂的全自动无人化生产！

2013

本公司创立于2013年  
The company was founded in 2013

100<sup>+</sup>项

相关专利证书  
Relevant patent certificate

## GUANGDONG ZHONGCONG INTELLIGENT EQUIPMENT CO., LTD

Guangdong Zhongcong Intelligent Equipment Co., LTD., a national high-tech enterprise, is located in Dalang Town, Dongguan City, the center of Guangdong-Hong Kong-Macao Greater Bay Area. The company integrates the research and development, production, sales and training of Swiss type CNC lathe in one, dedicates itself to the field of high-end precision CNC lathe machine, and strives to build a Chinese national brand! The company was founded in 2013, now more than 80 patents, over the years has been to use good materials, with the principle of good intentions, and strive to take practical action, do not forget the original heart, adhere to quality, to provide users with high precision, good stability, reliability of CNC lathe machine tools, welcome the majority of users to visit and guidance, on-site experience, Zhongcong will bring you different feelings!

Swiss type CNC lathe, also known as spindle mobile lathe, refers to the machining of precision shaft parts, relying on the axial movement of the spindle clamping material for turning and milling processing, supplemented by synchronous guide bushing device, in the process of spindle movement, the tool and the guide bushing always maintain the closest distance, so it can be processed slender shaft parts and the overall accuracy is consistent.

Swiss type CNC lathe in addition to turning and other side end milling functions, precision complex parts can be processed once, not only improve the accuracy of parts and eliminate the secondary clamping and other processes, dual spindle CNC lathe machine main and auxiliary shaft can be separated at the same time, part of the processing technology can be evenly divided parts using dual spindle CNC lathe machine processing, one equivalent to two machine tools processing efficiency, Equipped with automatic oil film feeder and receiving and conveying device, it can realize automatic unmanned production of precision manufacturing factory!



# EXHIBITION HALL AND WORKSHOP

## 展厅及车间

我们全套的服务，满足顾客对产品高精度的要求。我们的专业团队会提前从设计，制造，直到最后组装等各方面给您提供建议，并协助您完成量产期的设计修改，从而帮助您缩短产品从开发到进入市场的周期。只要项目一启动，您便无需等待。我们的优势是高效和专业的沟通以及快速的反应让复杂的设计和制作变得舒心、简单。

Our full range of services to meet customer requirements for high precision products. Our professional team will advise you in advance on all aspects of design, manufacturing, and final assembly, and assist you with design modifications during the production period, thereby helping you shorten the cycle from development to market. As soon as the project starts, you don't have to wait. Our advantage is that efficient and professional communication and quick response make complex design and production comfortable and simple.



# PRODUCT INTRODUCTION

走心式精密数控车床

型号 HS-926

HS-926/932



## 更高性能 更易使用与维护

Higher performance  
Easier to use and maintain

- 具备导套型与无导套型切换的功能。
- 主轴最高旋转速度与单次装夹长度等性能达到更高水平。
- 对切屑的清扫和工序切换等日常操作在设计上也进行了充分的考虑。
- With the function of switching between guide type and no guide type.
- Higher performance levels such as maximum spindle rotation speed and single clamping length.
- Daily operations such as chip cleaning and process switching are also designed with sufficient consideration.



## 双主轴 双通道设计

Double spindle  
Dual channel design

- 主轴、背面主轴均采用高精度内藏电主轴。
- 双通道设计，显著提高生产效率。
- 搭载背面专用刀具座，可通过正面/背面的独立加工，缩短加工时间。

- High precision internal electric spindle is used for main shaft and back spindle.  
- Dual channel design, significantly improve production efficiency.  
- Equipped with a special tool holder on the back, it can shorten the processing time through independent machining of the front/back.



## 以客户需求 导向优化

Customer demand-  
oriented optimization

HS-926具备单件上料加工方式，主轴单件上料时副轴可以同时加工，显著提升了加工效率。

HS-926 has a single-piece feeding processing mode, and the auxiliary shaft can be processed at the same time when the main shaft is single-piece feeding, which significantly improves the processing efficiency.



## 永磁同步伺服电主轴

高刚性，高精密度，快速启停，令铣削更从容！

Permanent magnet synchronous servo electric spindle; High rigidity, high precision, fast start and stop, make milling easier!



## 可旋转操作面板

让您轻松操作的同时还可以方便地持续查看加工过程。

Rotatable operation panel; It allows you to easily operate while also allowing you to easily view the process continuously.



## 集中油冷循环系统

提高了机床的热稳定性，加工精度更稳定。

Centralized oil cooling circulation system; The thermal stability of the machine is improved, and the machining accuracy is more stable.



# PRODUCT INTRODUCTION

走心式精密数控车床

型号 HS-932/926



更高性能  
更易使用与维护

Higher performance  
Easier to use and maintain

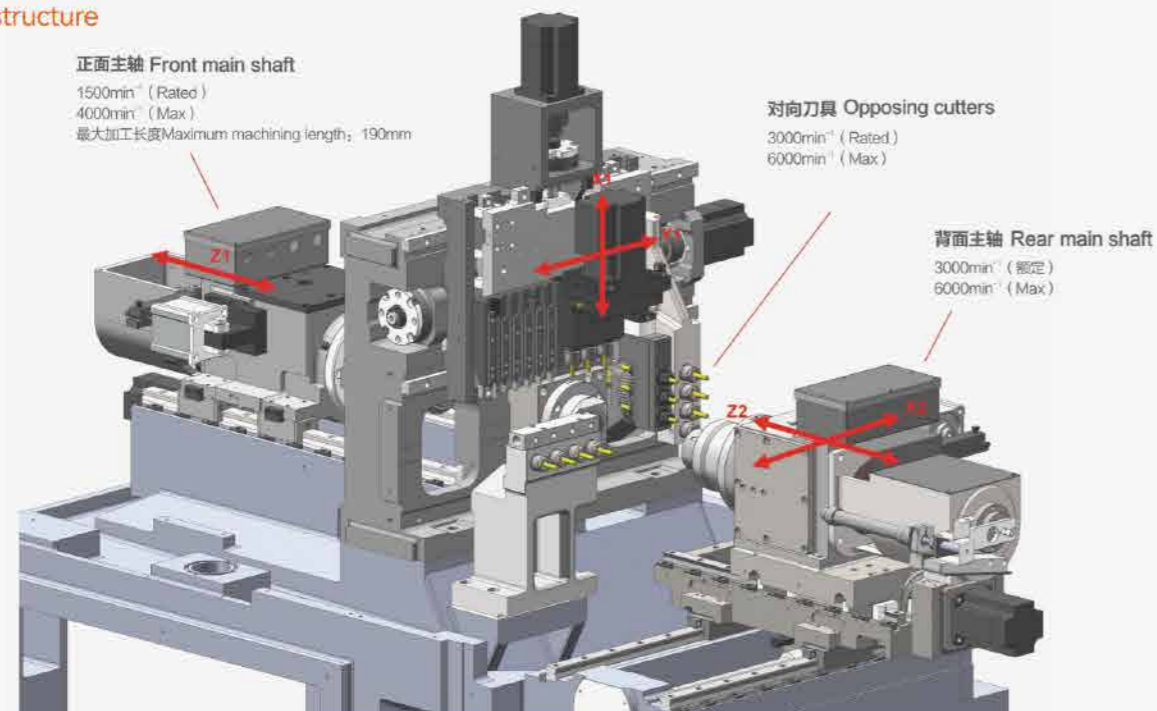
- 具备导套型与无导套型切换的功能。
- 主轴最高旋转速度与单次装夹长度等性能达到更高水平。
- 对切屑的清扫和工序切换等日常操作在设计上也进行了充分的考虑。
- With the function of switching between guide type and no guide type.
- Higher performance levels such as maximum spindle rotation speed and single clamping length.
- Daily operations such as chip cleaning and process switching are also designed with sufficient consideration.

## 技术参数 Technical parameter

机型 Machine type	参数配置 Parameter configuration	HS-932	HS-926
加工参数 Machining parameter	主轴最大加工直径 Maximum machining diameter of spindle	Φ32mm	Φ26mm
	背轴最大加工直径 Maximum machining diameter of the back shaft	Φ32mm	Φ26mm
	最大加工直径 Maximum machining diameter	Φ32mm	Φ26mm
	最大加工长度 Maximum working length	/	190mm/夹-导套模式 190mm/ clip - bushing mode
	轴向最大钻孔直径 Maximum axial hole diameter	Φ10mm	Φ10mm
	轴向最大攻丝大小 Maximum axial tapping size	M8	M8
	主轴最高转速 Maximum spindle speed	10000rpm	10000rpm
	径向最大钻孔直径 Maximum radial bore diameter	Φ12mm	Φ10mm
	径向最大攻丝大小 Maximum radial tapping size	M6	M6
	径向动力头最高转速 Maximum speed of radial power head	6000	6000
	径向动力头额定转速 Rated speed of radial power head	5000	5000
	前出料工件最大取出长度 Maximum extraction length of pre-discharge workpiece	100mm	100mm
	刀具尺寸 Tool size	刀具安装数量 Number of tools installed	6
刀具(车刀) Cutting tool (turning tool)		□16*16	□12*12
套筒 Sleeve		Φ25x4把bundle(ER16)	Φ25x4把bundle(ER16)
夹头导套 Chuck guide sleeve	主轴/背轴弹簧夹头 Spindle/back shaft spring chuck	TSUGAMI B032SC	TSUGAMI B0265CCR
	动力头夹头 Power head clamp	ER20*1支 ER16*3支 (count)	ER16*3
	导套 Guide bush	TSUGAMI B032BC	TSUGAMI BS-20#-B
进给速度 Feed rate	Z1/Y1/Z2/X2轴快移速度 Z1/Y1/Z2/X2 axis fast movement speed	30m/min	30m/min
	X1轴快移速度 X1 axis fast moving speed	28m/min	28m/min
电机 Electric machine	主轴/背轴 Main axis/back axis	11KW/4.2KW	4.2KW/3.7KW
	动力头 Power head	2KW	1KW
	切削油 Cutting oil	0.75KW	0.75KW
	主轴冷却 Spindle cooling	1KW	1KW
	润滑油 Lubricating oil	0.004KW	0.004KW
	X1/Y1/Z2轴 The X1/Y1/Z2 axis	0.75KW	0.75KW
	Z1/X2轴 Z1/X2 axis	0.85KW	0.85KW
其他 Other	主轴中心高 Spindle center height	1060mm	1060mm
	气压流量 Barometric flow	0.5MPa.0.3m <sup>3</sup> /min	0.5MPa.0.3m <sup>3</sup> /min
	输入功率 Input power	19.8KW	12KW
	重量 Weight	3000kg	2800kg
	外形尺寸 Overall dimension	2250x1400x2000mm	2250x1200x2000mm

