

**Reliable**

Reliable quality products

**Trustable**

We put our reputation in first position.

**Responsible**

What we do. We believe, we can, we just do it.

# Honing Machines Catalogue

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Suzhou Gudwill Grinding Technology Co., Ltd.

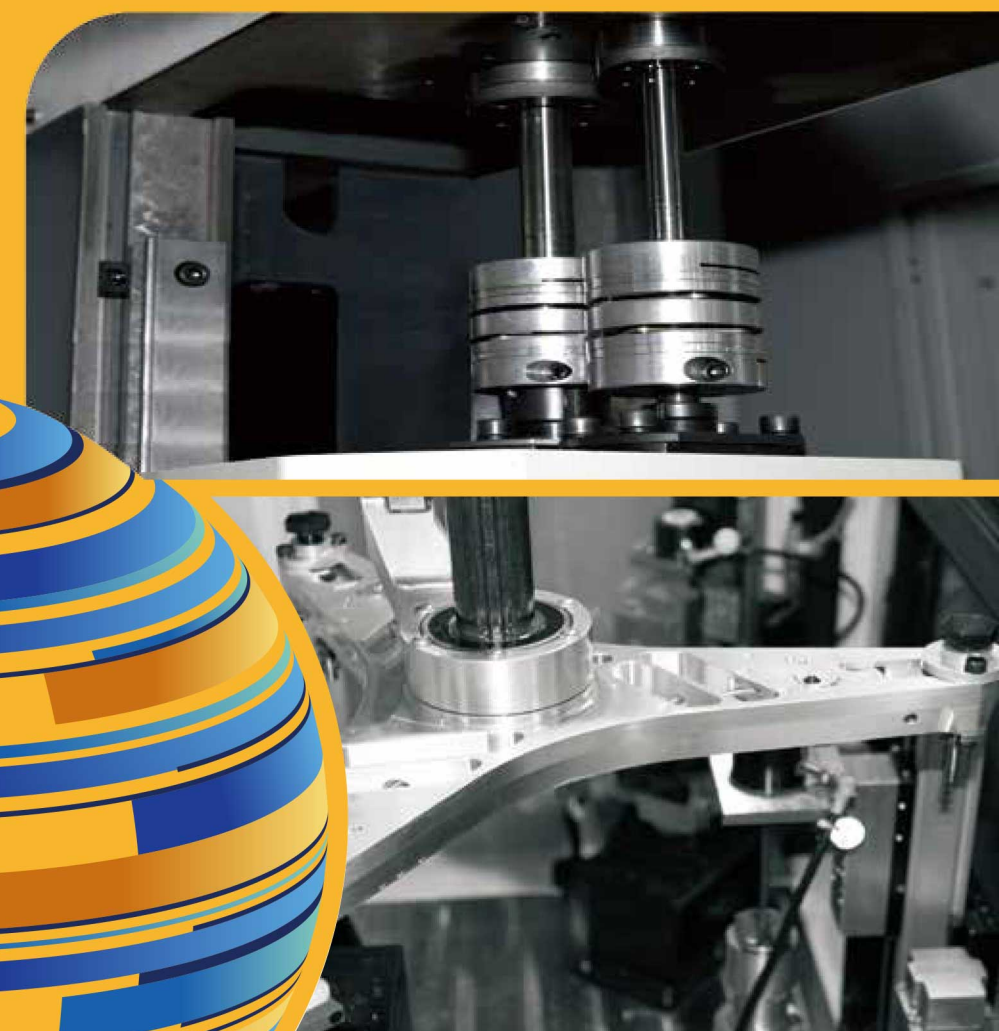
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Status of Market Coverage  
市场分布

## Company Introduction



Suzhou Gudwill honing machine factory, founded in 2001, We are the largest domestic specialized high-tech enterprise, which is engaged in the research of technology of honing, honing tools and equipment R & D and production. It covers an area of 30000 square meters, and possesses more than 100 professional staff who has a mechanical design and manufacturing, electrical automation control, abrasive abrasive, materials science and so on. In 2011 Germany, Stuttgart, we set up a R&D platform Europe international ( Germany ), In 2012 we had an acquisition the 51% stake of Germany Degen company, which is the world of highly honing manufacturing enterprise.

