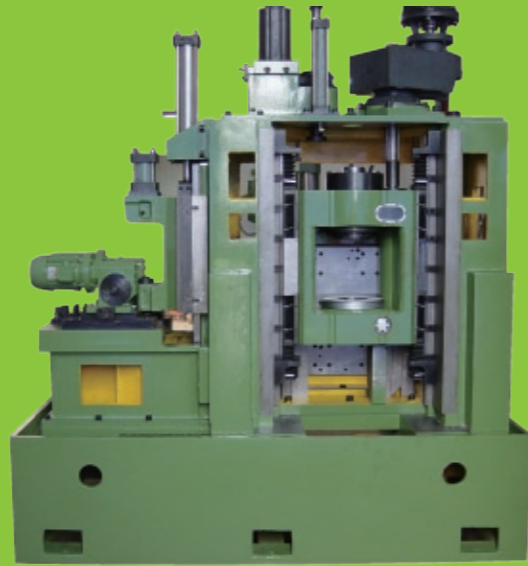


ECK1514



ECK1514光机



ECK1514

数控活塞环内外圆立式车床
CNC For Piston Ring Contour

功能简介 | Brief Introduction of Functions

- 本机床主体为公司专利产品，采用立式布局，上下主轴为整体框架结构，具有稳定性好、刚度大、排屑流畅、防护严密等特点；
- 配置平动式数控仿形刀架（一派数控专利产品），通过调用电子凸轮数据即可完成活塞环的内外圆数控仿形车削加工。机床无需实物凸轮、机械仿形装置及杠杆比调节装置，结构简单紧凑，维护方便。基于电子凸轮运用的数控仿形刀架，具有仿形精度高、产品换型快、精度保持性好等特点；
- 电子凸轮数据由“一派活塞环自由形线处理软件”（一派数控软件著作权产品）生成，软件提供了多种环周径向压力曲线设计方法，具备自由形线、压力分布、动态特性的分析处理功能；
- 可选配活塞环自由形线测量仪，并利用测量数据与理论数据的误差值，补偿修正伺服机构的加工误差，进一步提高加工精度，得到满意的自由形线曲线。
- The lathe is EPOCH NC patent product, which has a vertical layout and whose upper and lower spindle are an entire framework structure characterized by fine stability, high rigidity and smooth chip removing and strict protection;
- Equipped with translational numerically-controlled profiling cutter saddle (patent product of EPOCH NC), the lathe can finish the turning machining of the internal and external circles of piston rings through calling the data of the electronic cam. Without a solid cam, mechanical profile device and lever ratio adjusting device, the lathe has a simpler structure and can be maintained more conveniently. The numerically-controlled profiling cutter saddle based on electronic cam is characterized by highly accurately profiling, more quickly changing types of the products and well keeping good accuracy;
- The data of the electronic cam are produced by the "Epoch piston ring free-profiling curve treatment software" (Copyright product of EPOCH NC), which provides manifold design methods of radial pressure curve and have the functions of analysis and treatment of free-profiling curve, pressure distribution and dynamic characteristics;
- The lathe can be equipped with piston ring free-profiling curve measuring instrument. Through the error between the measured data and theoretic data, the processing error of the servo device can be compensated and corrected to further promote the processing accuracy and get satisfactory free-profiling curve.

主要技术指标 | Main Technical Indexes

活塞环直径范围 Piston Ring Diameter (mm)	Φ50~Φ140
最大加工环叠长度 Maximum Piston Rings Length (mm)	140
最大加工扁度 Maximum Ellipticity of Piston Ring (mm)	8.0
主轴精度 Spindle Precision Accuracy (mm)	0.015
车削主轴转速 Spindle Speed (r/min)	5~200
工序能力指数CPK (直径公差ΦD±0.03mm)	
Process Capability (Diameter Tolerance ΦD± 0.03mm)	≥1.33
仿形轮廓度 Profile Accuracy (mm)	±0.03
活塞环光密封度 Optical Sealing	不漏光 / light-proof
活塞环径向厚度差 Radial Thickness Deference of Piston Rings (mm)	0.05
加工表面粗糙度 Surface Roughness (μm)	Ra3.2
主机外形尺寸 (长×宽×高) Machine Dimensions (L×W×H) (mm)	2080×1200×2650