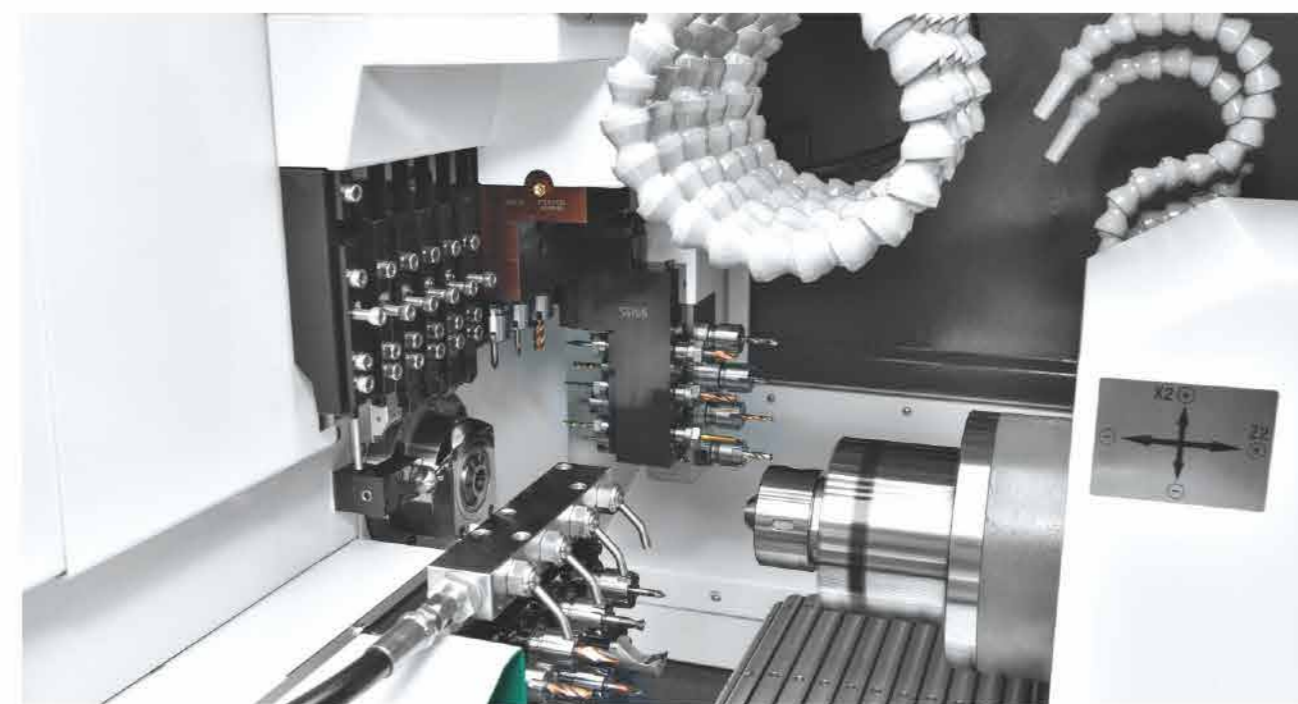
## 926基本构造

926 Basic structure



## 走心机选配刀具

Machine tool selection



## 双主轴 双通道设计

### Double spindle Dual channel design

- 主轴、背面主轴均采用高精度内藏电主轴。
- 双通道设计，显著提高生产效率。
- 搭载背面专用刀具座，可通过正面/背面的独立加工，缩短加工时间。

- High precision internal electric spindle is used for main shaft and back spindle.
- Dual channel design, significantly improve production efficiency.
- Equipped with a special tool holder on the back, it can shorten the processing time through independent machining of the front/back.



CNC 主要规格 CNC main specifications

参数配置 Parameter configuration	HS-932	HS-926
SYNTEC + HANBS		是 Yes
10.4英寸彩色LCD屏+操作面板 10.4 inch color LCD screen + operation panel		是 Yes
显示语言: 中文 Display language: Chinese		是 Yes
MPG (手轮) MPG (Handwheel)		是 Yes
PMCIA槽 PMCIA slot		是 Yes
USB槽 USB slot		是 Yes
以太网插口 Ethernet jack		是 Yes
工件程序容量 Job program capacity		1M
工件程序最大数量 Maximum number of job programs		800 (2 条路径) 800 (2 paths)
偏置刀具数量 Number of offset tools		96
最小输入和横向增量 Minimum input and lateral increment		0.001mm
以ISO代码A编程 Programming in ISO code A		是 Yes
插补: 线性、环形、极坐标、圆柱 Interpolation: linear, circular, polar coordinates, cylindrical		是 Yes
刚性攻丝 Rigid tapping		是 Yes
背景编辑 Background editing		是 Yes
刀具半径补偿 Tool radius compensation		是 Yes
单/多头持续加工螺纹 Single/multi-head continuous threading		是 Yes
恒定表面速度控制 Constant surface velocity control		是 Yes
持续加工螺纹循环 Continuous threading cycle		是 Yes
手动点动进给 Manual point feed		是 Yes
运行时间显示 Run time display		是 Yes
工件计数显示 Job counting display		是 Yes
小数点输入 Decimal point input		是 Yes
英制/公制转换 Imperial/metric conversion		是 Yes
自我诊断转换 Self-diagnostic conversion		是 Yes

配置标准附属品 Equipped with standard accessories		自由选配附属品 Optional accessories	
HS-932	HS-926	HS-932	HS-926
主轴夹头装置 Spindle chuck device	主轴夹头装置 Spindle chuck device	排屑器 Chip cleaner	固定导套装置 Fixed guide sleeve device
切削油装置 Cutting oil unit	同步旋转导套装置 Synchronous rotating bushing device	副轴动力 Countershaft power	排屑器 Chip cleaner
主轴冷却装置 Mainshaft cooling unit	切削油装置 Cutting oil unit	对向型钻铣单元 Opposite drilling and milling unit	副轴动力 Countershaft power
背面主轴顶料装置 Back spindle jacking device	主轴冷却装置 Mainshaft cooling unit	单向型钻铣单元 Unidirectional drilling and milling unit	对向型钻铣单元 Opposite drilling and milling unit
工件回收带 Job recovery belt	背面主轴顶料装置 Back spindle jacking device	切削油流量监测装置 Cutting oil flow monitoring device	Y2轴装置 Y2 axis device
工具一套 Tool set	工具一套 Tool set	自动送料机 Automatic feeder	端面旋转刀具 Face rotary tool
背面主轴夹头装置 Rear spindle chuck device	背面主轴夹头装置 Rear spindle chuck device	油雾回收装置 Oil mist recovery device	切削油流量监测装置 Cutting oil flow monitoring device
切断刀具检测装置 Cutting tool detection device	切断刀具检测装置 Cutting tool detection device	高压油装置 High pressure oil installation	自动送料机 Automatic feeder
润滑油装置 Lubricating oil installation	润滑油装置 Lubricating oil installation		油雾回收装置 Oil mist recovery device
安全门锁装置 Safety door lock device	安全门锁装置 Safety door lock device		高压油装置 High pressure oil installation
照明灯、报警灯 Lights, alarm lights	照明灯、报警灯 Lights, alarm lights		
	工件回收带 Job recovery belt		

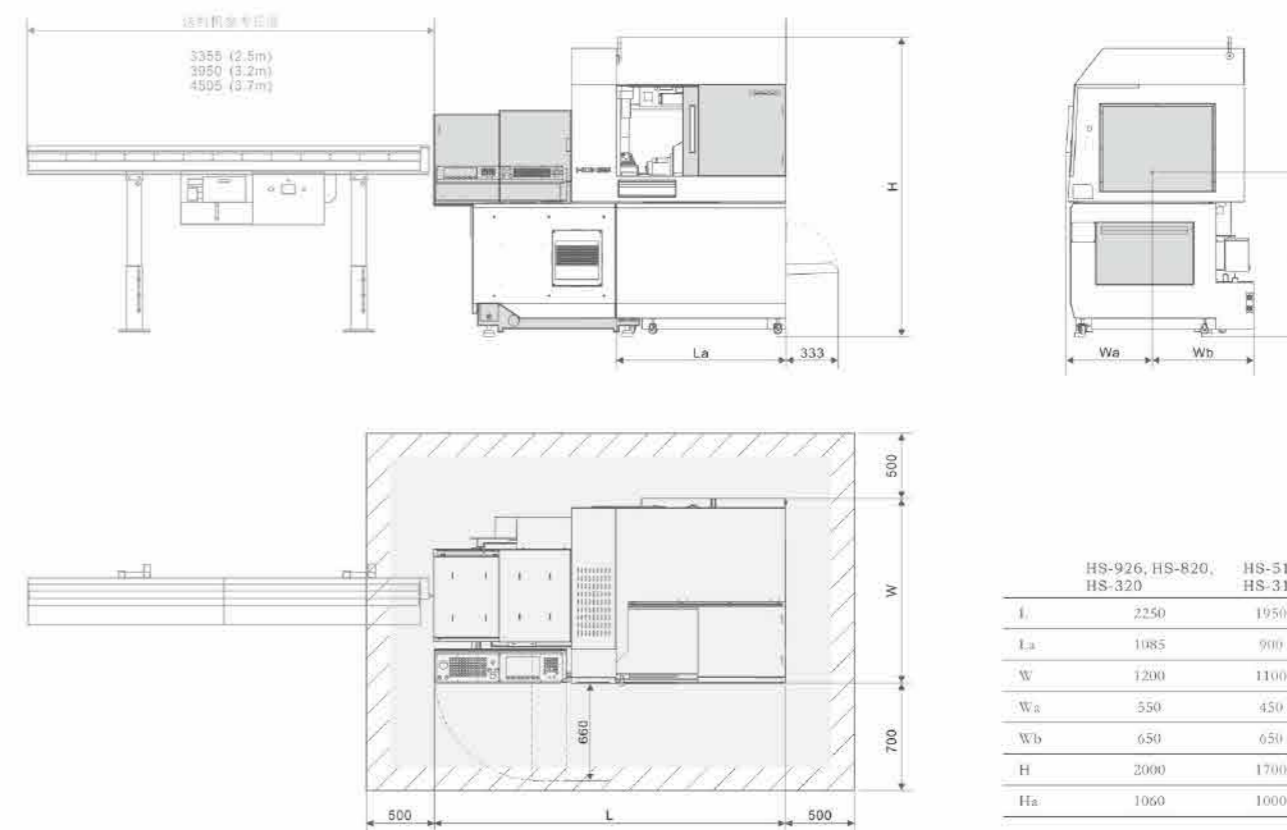


选配部件 Optional parts

- 背面动力单元与Y2轴 Rear power unit with Y2 shaft
- 自动棒材送料机 Automatic bar feeder
- 高压油泵 High pressure oil pump
- 自动收料器 Automatic feeder
- 油雾回收装置 Oil mist recovery device



机械尺寸 Mechanical dimension



# PRODUCT INTRODUCTION

走心式精密数控车床

型号 HS-820



**更高性能  
更易使用与维护**

Higher performance  
Easier to use and maintain

- 具备导套型与无导套型切换的功能。
- 主轴最高旋转速度与单次装夹长度等性能达到更高水平。
- 对切屑的清扫和工序切换等日常操作在设计上也进行了充分的考虑。
- With the function of switching between guide type and no guide type.
- Higher performance levels such as maximum spindle rotation speed and single clamping length.
- Daily operations such as chip cleaning and process switching are also designed with sufficient consideration.

