# 数控磨齿机 CNC GEAR GRINDING MACHINE

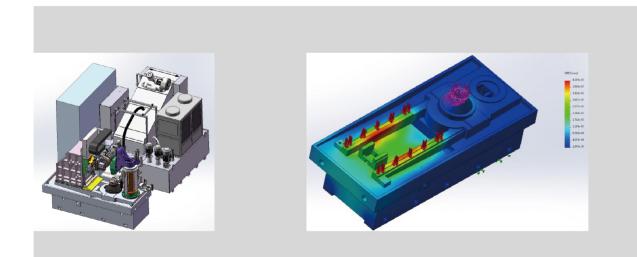
# 专注于核心技术的开发 打磨出高生产、高精度的加工效果

我们采用高刚性、热对称性、模块化的设计理念。

让机床具有精密、高效、刚性强、稳定可靠、软件功能完善、操作简单等特点,为客户提供更加优质的产品和服务。

Focus on the development of core technology Grinding the high production and high precision processing.

We adopt the design concept of high rigidity, thermal symmetry and modularization. The machine tool has the characteristics of precision, high efficiency, strong rigidity, stability and reliability, perfect software function and simple operation. Provide customers with better products and services.







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# 数控蜗杆砂轮磨齿机 CONTINUOUS GENERATING GEAR GRINDING MACHINE

### 机床特点

- 1.高刚性:床身、立柱、滑座均采用整体框式对称设计结构,通过有限元分析,具有刚度高、热对称性好及结构稳定性好的特点。
- 2.高精度磨削主轴:结构稳定可靠,刚性和精度好。同时刀架内置动平衡和声发射系统,动平衡系统实现砂轮在线平衡,减少主轴振动,提高磨削表面质量,声发射系统实现对磨削 过程监控,能完成砂轮修整和磨削时自动对刀,同时防止砂轮碰撞。
- 3.任意齿形齿向修形,齿形修形可根据客户要求定制专用金刚石滚轮,齿向修形可通过数控程序控制工件径向进给和工件轴向进给轴联动,修形加工至客户所需的要求。
- 4.低噪音移位磨削功能:在磨削过程中通控制系统多轴联动改变磨削纹路,形成一种齿面微观纹路,从而使齿轮啮合时的噪音显著降低。

### **MACHINE TOOL FEATURES**

1. High rigidity: The bed, column and slide seat all adopt the whole frame symmetrical design structure. Through finite element analysis, it has the characteristics of high rigidity, good thermal symmetry and good structural stability.

2. High precision grinding spindle: stable and reliable structure, good rigidity and precision. At the same time, the tool holder has built-in dynamic balance and acoustic emission system. The dynamic balance system realizes the online balance of the grinding wheel, reduces the spindle vibration and improves the grinding surface quality. The acoustic emission system realizes the monitoring of the grinding process, which can complete the dressing of the grinding wheel and the automatic tooling during grinding, while preventing

3. Arbitrary tooth profile and axial modification, and the tooth profile modification diamond dressing roller can be customized according to customer requirements. The axial modification can be realized by the radial feed of the workpiece and the axial feed axis of the workpiece through the numerical control program, and the modification is processed to the requirements of the customer.

4. Low noise shift function: In the grinding process, the grinding texture is changed by the multi-axis linkage of the control system to form a micro-texture of the tooth surface, so that the noise during gear meshing is significantly reduced.



## 技术参数 THE MAIN PARAMETERS

名称 Description		型号 Type YK7232
最大直径 Max. workpiece diameter	mm	ф320
最大齿宽 Max. tooth width	mm	320
最大加工模数 Max module	mm	6
最大工件螺旋角 Max workpiece helical angle	0	±45
砂轮中心到工作台中心水平距离(X轴) Horizontal center distance grinding wheel /worktable(X-axis)	mm	70~390
立柱进给最大速度(X轴) Radial feed speed(X-axis)	mm/min	10000
砂轮窜刀最大移动量(Y轴) Maximum movement of grinding wheel channeling(Y-axis)	mm	250
砂轮中心到工作台台面垂直距离(Z轴) Vertical center distance grinding wheel/worktable (Z-axis)	mm	135~525
滑板最大速度(Z轴) Maximum speed of slide(Z-axis)	mm/min	10000
砂轮主轴最高转速(B轴) Max grinding wheel spindle speed(B-axis)	rpm	7000
工作台最高转速(C轴) Maximum rotation speed of worktable(C-axis)	rpm	1500
修整滚轮转速(B3轴) Dressing roller speed(B3-axis)	rpm	3000~6000
砂轮主轴功率(B轴) Spindle power of the grinding wheel(B-axis)	KW	38
砂轮芯轴接口 Grinding wheel core shaft interface		HSK—C80
砂轮规格(外径×内径×长度) Grinding wheel specification	mm	ф280×ф115×160
机床总功率 Total power	kW	约110
机床重量 Total weight	t	约12
主机外形尺寸(长×宽×高) Main Machine Dimension	m	3.1x2.03x2.3









- 1、重量仅供搬运起重时参考,具体以实物为准; 2、外观防护分半防护、全防护,用户可根据实际需 要进行选择;
- 3、公司持续创新机床设计,本手册中各系列产品 参数将持续优化。

Note:

1. The weight is for reference only, and the actual product shall prevail;

2. The appearance protection of this machine tool has two options: semi-protection and full protection, which can be selected according to actual needs: protection, which can be selected according to actual needs;
3. We continue to innovate machine tool design. The parameters of each series of products in this manual are for reference only. If you have any inquiry, please contact us for the update.

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