## Company Strength



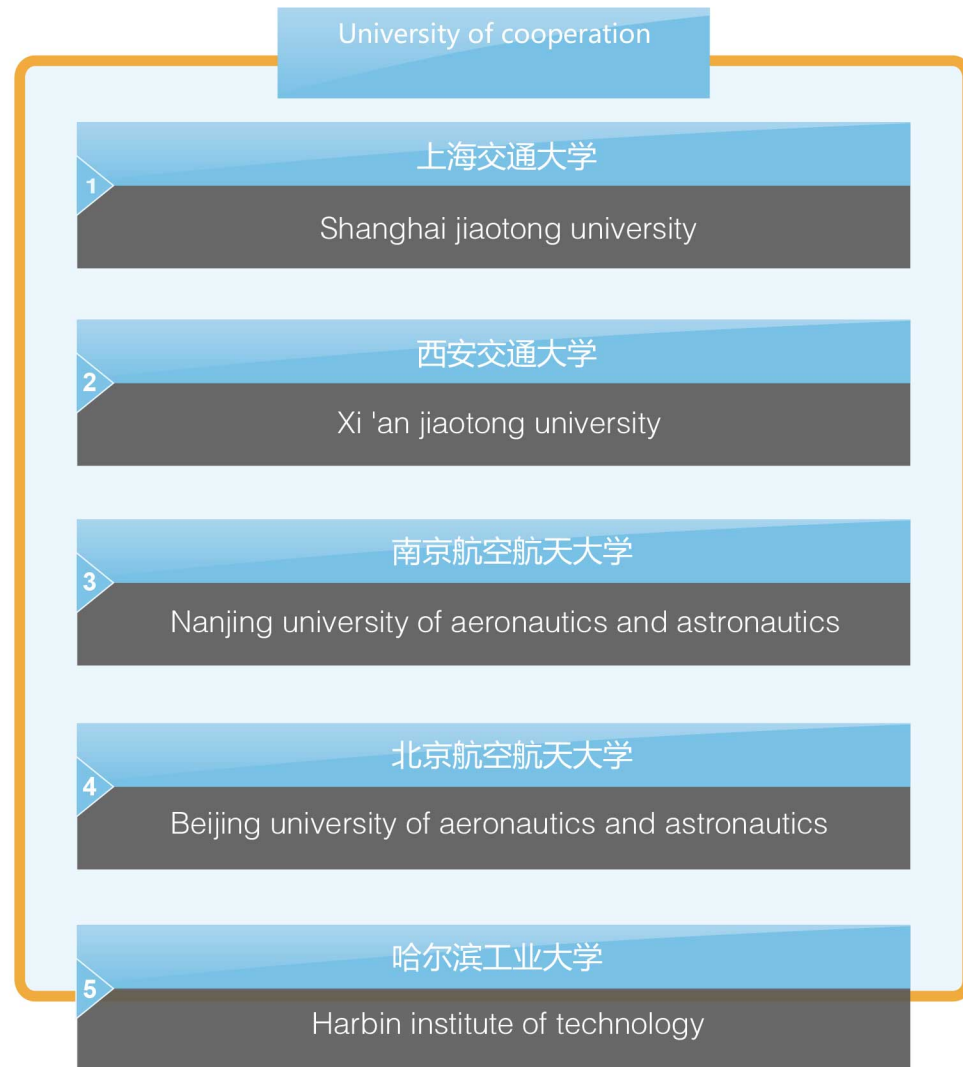
### German R&D Platform

In 2012, Factory acquire the Degen company in Germany which have 51% shares . Germany highly honing machine is surely the most distinguished R&D platform we have had. Executive development and industrialization.