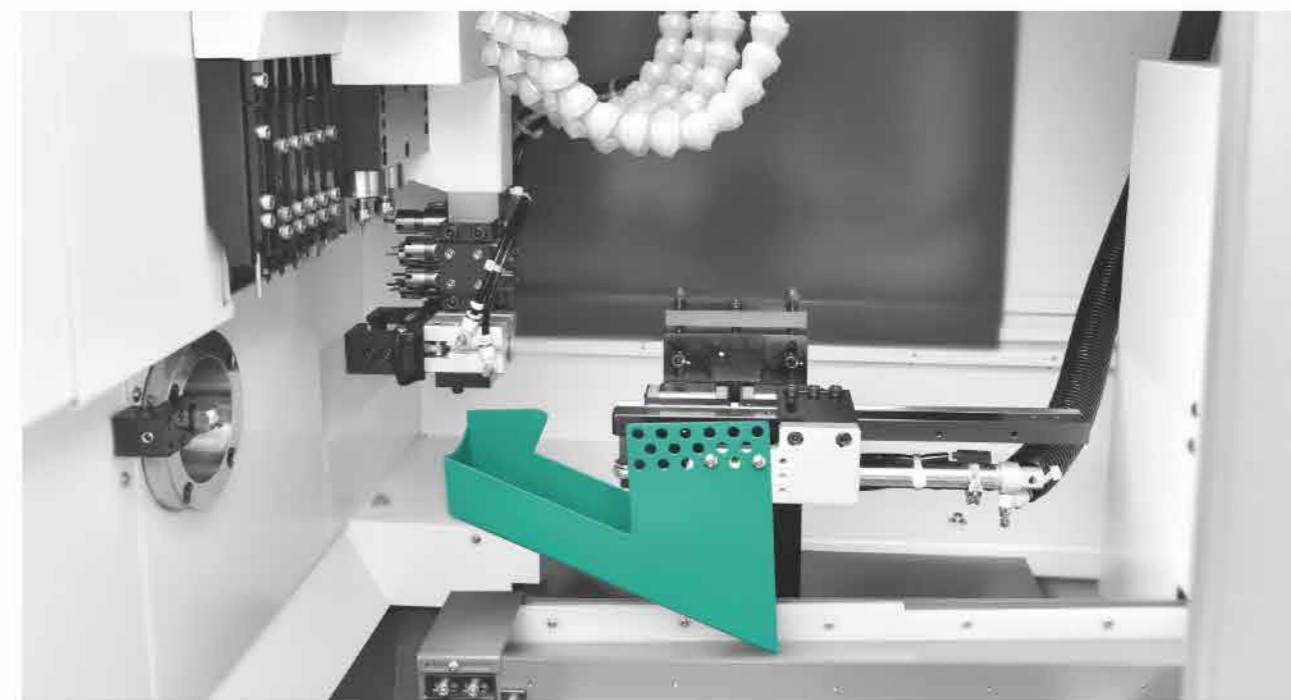
## 技术参数 Technical parameter

机型 Machine type	参数配置 Parameter configuration	HS-820
加工参数 Machining parameter	主轴最大加工直径 Maximum machining diameter of spindle	Φ20mm
	背轴最大加工直径 Maximum machining diameter of the back shaft	Φ20mm
	最大加工直径 Maximum machining diameter	Φ20mm
	最大加工长度 Maximum working length	190mm/夹-导套模式 190mm/ clip - bushing mode
	轴向最大钻孔直径 Maximum axial hole diameter	Φ10mm
	轴向最大攻丝大小 Maximum axial tapping size	M8
	主轴最高转速 Maximum spindle speed	10000rpm
	径向最大钻孔直径 Maximum radial bore diameter	Φ10mm
	径向最大攻丝大小 Maximum radial tapping size	M6
	径向动力头最高转速 Maximum speed of radial power head	6000
	径向动力头额定转速 Rated speed of radial power head	5000
	前出料工件最大取出长度 Maximum extraction length of pre-discharge workpiece	100mm
	刀具尺寸 Tool size	刀具安装数量 Number of tools installed
刀具 (车刀) Cutting tool (turning tool)		□12x12
套筒 Sleeve		Φ25x4把Bundle(ER16)
夹头导套 Chuck guide sleeve	主轴/背轴弹簧夹头 Spindle/back shaft spring chuck	TSUGAMI B0265CCR
	动力头夹头 Power head clamp	ER16*4
	导套 Guide bush	TSUGAMI BS-20#-B
进给速度 Feed rate	Z1/Y1/Z2/X2轴快移速度 Z1/Y1/Z2/X2 axis fast movement speed	30m/min
	X1轴快移速度 X1 axis fast moving speed	28m/min
电机 Electric machine	主轴/背轴 Main axis/back axis	3.7KW/2.5KW
	动力头 Power head	1KW
	切削油 Cutting oil	0.75KW
	主轴冷却 Spindle cooling	1KW
	润滑油 Lubricating oil	0.004KW
	X1/Y1/Z2轴 The X1/Y1/Z2 axis	0.75KW
	Z1/X2轴 Z1/X2 axis	0.75KW
其他 Other	主轴中心高 Spindle center height	1060mm
	气压流量 Barometric flow	0.5MPa.0.3m <sup>3</sup> /min
	输入功率 Input power	9.6KW
	重量 Weight	2800kg
	外形尺寸 Overall dimension	2250x1200x2000mm

# PRODUCT INTRODUCTION

走心式精密数控车床

型号 HS-326



## 产品优势 Product advantage

### 10,000rpm

主轴最高旋转速度

The maximum rotating speed of the spindle is 10,000rpm

超高的主轴及背面主轴旋转速度，在细长型材料及使用小直径刀具时可提供最佳加工条件。

The high spindle and back spindle rotation speeds provide optimal machining conditions for slender materials and small diameter tools.

### 60mm

单次装夹可加工长度

A single clamping can process the length of 60mm

超长的单次装夹加工长度，将以前需要变换装夹来加工的工件通过一次装夹就可以完成，缩短了加工时间。

Ultra-long single clamping processing length, the workpiece that previously needed to be changed by clamping can be completed through a single clamping, shortening the processing time.

### Ø26mm

选配最大装夹装置

Optional maximum clamping device Ø26mm

主轴通孔直径为26mm，可配Ø26的装夹装置，进行精密材料的加工。

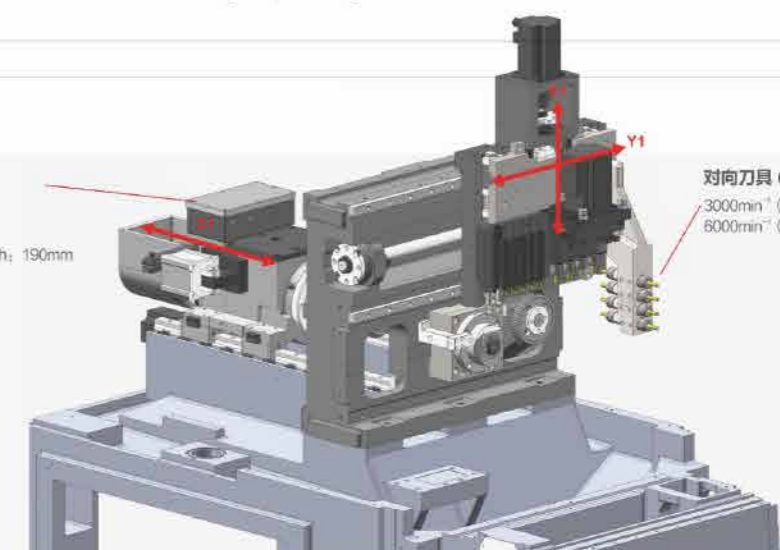
The spindle hole diameter is 26 mm and can be equipped with Ø26 clamping device for precision material processing.

### 正面主轴 Front main shaft

1500min<sup>-1</sup> (Rated)  
4000min<sup>-1</sup> (Max)  
最大加工长度 Maximum machining length: 190mm

### 对向刀具 Opposing cutters

3000min<sup>-1</sup> (Rated)  
6000min<sup>-1</sup> (Max)



# PRODUCT INTRODUCTION

走心式精密数控车床

型号 HS-512



## 更高性能 更易使用与维护

Higher performance  
Easier to use and maintain

- 具备导套型与无导套型切换的功能。
  - 主轴最高旋转速度与单次装夹长度等性能达到更高水平。
  - 对切屑的清扫和工序切换等日常操作在设计上也进行了充分的考虑。
- With the function of switching between guide type and no guide type.
- Higher performance levels such as maximum spindle rotation speed and single clamping length.
- Daily operations such as chip cleaning and process switching are also designed with sufficient consideration.

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## 产品优势 Product advantage

### 10,000rpm

主轴最高旋转速度

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超高的主轴及背面主轴旋转速度，在细长型材料及使用小直径刀具时可提供最佳加工条件。

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### 60mm

单次装夹可加工长度

A single clamping can process the length of 60mm

超长的单次装夹加工长度，将以前需要变换装夹来加工的工件通过一次装夹就可以完成，缩短了加工时间。

Ultra-long single clamping processing length, the workpiece that previously needed to be changed by clamping can be completed through a single clamping, shortening the processing time.

### Ø12mm

选配最大装夹装置

Optional maximum clamping device Ø12mm

主轴通孔直径为12.7mm，可配Ø12的装夹装置，进行精密材料的加工。

The spindle hole diameter is 12.7mm and can be equipped with Ø12 clamping device for precision material processing.

## 更经济

More economical

高品质、低价格，最高性价比。

High quality, low price, the highest cost performance.

## 高效率

High efficiency

紧凑型排刀设计，主、背轴可同时加工。

Compact cutter row design, main and back shaft can be processed simultaneously.

## 高精度

High precision

重复定位精度0.002mm。

Repeated positioning accuracy 0.002mm.

