

2017年第一版



YK7832 YK78200
CNC Rack Grinding Machine
数控齿条磨齿机

始终追求在齿轮传动领域实现客户的梦想

Our target is to realize customers dreams in the field of gears transmission



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国家重点高新技术企业
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数控齿条磨齿机系列 ^{宜长®} Series of CNC Rack Grinding Machine

- YK7832性能: 本机床为五轴二联动数控齿条磨齿机。机床砂轮机械主轴由西门子主轴伺服电机驱动, 内置动平衡仪, 自动监测并实现砂轮的自动平衡; 砂轮恒线速度磨削; 机床配AE自动对刀系统; 砂轮可进行单片金刚滚轮插补修型, 也可进行成型金刚滚轮修型, 机床适用性宽; 机床排屑系统实现了磨削油温度的恒温控制; 机床具有断电自动回退功能。
- 特点: 自动监测并实现砂轮的自动平衡、恒定的砂轮线速度、AE自动对刀系统、断电自动回退。
- 适用范围: 汽车行业专用磨齿机, 适用转向器摇臂轴, 活塞螺母硬齿面磨削; 汽车传动突缘叉、突缘强力成型磨削; 乘用车转向器齿条硬齿面磨削; 亦适用于齿条加工长度小于等于320长度通用齿条的硬齿面磨削;
- Performance: The machine have five axes and two of them can be moved simultaneously. The wheel spindle is driven by Siemens servo motor and the dynamic balancing machine is inside which could monitor it and realize the balance of the wheel automatically. The machine is equipped with an AE tool auto-checking system. The linear velocity of the wheel is invariable and it can be modified by flake emery wheel or molding emery wheel. The temperature of the grinding oil is constant and it has the function automatically return when there is a sudden power failure.
- Characteristics: Automatic monitoring and realize automatic balance of the grinding wheel, the linear velocity of the wheel is invariable, AE auto-match tool system, the function automatically return when there is a sudden power failure.
- Application: It is the special rack grinding machine of the automobile industry, especially for the grinding of the hardened gear face, such as the rocker shaft of redirector, piston nut rack and steering gear rack of the passenger car. It is suitable for the strong grinding of the flange yoke and the profile flange too. It can also be used to process the conventional rack which are less than or equal to 320mm.
- YK78200性能: YK78200数控齿条磨齿机可实现六轴四联动。该产品具有齿条磨齿加工余量自动均匀分配功能、直线导轨抑制振动功能、砂轮自动修形功能、磨齿加工环境实时监测及应急处理等核心技术。自主开发了参数化编程磨齿加工控制系统, 将数字化控制技术、传感器技术等多项技术结合在一起, 使机床具备自诊断功能, 能自动匹配工艺参数, 实现了高端齿条的精密高效加工。
- 特点: 齿条磨齿加工余量自动均匀分配功能、直线导轨抑制振动功能、砂轮自动修形功能、磨齿加工环境实时监测。
- 适用范围: 适用于齿条软、硬齿面精密磨削加工。
- Performance: The machine have six axis and four of them can be moved simultaneously. It has the following core technology, a uniform distribution of the process redundancy automatically, vibration suppression of the linear guide, modification of the grinding wheel automatically, real-time monitoring and emergency treatment for processing environment. The parametric programming control system is independent developed, which could be used to match the



YK78200

数控齿条磨齿机 Series of CNC Rack Grinding Machine

主要技术参数 The Main Technical Specification	YK7832	YK78200
最大加工模数 (mm) Max. module	18	18
最大加工工件(20° 斜齿)长度 (mm) Max. processing length(helical tooth 20°)	320	2000
加工斜齿条最大角度 (°) Max. helical tooth angle	任意(arbitrary)	± 20
主轴电机功率 (Kw) Power of the spindle motor	45	45
砂轮主轴转速 (r/min) Speed of the grinding wheel	1~4000	1~4000
最大砂轮宽度 (mm) Max. width of the grinding wheel	105	105
砂轮直径 (mm) Diameter of the grinding wheel	210~400	210~400
主轴砂轮孔安装直径 (mm) Installing diameter of the grinding wheel	152.4	152.4 (6 inch)
X轴最大行程 (mm) Max. stroke of X-axis	350	500
X轴最大进给速度 (mm/min) Max. feeding speed of X-axis	10000	5000
Y轴最大行程 (mm) Max. stroke of Y-axis	320	2000
Z轴最大行程 (mm) Max. stroke of Z-axis	350	420
Z1轴最大行程 (mm) Max. stroke of Z1-axis		105
Y1轴最大行程 (mm) Max. stroke of Y1-axis		125
金刚滚轮直径 (mm) Diameter of the emery wheel	100~200	90~200
机床重量 (Kg) Total weight	7000	20000

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parameters of the process automatically and realize a precision high efficiency processing of the high-end rack.

- Characteristics: A uniform distribution of the process redundancy automatically, vibration suppression of the linear guide, modification of the grinding wheel automatically, real-time monitoring and emergency treatment for processing environment.
- Application: It is suitable for the grinding of the rack whether they are soft or hard tool-face.

注: 以上参数仅供参考, 如有需求, 请联系我们。

Note: The above mentioned parameters for your reference only. If have (any requires) please contact us.