# Company Strength

## University of cooperation



## The cooperative enterprise



日本电装公司  
Denso company



中国运载火箭研究院  
China academy of launch vehicle



西安飞机工业公司  
Xi 'an aircraft industry company



重庆嘉陵本田公司  
Chongqing jialing Honda



韩国现代  
South Korea's hyundai



比亚迪汽车公司  
Byd auto company



奇瑞汽车公司  
Chery automobile company



西安航空动力股份公司  
Xi 'an air power co., LTD



德国博世公司  
Germany Bosch



售前服务  
Pre-sale services

方案设计、设备选型  
program design,  
equipment selection



售中服务  
In the sale of services

用户培训、产品制造  
user training, product manufacturing



售后服务  
After-sales service

技术交底、现场安装、系统调试、维护指导  
technical tests, on-site monitoring  
equipment, system debugging,  
maintenance guidance



终身服务  
Lifelong service

设立备件中心, 用户无需储备  
set up a spare parts center, users do not  
need to reserve

### Multi-phase Services

Completely sales, and after sales  
tea work.  
Strong R&D team ready for  
customer order products

## Enterprise products

### HORIZONTAL HONING MACHINE SERIES

HM2000 HORIZONTAL HONING MACHINE SERIES



技术参数 TECHNICAL SPECIFICATIONS:

加工孔径	Bore diameter	Ø3 ~ Ø100mm
加工长度	Bore length	0-260mm
主轴转速	Spindle rate	250 ~ 2500r/min
主轴驱动	Spindle rate	AC, 1.5KW
冲程驱动	Stroke drive	0.75KW
冲程长度	stroke length	0-160mm
冲程速度	Stroke speed	80-310p/min
冷却系统	cooling system	FLU 25L/min Vo : 50L
机床尺寸	Machine size	L 1300 x B 850 x H 1300
机床重量	Machine weight	0.5T

产品特点 PRODUCT FEATURES:

- + The machine is simple, to ensure effectiveness and accuracy.
- + The main shaft, stroke double frequency conversion control, easy to matching regulate reticulate.
- + The panel on the digital display operation, can quickly adjust parameters.
- + Automatic zero down to size, has the function of "fixed point" "time".
- + Double guide rail stroke bracket and strengthening design of connecting rod drive allows for faster cycle, shorten the cycle time.
- +
- +

## Enterprise products

### High Precision CNC Vertical Honing Machine

HIGH-PRECISION CNC VERTICAL HONING MACHINE



技术参数 TECHNICAL SPECIFICATIONS:

加工孔径	Bore diameter	Ø4 ~ Ø50mm
主轴转速	Spindle rate	100 ~ 2000r/min
主轴驱动	spindle drive	AC, 1.5KW
主轴冲程长度	spindle stroke length	max.200mm
主轴往复速度	spindle speed reciprocating	max.40m/min
冲程驱动	Stroke drive	Servo, 3.5KW
冲程控制方式	Stroke control mode	Servo motor+ball screw
进给驱动	Feed drive	Servo, 0.6KW
进给控制方式	Feed control method	Servo motor+ball screw
进给分辨率	Feed resolution	0.1um
电源	power supply	3-380V±10%, 50HZ
机床尺寸	Machine size	L1490x81600xH2800
机床重量	Machine weight	1.8T

产品特点 PRODUCT FEATURES:

- + Low with a 7.5 "touch screen, the menu technology dialogue type honing processing interface, all parameters can be display, can be arbitrary Settings. Control system, tool wear compensation value setting function (manual, automatic compensation function). Numerical control system with USB interface, through the interface, can realize exchange of machine tool and computer processing program, and program storage closed to media.
- + Low stroke, feed adopts "servo motor + ball screw" control mode. Stroke repeat positioning accuracy to 0.05 mm or less, the resolution of the feed system of 0.1 um.
- + Low cooling filter system way: "magnetic separator + paper bag + oil cooler", filtration precision acuities were 20 um, cooling tank capacity of 300 l, or flow or 50 l/min. With honing oil temperature control system, the maximum extent to reduce the honing workpiece shadow of fever
- + Lubrication control system has perfect machine, all moving parts have automatic lubricating device.
- +
- +

## Enterprise products



### HIGH-PRECISION CNC VERTICAL HONING MACHINE

HIGH-PRECISION CNC VERTICAL HONING MACHINE

技术参数 TECHNICAL SPECIFICATIONS:

加工孔径	Bore diameter	Ø4~Ø50mm
主轴转速	Spindle rate	100~2000r/min
主轴驱动	spindle drive	变频电机, 1.5KW
主轴冲程长度	spindle stroke length	max.200mm
主轴往复速度	spindle speed reciprocating	max.40m/min
冲程驱动	Stroke drive	伺服电机, 3.5KW
冲程控制方式	Stroke control mode	伺服电机+滚珠丝杆
进给驱动	Feed drive	伺服电机, 0.6KW
进给控制方式	Feed control method	伺服电机+滚珠丝杆
进给分辨率	Feed resolution	0.1um
电源	power supply	3-380V±10%、50HZ
机床尺寸	Machine size	L1490xB1600xH2800
机床重量	Machine weight	2.5T

产品特点 PRODUCT FEATURES:

- + Low is equipped with two 7.5 "touch screen, the menu technology dialogue type honing processing interface, all parameters can be display, can be arbitrary Settings. Control system, tool wear compensation value setting function (manual, automatic compensation function). Numerical control system with USB interface, through the interface, can realize exchange of machine tool and computer processing program, and program storage closed to media. Low stroke, feed adopts "servo motor + ball screw" control mode. Stroke repeat positioning accuracy to 0.05 mm or less, the resolution of the feed system of 0.1 um.
- Low cooling filter system way: "magnetic separator + paper bag + oil cooler", filtration precision acuities were 20 um, cooling tank capacity of 300 l, or flow 100 l/min or higher. With honing oil temperature control system, the maximum extent to reduce fever on the precision of workpiece when honing Lubrication control system has perfect machine, all moving parts have automatic lubricating device.
- + Low machining accuracy: roundness acuities were 1 um, cylindricity 2 um / 100 mm or less, roughness of 0.1 um or less.

## Enterprise products



### HIGH-PRECISION CNC VERTICAL HONING MACHINE

HIGH-PRECISION CNC VERTICAL HONING MACHINE MB42200

技术参数 TECHNICAL SPECIFICATIONS:

加工孔径	Bore diameter	Ø50-Ø200mm
主轴转速	The spindle rat	50-200rpm
主轴电机	Spindle motor	7.5KW
冲程长度	Stroke length	800mm
主轴往复速度	The spindle reciprocating speed	30m/min
冲程伺服电机	Reciprocating motor	7KW
冲程控制方式	Stroke control method	"伺服电机+滚珠丝杠"
进给伺服电机	Feed motor	0.35KW
进给分辨率	Feed resolution	0.1um
电源	Power supply	3-380V±10%、50HZ
机床尺寸	Profile dimension	L2200XB2000XH4000
机床重量	Weight	5T

产品特点 PRODUCT FEATURES:

- + With the operation of the touch screen, menu dialogue honing processing interface, all parameters can be displayed and can be arbitrarily set. Control system with tool wear compensation value setting function (with manual, automatic compensation function). CNC system with USB interface, through the interface can achieve the exchange of machine tools and computer processing program, as well as the program machine outside the media storage.
- + Stroke, feed adopts "private server motor + ball screw" control mode. Stroke repeated positioning accuracy of ≤0.05mm, the resolution of 0.1um feed system.
- Cooling and filtering system: "magnetic separator + tape + oil cooler", filtration precision is ≤25um, cooling tank capacity is ≥300L, flow is ≥ 100L / min. With the constant temperature control system of honing oil, reduce the maximum impact on the workpiece heating precision honing.
- Machine tool has perfect lubrication control system, all moving parts have automatic lubrication device.
- The machining accuracy of roundness ≤ 15um/φ200mm ,Straightness ≤ 20um/300mm ;the roughness is ≤ 0.4um.

## Enterprise products

### HMTC series CNC horizontal strong deep hole honing machine

HMTC series CNC horizontal strong deep hole honing machine



strong honing head



Inner flu grinding shaft

#### 产品特点 PRODUCT FEATURES:

- + When the appearance of the new design style (standard type);
- + Low with a 10.4 "touch screen, the menu technology dialogue type honing processing interface, all parameters can be display, can be arbitrary Settings. Control system, tool wear compensation value set function;
- + Low feed adopts "servo motor + screw" control mode, the resolution of the feed system of 1  $\mu\text{m}$ ;
- + Low cooling filter system way: "magnetic separator + paper bag + oil cooler", filtration precision acuities were 30  $\mu\text{m}$ , cooling tank capacity of 350 l, or flow 100 l/min or higher. With honing oil temperature control system, the maximum extent to reduce honing workpiece influence of fever;
- + Low honing rod structure of internal injection, honing the lubrication effect is good, fast cooling and chip removal easy, improve the surface accuracy and production efficiency;