## 更先进

More advanced

+ 易排屑；  
+ 刀具排布多样化  
+ 主背轴气幕保护  
+ 尾料更短

+ Easy chip removal;  
+ Diversified tool arrangement  
+ main back shaft air curtain protection  
+ Shorter finish

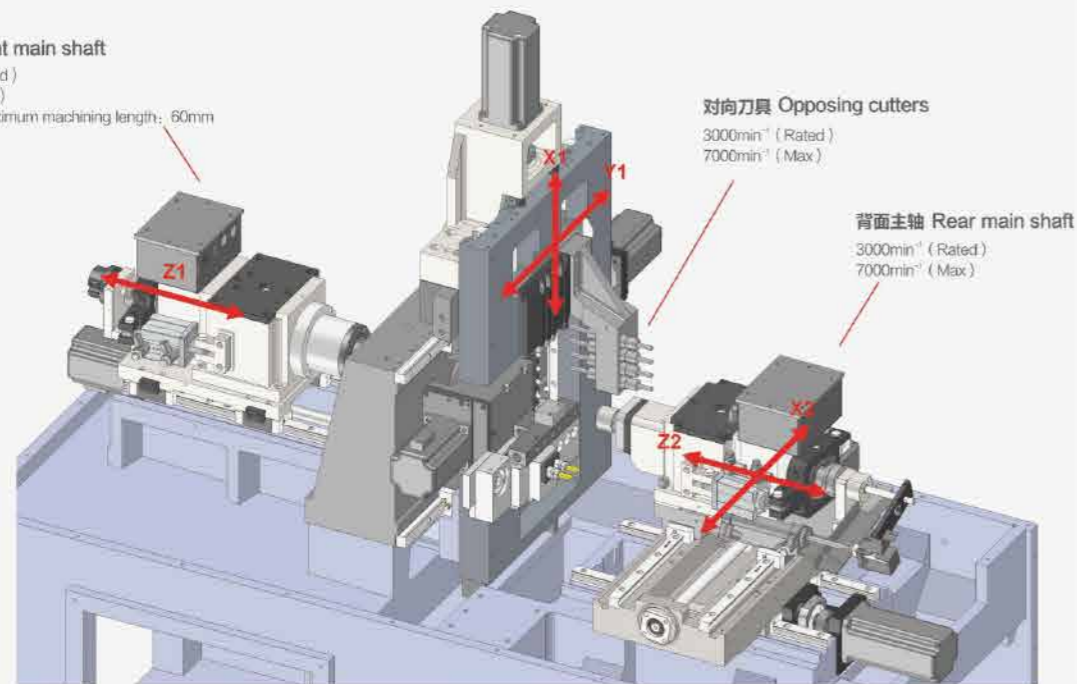
PAGE 20

## 512基本构造

### 512 Basic structure

#### 正面主轴 Front main shaft

3000min<sup>-1</sup> (Rated)  
7000min<sup>-1</sup> (Max)  
最大加工长度Maximum machining length: 60mm



#### 对向刀具 Opposing cutters

3000min<sup>-1</sup> (Rated)  
7000min<sup>-1</sup> (Max)

#### 背面主轴 Rear main shaft

3000min<sup>-1</sup> (Rated)  
7000min<sup>-1</sup> (Max)

#### 主要功能 Main function

- + 车削
- + 端面正反面钻孔、攻牙、倒角
- + 端面镗孔
- + 自动送料、工件自动切断、主轴背轴一次性完成加工
- + Turning
- + Face drilling, tapping, chamfering
- + Face boring
- + Automatic feeding, automatic workpiece cutting, spindle back shaft once completed processing

#### 选配功能 Optional function

- + 高压油泵
- + 排屑器
- + 自动送料机
- + 背轴动力装置
- + 油雾回收装置
- + 高频铣动力头
- + High pressure oil pump
- + chip extractor
- + Automatic feeder
- + back shaft power unit
- + Oil mist recovery device
- + High frequency milling power head

#### 各轴行程 (全行程) Axis travel (full travel)

- + X1: 75MM
- + Y1: 105MM
- + Z1: 240MM
- + X2: 415MM
- + Z2: 170MM



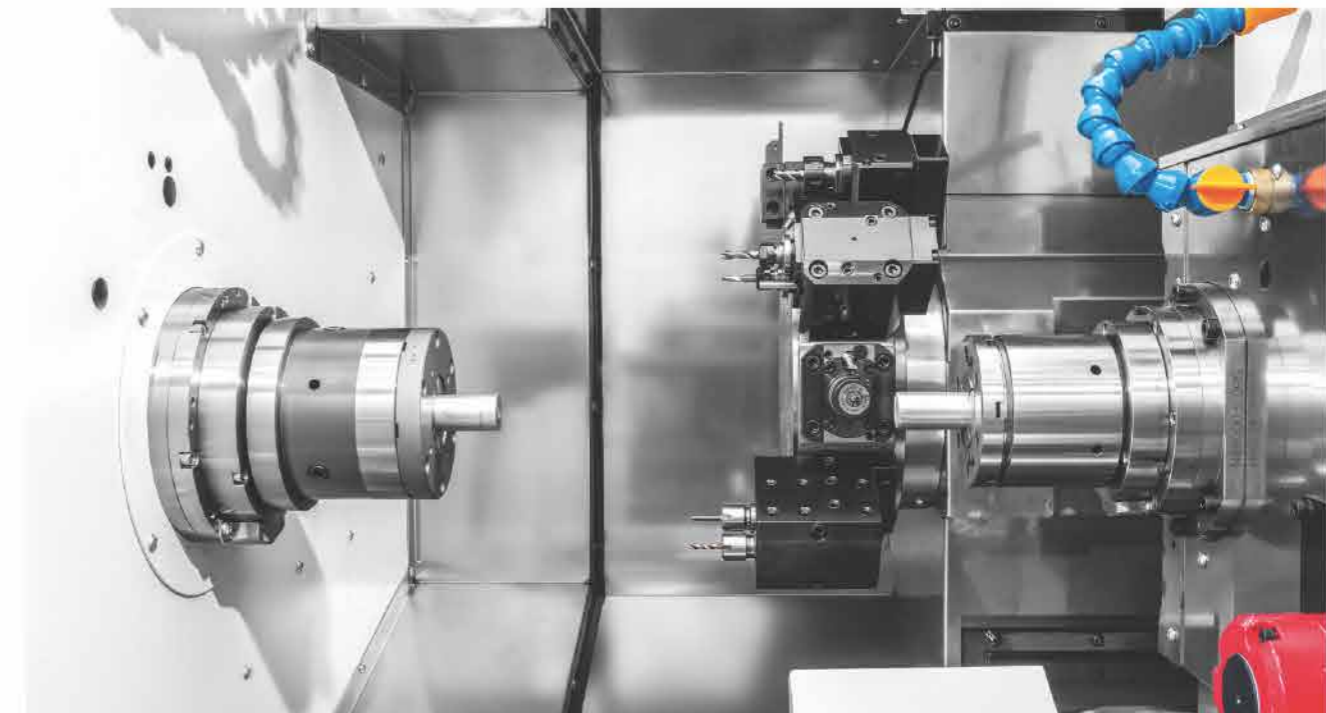
## 技术参数 Technical parameter

机型 Machine type	参数配置 Parameter configuration	HS-512
加工参数 Machining parameter	最大加工直径 Maximum machining diameter	Φ12mm
	最大加工长度 (无导套2.5D) Max. Machining length (2.5d without bushing)	60mm
	轴向最大钻孔直径 Maximum axial hole diameter	Φ7mm
	轴向最大攻丝大小 Maximum axial tapping size	M5
	主轴最高转速 Maximum spindle speed	10000rpm
	背轴最大夹持直径 Maximum gripping diameter of the back shaft	Φ12mm
	背轴端面最大钻孔直径 Maximum bore diameter of the back shaft face	Φ5mm
	背轴端面最大攻丝直径 Maximum tapping diameter of back shaft end face	M5
	背轴最高转速 Maximum speed of the back shaft	12000rpm
	工件最大取出长度 Maximum workpiece extraction length	40mm
刀具安装数量 Number of tools installed	5	
刀具 (车刀) 规格 Tool (turning tool) specifications	□10X10	
刀具尺寸 Tool size	套筒 (正面20mm*4; 背面20mm*5) Sleeve (front 20mm*4; back 20mm*5)	9把 Bundle
	主轴夹头 Spindle chuck	HA12
夹头导套 Chuck guide sleeve	背面夹头 Back chuck	HA12
	套筒夹头 Collet	ER11
进给速度 Feed rate	导套 Guide bush	Ha12
	Z1/Z2/X2/Y 轴进给速度 Z1/Z2/X2/Y axis feed speed	24m/min
	X1 X1	18m/min
	主轴功率 Spindle power	1.5/2.5KW
电机 Electric machine	背轴功率 Back shaft power	1.1/1.5KW
	主轴中心高度 Spindle center height	1000mm
	主轴型式 Spindle type	伺服同步电主轴 Servo synchronous motorized spindle
	主轴密封 Spindle seal	气密封 Gas seal
	气动装置所需压力, 流量 Pneumatic device required pressure, flow	0.4MPa, m /0.5min
	总功率 Gross power	8KW
其他 Other	重量 Weight	1960kg
	尺寸 Dimension	1800*1100*1700mm

# PRODUCT INTRODUCTION

车铣复合数控车床

型号 HS-1146



## 更高性能 更易使用与维护

Higher performance  
Easier to use and maintain

- 全硬轨，双主轴双刀塔
- 主轴和背轴同时加工
- 主轴动力刀塔和Y轴一体化
- 主轴和背轴卡盘/夹头可切换

- All hard track, Double spindle double knife tower
- Spindle and back spindle can process simultaneously
- Spindle power knife tower and Y-axis are integrated
- The spindle and back spindle's chuck /clamp can switchable

## 更经济

More economical

高品质、低价位，  
最高性价比。

High quality, low price, the  
highest cost performance.



## 高效率

High efficiency

紧凑型排刀设计，主、背轴  
可同时加工。

Compact cutter row design,  
main and back shaft can be  
processed simultaneously.



## 高精度

High precision

重复定位精度0.002mm。

Repeated positioning accuracy  
0.002mm.



