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长沙一派数控机床有限公司  
CHANGSHA EPOCH NC MACHINE TOOL CO.,LTD

## ETK2506A数控活塞异形销孔立式镗床

ETK2506A NC Boring Machine For Piston Non-Cylinder Pin Hole



### 功能简介

### Brief Introduction of Functions

- ① 机床配置精密微位移伺服镗削装置（一派数控专利产品），完成活塞异形销孔型面（锥孔、曲线孔）的加工；
- ② 镗杆的微位移运动在主轴高速运转的情况下完成，具有自动动平衡功能，能保持主轴高精度；
- ③ 机床采用立式结构，配有主轴倾斜角精密调节装置，用于活塞销孔叠加椭圆孔的加工；
- ④ 活塞夹具可转方向，完成销孔任意角度方向上的椭圆孔加工；
- ⑤ 销孔大小可通过控制程序界面进行微调；
- ⑥ 可选机械手自动上下料。

The boring machine is equipped with precision micro-displacement servo boring device (patent product of EPOCH NC) to complete the processing of piston non-cylinder pin hole (conical hole, curve hole);

The micro-displacement motion of the servo boring device is completed under the circumstances of high speed revolution of spindle, and the servo boring device bears the function of automatic dynamic balancing, which can maintain the high precision accuracy of spindle;

The boring machine has a vertical layout which is equipped with precision adjustment device for spindle inclination to complete the processing of the overlapped elliptic pin hole of piston;

The fixture of piston can be turned to complete the processing of the elliptic pin hole at all directions;

The size of pin hole can be micro-adjusted through the control program interface.

Manipulator for mounting or unmounting the work-piece automatically is optional.

### 主要技术指标 MAIN TECHNICAL INDEXES

活塞销孔直径/Piston Pin Hole Diameter	Φ25~Φ60mm
活塞直径/Piston Diameter	Φ60~Φ160mm
镗刀最大单边偏移量/Maximum Offset of Boring Cutter	0.06mm
主轴中心线与销孔中心线的倾斜角度范围 Adjustment Range of Angle Between Spindle Centreline and Pinhole Centreline	0~7°
销孔椭圆长轴方向/Major Axis Direction of the Pin Hole Ellipse	任意角度方向/Any Angle Direction
主轴精度/Spindle Precision Accuracy	0.002mm
主轴速度/Spindle Speed	50~3500rpm
工序能力指数（直径公差 $\Phi D \pm 0.002\text{mm}$ ） Process Capability (Diameter Tolerance $\pm 0.002\text{mm}$ )	$C_p K \geq 1.33$
粗糙度/Surface Roughness	Ra0.3 $\mu\text{m}$
单边销孔直线段圆柱度 Cylindricity of the Straight Segment of the Single Piston Pin Hole	0.002mm
直销孔圆度/Straight Pin Hole Roundness	0.001mm
主机外形尺寸（长×宽×高）/Machine Dimensions(L×W×H)	2000×2000×2500mm