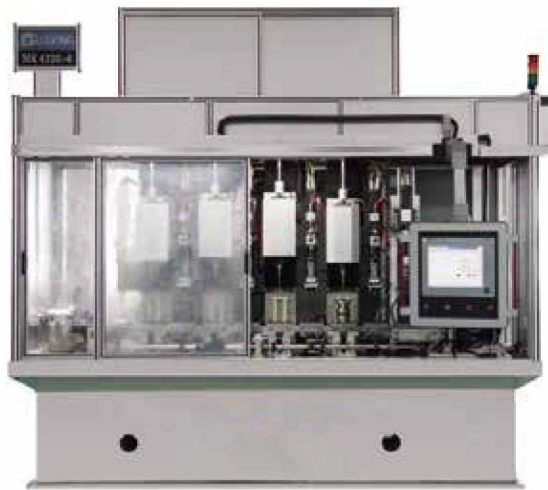
#### 技术参数 TECHNICAL SPECIFICATIONS:

+ Honing ID : $\varnothing 30 \sim \varnothing 500\text{mm}$ ;	+ Feeding Speed : 4-20m/min
+ Honing Length : 500-12000mm	+ Feeding Motor : Servo , 0.75KW ;
+ Clamping OD : $\varnothing 100 \sim \varnothing 560\text{mm}$ ;	+ Feeding model : Servo Motor+Ball Screw ;
+ Spindle Speed : 10 ~ 140r/min ;	+ Feeding Rate : 1 $\mu\text{m}$ ;
+ Spindle Motor : AC , 11KW ;	+ Cooling System : Paper filter+Magenatic filter+Oil cooler
+ Feeding Motor : Servo , 3.5KW ;	Outer Flu:100L/min
Working Range : $\varnothing 500 \sim \varnothing 1000\text{mm}$	Inner Flu:30L/min
Working Length : 0-18m ;	+ Volume : 350L-500L

## Enterprise products

### Customized models

Customized models



Main application fields

### Main application fields

#### MK 4230-4

Auto industry (diesel and gasoline fuel injection system, the gearbox), the aerospace industry, etc.

#### MB 42300-1

The car industry, aerospace industry, hydraulic industry, pneumatic industry, shipbuilding industry, etc.

#### MB 42200-800

Main applications: automotive industry (diesel and gasoline engine cylinder block), the aerospace industry, hydraulic, pneumatic industry, shipping industry, etc.

#### MK 42100-2

Automobile, motorcycle industry (cylinder block, cylinder liner, etc.), hydraulic, pneumatic components (cylinder, etc.), shipbuilding, aerospace industry (such as cylinder, etc.).

## Enterprise products



## HIGH-PRECISION CNC VERTICAL HONING MACHINE

HIGH-PRECISION CNC VERTICAL HONING MACHINE

技术参数 TECHNICAL SPECIFICATIONS:

加工孔径	Bore diameter	Ø4mm-Ø50mm
冲程长度	Stroke length	200mm
主轴转速	The spindle rat	100-2000rpm
主轴往复速度	The spindle reciprocating speed	40m/min
行程控制方式	Stroke control	伺服控制
主轴电机	Spindle motor	1.5kw
进给电机	Feed motor	0.35kw
往复电机	Reciprocating motor	3.5kw
电源	Power supply	380V
机床尺寸	Profile dimension	L2000XB1400XH2800
机床重量	Weight	3T
机床结构	Machine structure	两轴四工位

产品特点 PRODUCT FEATURES:

- + With the operation of the touch screen, menu dialogue honing processing interface, all parameters can be displayed and can be arbitrarily set. Control system with tool wear compensation value setting function (with manual, automatic compensation function). CNC system with USB interface, through the interface can achieve the exchange of machine tools and computer processing program, as well as the program machine outside the media storage.
- + Stroke, feed adopts "private server motor + ball screw" control mode. The resolution of 0.1um feed system.
- + Cooling and filtering system: "magnetic separator + tape + oil cooler", filtration precision is  $\leq 20\mu\text{m}$ , cooling tank capacity is  $\geq 300\text{L}$ , flow is  $\geq 100\text{L} / \text{min}$ . With the constant temperature control system of honing oil, reduce the maximum impact on the workpiece heating precision honing.
- + Machine tool has perfect lubrication control system, all moving parts have automatic lubrication device.
- + Machine tool structure: loading device, unloading device, two processing station.