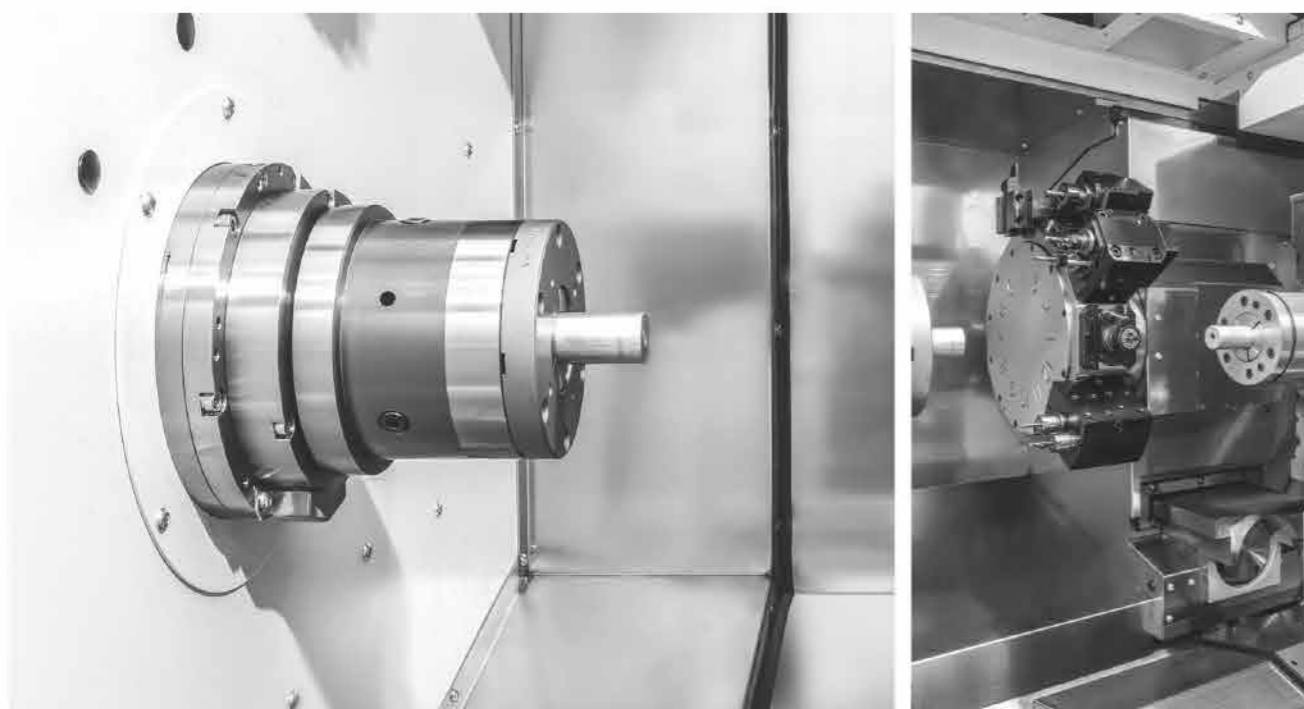
## 更先进

More advanced

- + 易排屑；
- + 刀具排布多样化
- + 主背轴气幕保护
- + 尾料更短

- + Easy chip removal;
- + Diversified tool arrangement
- + main back shaft air curtain protection
- + Shorter finish





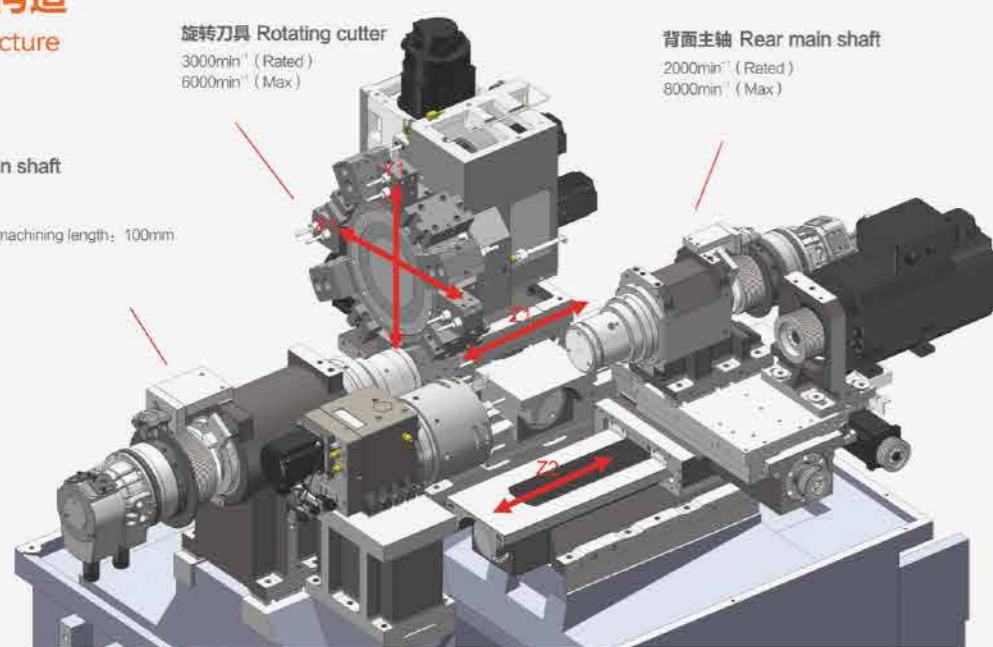
## 双主轴 双通道设计

Double spindle  
Dual channel design

- 全硬轨 - All hard track
- 双主轴双刀塔 - Double spindle double knife tower
- 主轴和背轴同时加工 - Spindle and back spindle can process simultaneously
- 主动力刀塔和Y轴一体化 - Spindle power knife tower and Y-axis are integrated
- 主轴和背轴卡盘/夹头可切换 - The spindle and back spindle's chuck / clamp can switchable

## 1146基本构造 1146 Basic structure

**正面主轴 Front main shaft**  
2000min<sup>-1</sup> (Rated)  
8000min<sup>-1</sup> (Max)  
最大加工长度 Maximum machining length: 100mm



**旋转刀具 Rotating cutter**  
3000min<sup>-1</sup> (Rated)  
6000min<sup>-1</sup> (Max)

**背面主轴 Rear main shaft**  
2000min<sup>-1</sup> (Rated)  
8000min<sup>-1</sup> (Max)

## 技术参数 Technical parameter

参数配置 Parameter configuration	HS-1146	
最大加工长度 Maximum working length	100mm	
标准加工直径 (夹持径) Standard machining diameter (clamping diameter)	主轴 Principal axis	Φ46mm
	背轴 Abaxial	Φ34mm
刀塔移动行程 Turret travel	X1轴 X1-axis	140mm
	Z1轴 Z1 axis	285mm
	Y1轴 Y1 axis	70(±35)mm
背轴移动行程 Back axis travel	Z2轴 Z2 axis	360mm
主轴数 Number of principal axes	2	
最高转速 Maximum speed	主轴 Principal axis	4,500min <sup>-1</sup>
	背轴 Abaxial	4,500min <sup>-1</sup>
卡盘尺寸 (选配) Chuck size (optional)	主轴 Principal axis	6"(中空卡盘) 6"(hollow chuck)
	背轴 Abaxial	4"(中空卡盘) 4"(hollow chuck)
刀塔数 Number of towers	1	
刀塔形式 Turret form	12角转塔 12 corner turret	
刀具尺寸 Tool size	□20mm	
刀座孔的尺寸 Force seat hole size	Φ25mm	
旋转刀具安装数量 Number of rotary tools installed	最多12 Up to 12	
旋转刀具最高转速 Maximum rotating tool speed	X1轴 X1-axis	20m/min
	Z1轴 Z1 axis	20m/min
	Y1轴 Y1 axis	12m/min
	Z2轴 Z2 axis	20m/min
电机 Electric machine	主轴 Principal axis	7.5/5.5kW(15分钟/额定 15 minutes/rated)
	背轴 Abaxial	5.5/3.7kW(15分钟/额定 15 minutes/rated)
	旋转刀具 Rotary tool	1.0kW(rated)
电机电源容量 Motor power capacity	30kVA	
机床高度 Machine height	1,750mm	
机床面积 Machine area	2,350(长Length) × 1,450(宽Width)mm	
重量 Weight	3,800kg	

# PRODUCT INTRODUCTION

双主轴数控车床

型号 HS-P26



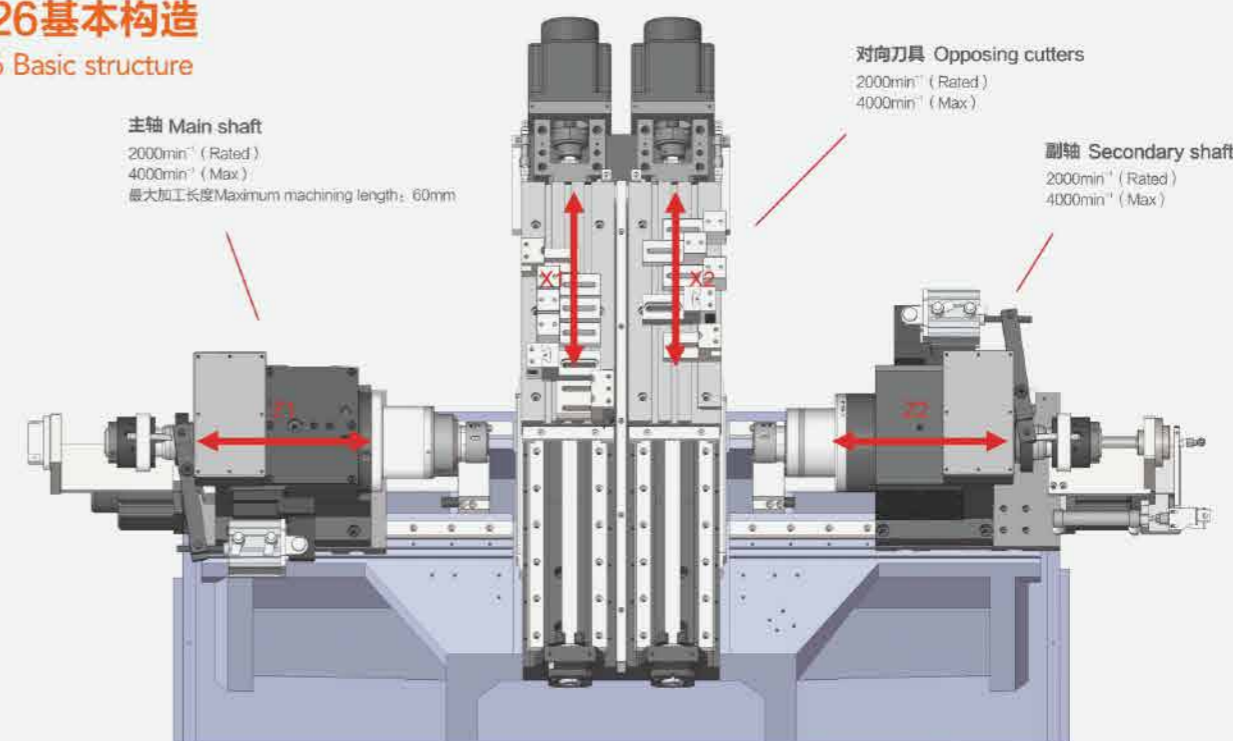
## 双主轴数控排刀式车床

Double Spindle Swiss type CNC lathe

- 主轴、背面主轴均采用高精度内装电主轴。
- 双通道设计，显著提高生产效率。
- 主轴、背轴配备独立刀板，可通过正面/背面的独立加工，缩短加工时间。
- The main shaft and back spindle are equipped with high precision electric spindle.
- Dual channel design, significantly improve production efficiency.
- Spindle and back shaft are equipped with independent blade, which can shorten the processing time by independent machining of front/back.

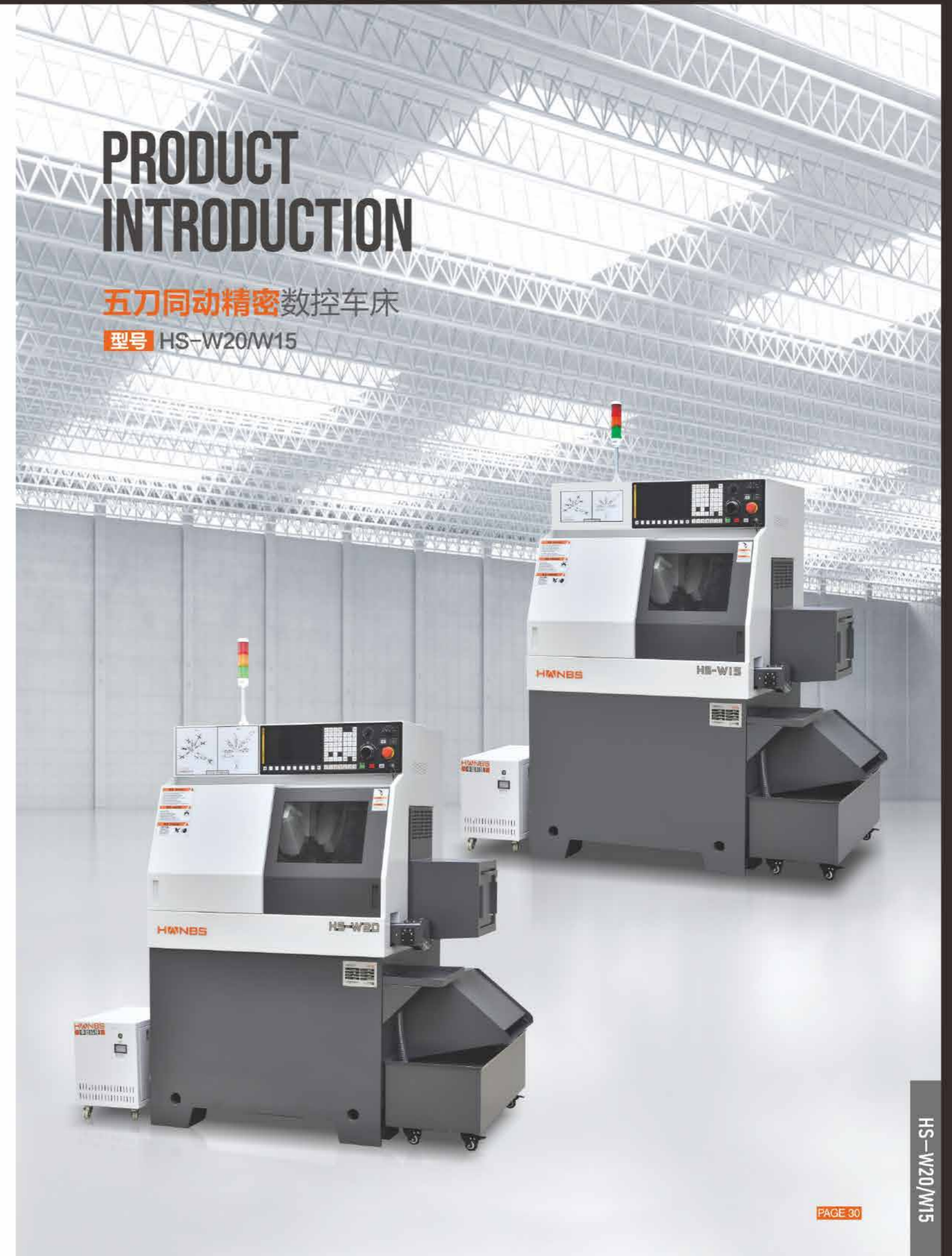
## P26基本构造

P26 Basic structure



## 技术参数 Technical parameter

机型 Machine type	参数配置 Parameter configuration	HS-P26
加工参数 Machining parameter	最大加工直径 Maximum machining diameter	φ26mm ( 主轴Main spindle ) 26mm ( 背轴abaxial )
	最大加工长度2.5D Maximum processing length 2.5D	50mm
	轴向最大钻孔直径 Maximum axial hole diameter	φ10mm
	轴向最大攻丝大小 Maximum axial tapping size	M8
	主轴最高转速(短时) Maximum spindle speed (short time)	10000rpm
	背轴最高转速(短时) Maximum speed of back shaft (short time)	12000rpm
	工件最大取出长度 Maximum workpiece extraction length	40mm
	X1轴 x1-axis	375mm
	Z1轴 Z1 axis	180mm
	X2轴 X2 axis	375mm
Z2轴 Z2 axis	180mm	
刀具尺寸 Tool size	刀板尺寸 Blade size	390mm
	最大刀具安装数量 Maximum number of tools installed	8
	刀具 (车刀) Cutting tool (turning tool)	16X16
夹头导套 Chuck guide sleeve	套筒 sleeve	φ25
	刀板座到主轴中心高 Cutter seat to spindle center height	45mm
	主轴夹头 Spindle chuck	HB 26
进给速度 Feed rate	背轴夹头 Back axle chuck	HB 26
	X1/X2轴进给速度 X1/X2 axis feed speed	30m/min
	Z1/Z2轴进给速度 Z1/Z2 axis feed speed	15m/min
电机 Electric machine	主轴驱动功率 Spindle drive power	2.5/3.7KW
	X1X2Z1Z2功率 X1X2Z1Z2 power	1.1KW
	切削油用 Cutting oil	0.4KW
其他 Other	主轴中心高 Spindle center height	1200mm
	气压流量 Barometric flow	0.7mpa 0.5m <sup>3</sup> /min
	主断路器容量 Main circuit breaker capacity	40A
	输入功率 Input power	6.8KW
	重量 weight	2700Kg
	外形尺寸 Overall dimension	1950X1455X1700mm



# PRODUCT INTRODUCTION

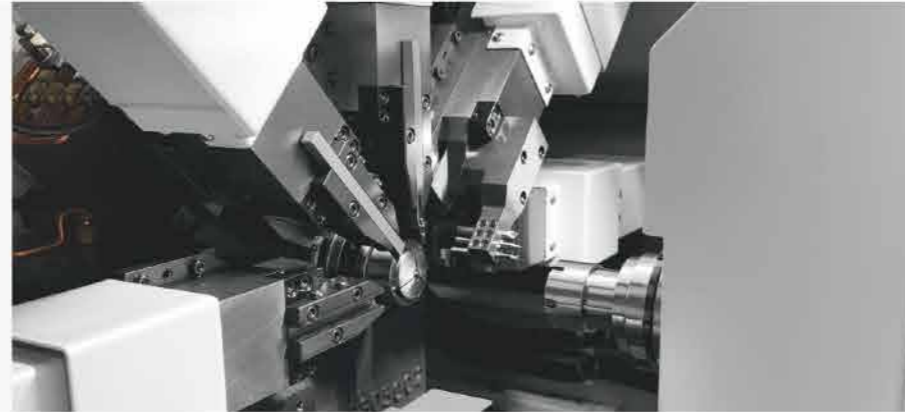
五刀同动精密数控车床

型号 HS-W20/W15

■ 标配内部图  
Internal drawings are standard



■ 高配内部图  
High profile interior drawing



## W20 / W15基本构造 W20 / W15 Basic structure

### 正面主轴 Front spindle

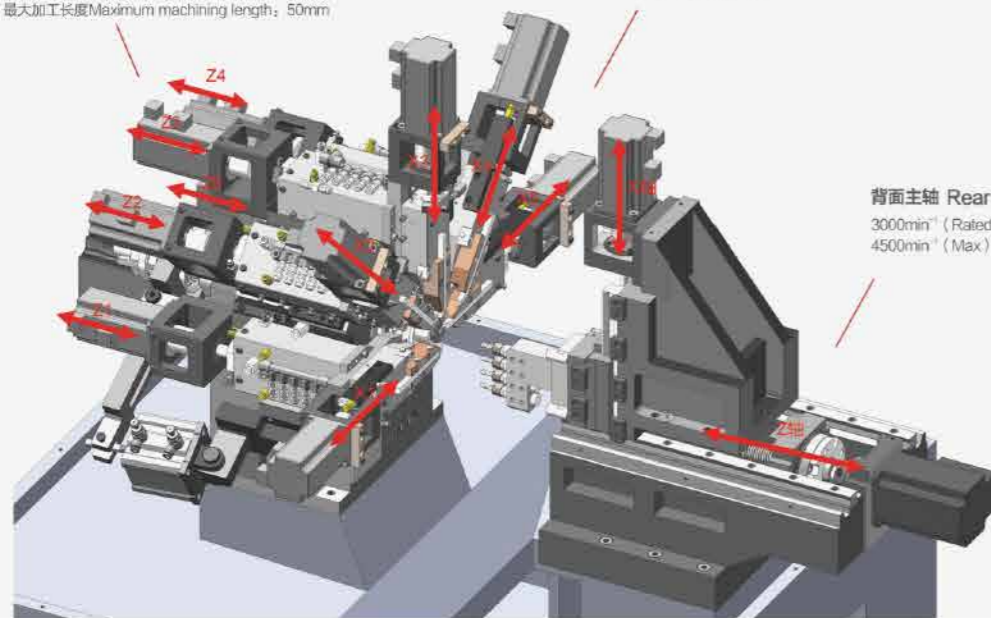
3000min<sup>-1</sup> (Rated)  
5000min<sup>-1</sup> (Max)  
最大加工长度 Maximum machining length: 50mm

### 对向刀具 Opposing cutters

3000min<sup>-1</sup> (Rated)  
5000min<sup>-1</sup> (Max)

### 背面主轴 Rear main shaft

3000min<sup>-1</sup> (Rated)  
4500min<sup>-1</sup> (Max)