## Enterprise products



## HIGH-PRECISION CNC VERTICAL HONING MACHINE MB42150Z

HIGH-PRECISION CNC VERTICAL HONING MACHINE MB42150Z

技术参数 TECHNICAL SPECIFICATIONS:

加工孔径	Bore diameter	Ø50-Ø150mm
主轴转速	The spindle rat	125-500rpm
主轴电机	Spindle motor	5.5KW
冲程长度	Stroke length	600mm
主轴往复速度	The spindle reciprocating speed	30m/min
冲程伺服电机	Reciprocating motor	7KW
冲程控制方式	Stroke control method	"伺服电机+滚珠丝杠"
进给伺服电机	Feed motor	0.6KW
进给分辨率	Feed resolution	0.1um
电源	Power supply	3-380V±10%、50HZ
机床尺寸	Profile dimension	L2200XB2000XH4000
机床重量	Weight	5T

产品特点 PRODUCT FEATURES:

- + With the operation of the touch screen, menu dialogue honing processing interface, all parameters can be displayed and can be arbitrarily set. Control system with tool wear compensation value setting function (with manual, automatic compensation function). CNC system with USB interface, through the interface can achieve the exchange of machine tools and computer processing program, as well as the program machine outside the media storage. Stroke, feed adopts "private server motor + ball screw" control mode. The resolution of 0.1um feed system.
- + Cooling and filtering system: "magnetic separator + tape + oil cooler", filtration precision is  $\leq 25\mu\text{m}$ , cooling tank capacity is  $\geq 300\text{L}$ , flow is  $\geq 100\text{L}/\text{min}$ . With the constant temperature control system of honing oil, reduce the maximum impact on the workpiece heating precision honing.
- + Machine tool has perfect lubrication control system, all moving parts have automatic lubrication device.
- + The machining accuracy of roundness  $\leq 6\mu\text{m}$ , Cylindricity  $\leq 8\mu\text{m}/150\text{mm}$ , the roughness is  $Rz \leq 2-4\mu\text{m}$ .

## Enterprise products

### HMTB SERIES CNC HORIZONTAL STRONG DEEP HOLE HONING MACHINE

HMTB series CNC horizontal strong deep hole honing machine



#### 产品特点 PRODUCT FEATURES:

- When the appearance of the new design style (standard type);
- Low with a 10.4 "touch screen, the menu technology dialogue type honing processing interface, all parameters can be display, can be arbitrary Settings. Control system, tool wear compensation value set function;
- Low feed adopts "servo motor + screw" control mode, the resolution of the feed system of 1  $\mu\text{m}$ ;
- Low cooling filter system way: "magnetic separator + paper bag + oil cooler", filtration precision acuities were 30  $\mu\text{m}$ , cooling tank capacity of 350 l, or flow 100 l/min or higher. With honing oil temperature control system, the maximum extent to reduce honing workpiece influence of fever;
- Low honing rod structure of internal injection, honing the lubrication effect is good, fast cooling and chip removal easy, improve the surface accuracy and production efficiency;

#### 技术参数 TECHNICAL SPECIFICATIONS:

+ Honing ID : $\varnothing 30 \sim \varnothing 500\text{mm}$ ;	+ Feeding Speed : 4-20m/min
+ Honing Length : 500-12000mm	+ Feeding Motor : Servo , 0.75KW ;
+ Clamping OD : $\varnothing 100 \sim \varnothing 560\text{mm}$ ;	+ Feeding Control : Servo Motor+Ball Screw ;
+ Spindle Speed : 10 ~ 140r/min ;	+ Feeding Rate : 1 $\mu\text{m}$ ;
+ Spindle Motor : AC , 11KW ;	+ Cooling System : Paper filter+Magenatic filter+Oil cooler
+ Feeding Motor : Servo , 3.5KW ;	Outer Flu:100L/min
	Inner Flu : 30L/min
	+ Volum : 350L-500L