机型参数表 Model parameter list

机型 Machine type	HS-W20	HS-W15
数控系统 Numerical control system	中聪自研 (yn2.0版本) Satoshi Self-developed (yn2.0 version)	中聪自研 (yn2.0版本) Satoshi Self-developed (yn2.0 version)
伺服轴数 Number of servo axes	13轴 13-axis	13轴 13-axis
编程方式 Programming mode	6通道G代码编程 各轴均可单独编程 6-channel G code programming Each axis can be individually programmed	6通道G代码编程 各轴均可单独编程 6-channel G code programming Each axis can be individually programmed
刀具数 Number of tool	5组 Five groups	5组 Five groups
最大加工直径 Maximum machining diameter	Φ20mm	Φ15mm
导套模式 (主轴 副轴) Bushing mode	Φ10mm Φ12mm	Φ10mm Φ12mm
最大加工长度 (导套模式时为30mm) Maximum machining length (30mm in bushing mode)	(含导套模式): 30mm (including bushing mode): 30mm	(含导套模式): 30mm (including bushing mode): 30mm
轴向最大钻孔直径 Maximum axial drilling diameter	Φ6mm	Φ6mm
钻孔臂径 Bore arm diameter	Φ5 (三支) Φ6 (二支) Φ5 (three) Φ6 (two)	Φ5 (三支) Φ6 (二支) Φ5 (three) Φ6 (two)
攻牙能力 (主轴正反转模式) Tapping ability (spindle forward and reverse mode)	M6	M6
车螺纹功能 Threading function	有 Have	有 Have
多刀同步加工功能 Multi-tool synchronous processing function	有 Have	有 Have
背面主轴最大夹持直径 Maximum clamping diameter of the back spindle	Ø12mm	Ø12mm
背面主轴最大钻孔直径 Maximum borehole diameter of the back spindle	Φ6mm	Φ6mm
背面主轴最大攻丝直径 Maximum tapping diameter of the back spindle	M6	M6
主轴功率 Spindle power	2KW (带分度功能With indexing function)	2KW (带分度功能With indexing function)
背面平台轴功率 Rear platform shaft power	1.0KW	1.0KW
主轴最高转速 Maximum spindle speed	8000rpm	8000rpm
背面主轴最高转速 Maximum speed of the back spindle	8000rpm	8000rpm
工件最大取出长度 Maximum workpiece extraction length	50mm	50mm
旋转同步导套加工长度 Rotary synchronous bushing processing length	30mm	30mm
排刀 (□8*120*3) Row knife (□8*120*3)	3	3
标配最大刀具安装数量 Standard maximum number of tools installed	10	10
高配最大刀具安装数量 Maximum number of tools installed	11	11
车刀尺寸 Turning tool size	8*8	8*8
Z1,2,3,4,5轴行程 Z1,2,3,4,5 Axis travel	50mm	50mm
X1,2,3,4,5轴行程 X1,2,3,4,5 Axis travel	30mm	30mm
背轴行程 Back axis travel	150mm	150mm
X1,2,3,4,5轴功率 X1,2,3,4,5 Shaft power	400W	400W
Z1,2,3,4,5轴功率 Z1,2,3,4,5 Shaft power	400W	400W
Z1,Z2,Z3,Z4,Z5,Z2轴快速进速度 Z1,Z2,Z3,Z4,Z5,Z2 axis fast forward speed	30m/min	30m/min
X1,X2,X3,X4,X5轴快速进速度 X1,X2,X3,X4,X5 axis fast forward speed	30m/min	30m/min
主轴中心高度 Spindle center height	1010mm	1010mm
高配版输入功率 High input power	7.6KW	7.6KW
重量 weight	1800Kg	1800Kg
油箱储油量 The amount of oil in the tank	50L	50L
尺寸 dimension	1550*1060*1650mm	1550*1060*1650mm

## A51数控系统

### A51 numerical control system

本机采用五通道G代码数控编程，每一通道与普通两轴数控编程方式一致，各通道之间可指定同步、等待、配合加工等，相关编程说明如下：

The machine adopts five-channel G code CNC programming, each channel is consistent with the ordinary two-axis CNC programming, and synchronization, waiting, and processing can be specified between each channel. The relevant programming instructions are as follows:

#### ■ 顶栏 Top hurdle

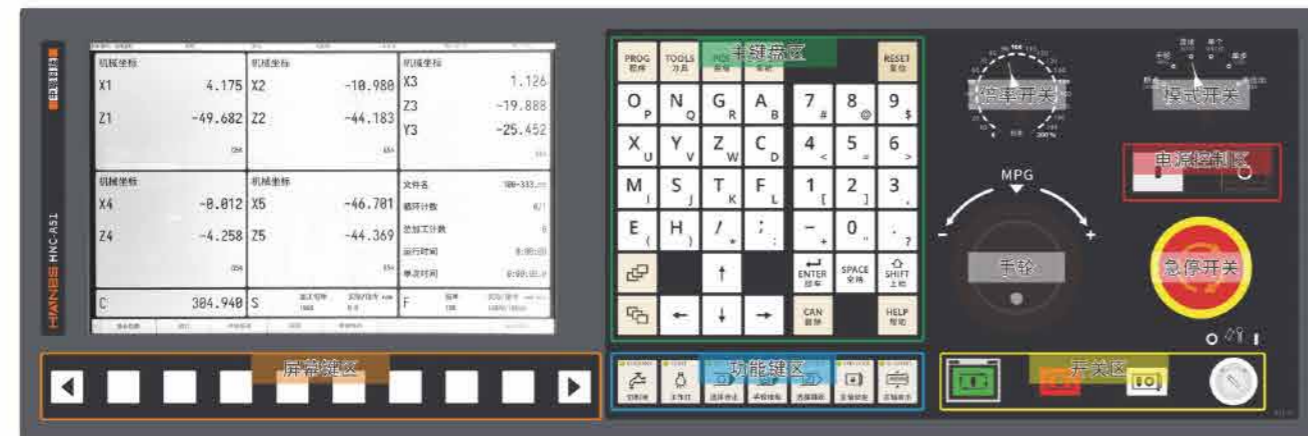
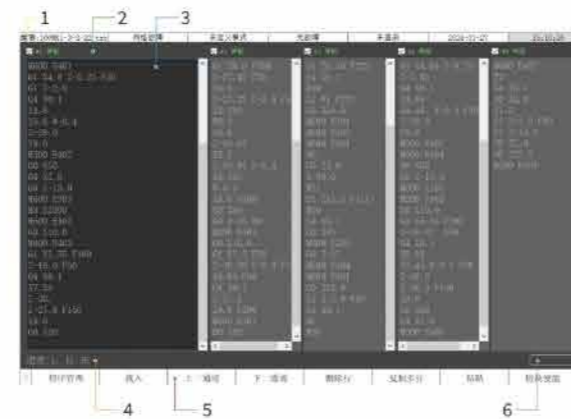
顶栏显示当前编辑的文件标题、连接状态、运行模式、故障报警及日期时间等信息。

The top bar displays information such as the title, connection status, running mode, fault alarm, date and time of the currently edited file.

#### ■ 使能状态 Enabled state

使能状态显示当前通道的代码是否会被载入执行，可通过功能键区的【切换使能】按键来切换对应通道是否使能。

Enable status indicates whether the code of the current channel will be loaded and executed. You can switch whether the corresponding channel is enabled by pressing the "Switch Enable" button in the function key area.



#### ■ 编辑区 Edit area

编辑区可编辑各通道程序代码，基本语法与通用数控指令一致。其中仅M500 Exxx与M600 Exxx为各通道同步专用指令。当需要在通道间同步时，M600用于在被同步通道等待同步信号，M500为发送同步信号，当M500与M600后面的E数字一样时，构成一组同步指令。

Editing area can edit each channel program code, the basic syntax is consistent with the general CNC instructions. Among them, only M500 Exxx and M600 Exxx are dedicated commands for synchronizing each channel. When it is necessary to synchronize between channels, M600 is used to wait for the synchronization signal in the synchronized channel, M500 is used to send the synchronization signal, and when the M500 is the same as the E digit after the M600, it forms a set of synchronization instructions.

#### ■ 光标指示区 Cursor area

指示当前光标所处的位置。  
Indicates the position of the current cursor.

#### ■ 功能按键区 Function button area

执行对应按键功能。  
The corresponding key function is displayed.

#### ■ 载入状态指示 Load status indication

指示当前程序载入后的状态。  
屏幕键区：对应屏幕下方菜单功能；  
主键盘区：各功能画面切换及程序与数据输入；  
功能键区：控制对应功能的开关；  
倍率开关、模式开关：分别控制程序运行倍率及机床运行模式、手轮、电源控制区；  
急停开关：手轮可控制轴移动及手轮模拟时程序运行，电源开关，急停功能；  
开关区：控制程序启动、停止及主轴的启动、停止，程序锁可以控制程序编辑许可。

Indicates the status of the current program after loading. Screen key area: corresponding to the menu function at the bottom of the screen; Main keyboard area: screen switching and program and data input; Function key area: control the switch of the corresponding function; Power switch, mode switch: respectively control program running power and machine tool running mode, hand wheel, power control area; Emergency stop switch: the handwheel can control the movement of the shaft and the program operation during the simulation of the handwheel, the power switch, the emergency stop function; Switch area: control program start, stop and spindle start, stop, program lock can control program editing license.

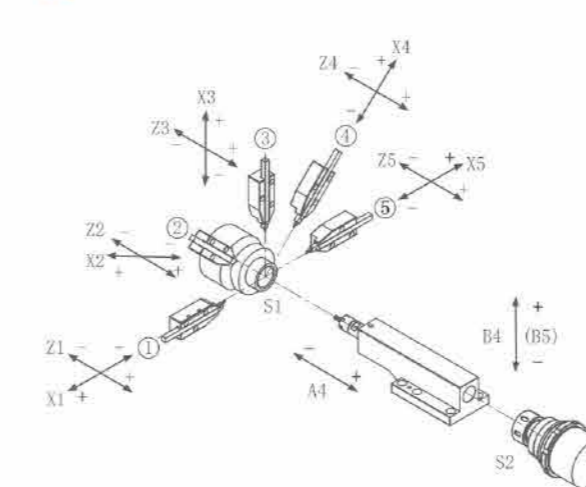
## ■ 舍弃式刀具 (8x8) Expendable tool (8x8)



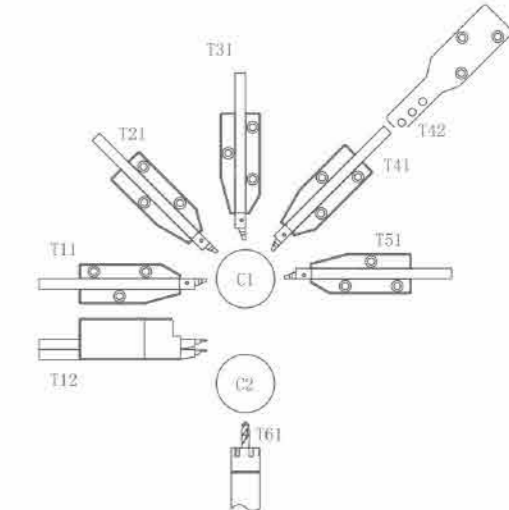
## ■ 产品展示 Product display



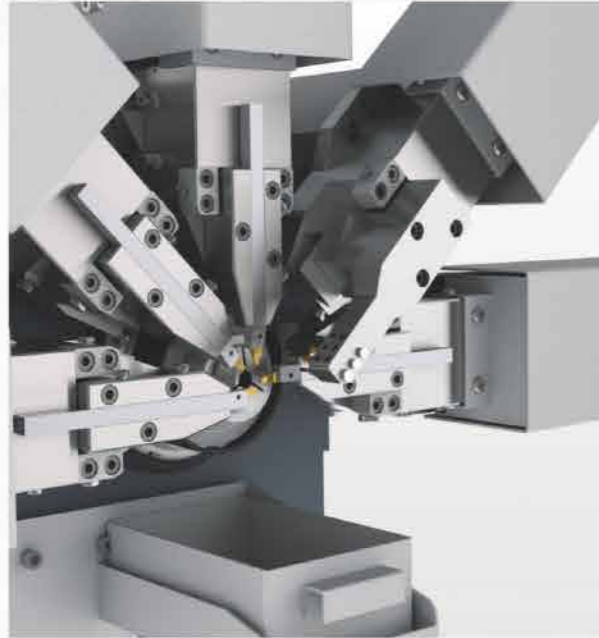
## ■ 轴位图 Axial view



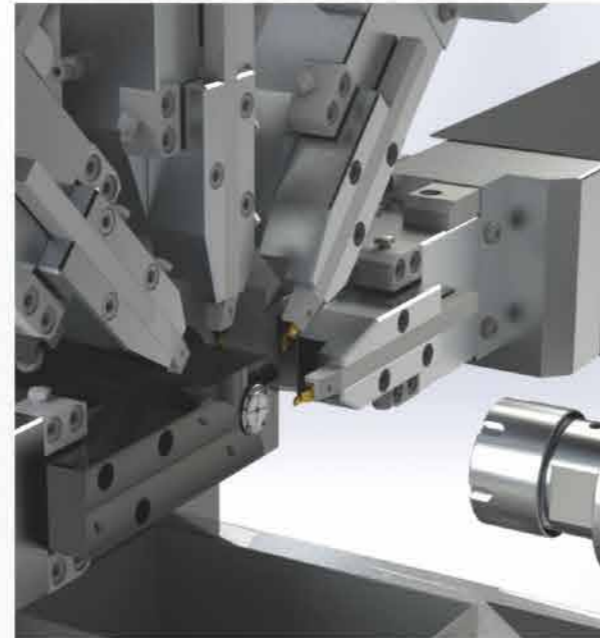
## ■ 刀位图 Cutter position map



# HS-W20/W15 功能介绍 Function introduction



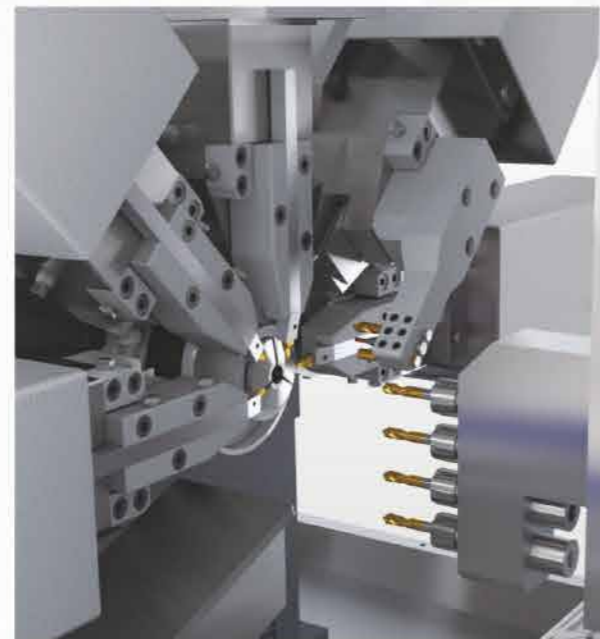
**五刀同动**  
每只刀具即可单独运动又可相互配合同步加工  
Five knives are processed at the same time  
Each tool can be moved individually and can be synchronized with each other



**导套式双主轴**  
背面为12型主轴，使用主轴端钻加工  
Double spindle with guidesleeve  
The back is 12 type spindle, machined by spindle end drilling



**背轴强力钻孔**  
背面1kw伺服轴可实现强力钻孔  
Back shaft strong drilling  
The rear 1kw servo shaft enables strong drilling



**背面多轴钻孔**  
背面4支ER11主轴端钻  
Back multi-axis drilling  
Back 4 ER11 spindle end drills

# HIANBS 中聪科技



## 电话沟通

初步了解客户需求，为制定方案打好基础。

## Telephone communication

Preliminary understanding of customer needs to lay a good foundation for the development of solutions.



## 现场拜访

进一步了解客户的需求和生产现状及目前存在的问题，以确保方案的精准性。

## On-site visit

Further understanding of customer needs and production status and existing problems to ensure the accuracy of the solution.



## 方案提供

给客户id提供完善、高效、科学的综合提升方案。

## Solution offering

To provide customers with a complete, efficient, scientific comprehensive improvement program.

## 保修及售后服务

- 机床验收合格后，提供整机保修两年的服务(耗用品及易损件除外)。保修期间，我会定期或不定期对所售机台进行保修和检修。
- 在保修期内，机床及附件因制造不良而损坏或不能正常工作时，公司服务人员4小时快速响应，省内24小时内到达现场免费进行修理或更换零部件。保修期内免费提供零部件及服务。
- 保修期满，卖方负责终身维修并提供相关的技术支持和备件供应服务，买方负责维修和备件费用。其中包括机床制造方技术改进后的情况以及软件升级。机床及附件因制造不良而损坏或不能正常工作时，公司服务人员4小时快速响应，省内24小时内到达现场进行修理或更换零部件。购买或更换的零部件保修期不少于6个月。

## Warranty and after-sales service

- After the acceptance of the machine, provide the whole machine warranty service for two years (except consumable supplies and wearing parts). During the warranty period, our company will regularly or irregularly repair and repair the machine sold.
- During the warranty period, when the machine tool and accessories are damaged or cannot work normally due to poor manufacturing, the company's service personnel will respond quickly in 4 hours, and arrive at the scene within 24 hours for free repair or replacement of parts. Spare parts and services are provided free of charge during the warranty period.
- Upon expiration of the warranty period, the seller shall be responsible for lifelong maintenance and provide related technical support and spare parts supply services, while the Buyer shall be responsible for maintenance and spare parts costs. It includes the technological improvement of the machine tool manufacturer and software upgrade. When the machine tool and accessories are damaged or cannot work normally due to poor manufacturing, the company's service personnel will respond quickly in 4 hours and arrive at the scene within 24 hours to repair or replace the parts. The warranty period of purchased or replaced parts is not less than 6 months.

## 主要配置件及其它要求 Major configurations and other requirements

### 01/ 主要配置件 Major configuration

丝杠 Screw rod	台湾PMI Taiwan PMI
导轨 Guide rail	台湾PMI Taiwan PMI
电主轴 Motorized Spindle	伺服同步电主轴 Servo synchronous motorized spindle
轴承 Bearing	TPI / NSK TPI / NSK
伺服电机 Servo Motor	中聪定制 Zhong Cong Customization
控制器 Controller	HANBS/新代 HANBS/New Generation
电气 Electric	德力西 Delixi
气动元件 Pneumatic Element	台湾亚德克 Yadek Taiwan
线缆 Cable	德国莱尼 German Leni
注油器 Oiling machine	宝腾 Baoten

### 02/ 技术资料 Technical data

- 提供机床使用手册、编程手册。  
Provide machine tool user manual and programming manual.
- 提供机床平面布置图。  
Provide machine tool layout plan.
- 数控系统的编程手册。  
Programming manual for numerical control systems.
- 上述资料提供中文资料。以上资料1套随机提供。  
The above information is provided in Chinese. The above information is provided randomly.
- 可提供机床出厂合格证和出厂几何精度检测报告。  
We can provide machine tool factory certificate and factory geometric accuracy test report.

### 03/ 设备满足工作条件

- 电源: 380V ± 10%, 220V ± 10%, 50Hz ± 5%, 三相交流。  
Power supply: 380V ± 10%, 220V ± 10%, 50Hz ± 5%, three-phase AC.
- 环境温度: 0-40℃。  
Ambient temperature: 0-40℃.
- 相对湿度: ≤ 85%。  
Relative humidity: ≤ 85%.
- 压缩空气: 0.6-0.8MPa。  
Compressed air: 0.6-0.8MPa.
- 机床噪声: 噪音 ≤ 75db。  
Machine noise: Noise ≤ 75db.
- 要求机床在上述工作环境下能连续稳定工作 72 小时。  
The machine tool is required to work continuously and stably for 72 hours in the above working environment.

### 04/ 验收标准 Acceptance criteria

- 机床几何精度按出厂标准及中国金切机床通则 GB/T1742.1-1998 (国际 ISO230-1-96) 执行。
- 机床位置精度按 ISO230-2 标准。
- The geometric accuracy of the machine tool is implemented according to the factory standard and the general rules of China Gold cutting machine tool GB/T1742.1-1998 (international ISO230-1-96).
- Machine position accuracy according to ISO230-2 standard.

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### 05/ 验收程序

- 在卖方工厂调试完毕, 检验合格进行预验收并加工试件, 验收合格后双方签署预验收报告, 方可发货。
- 在买方工厂调试完毕, 检验合格及对数控系统功能演示认可后加工试件, 同时进行操作、编程、维修等的免费培训。合格后双方签署终验收报告。
- After the debugging is completed in the seller's factory, the test pieces shall be pre-accepted and processed after passing the inspection.
- After passing the acceptance, both parties can sign the pre-acceptance report before delivery.

### 06/ 机床包装要求、运输方式及交货地点 Machine packaging requirements, mode of transport and place of delivery

- 专车运输至用户工厂。
- 用户工厂。
- Private car transport to the user's factory.
- User factory.

### 07/ 其它 Other

- 设备具有稳压装置和漏电保护、断电保护安全等防护装置。安全防护装置齐全可靠, 符合 GB15760-1995 金属切削机床安全防护通用技术条件。
- 提供机床总用气量及用电总功率。可提供机床样本、机床外型立体图。
- The equipment has a voltage regulator and leakage protection, power failure protection and other protective devices. Safety protection device is complete and reliable, in line with GB15760-1995 metal cutting machine tool safety protection general technical conditions.
- Provide total gas consumption and total power consumption of machine tools. Can provide machine tool samples, machine tool appearance stereogram.

### 08/ 设备交付 Equipment delivery

- 卖方负责机台安装与培训, 如有需要可配合买方进行技术培训与指导。
- The seller is responsible for the installation and commissioning of the machine, and can cooperate with the buyer to provide technical training and guidance if necessary.



## OTHER PRODUCTS DISPLAY

### 其他产品展示

持续创新, 传承工匠精神  
Continuous Innovation, Inherit Artisan Spirit  
卓越品质, 满足客户需求  
Excellent Quality To Meet Customer Needs



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