



EDHM16SL系列深孔数控珩磨机

EDHM16SL series deep-hole CNC honing machine

深孔高效珩磨加工

High-efficiency honing of deep holes

- 机床整体架构采用铸铁床身，加高单立柱结构，结构紧凑，确保了机床的高刚性和高稳定性。
- 机床冷却系统为循环冷却，采用双油箱设计，磁分式纸带过滤器两级过滤，并使用油冷机强制冷却。
- 主轴往复和旋转运动采用高性能伺服电机控制，速度可实现同步控制，响应速度快。
- 珩磨砂条涨缩装置为液压双进给结构，采用液压比例控制技术或手动调压阀设定实现压力控制。
- 机床工作台采用高精度双工位液压回转工作台，单轴双工位模式，工作辅助时间为零。
- 采用欧姆龙高性能运动控制器，运行稳定可靠。
- 集成操作平台，配置TFT彩色液晶触控面板。专为珩磨加工定制的人机界面更具人性化。
- 集中润滑系统间歇供油，延长滑动部件使用寿命。
- The overall structure of the machine tool is cast iron bed with a single column structure, which is compact and ensures the high rigidity and stability of the machine tool.
- Machine tool cooling cycle cooling system, dual fuel tank design, magnetic tape filter two-stage filtration fraction, and an oil cooler forced cooling.
- The reciprocating and rotating movement of the main shaft is controlled by a high-performance servo motor. The speed can be synchronously controlled and the response speed is fast.
- Honing extension system is in double-feed design, Adopt hydraulic proportional control technology to realize pressure closed-loop control.
- The machine table is duplex hydraulic rotary table, single axis duplex position mode, the work auxiliary time is zero.
- The machine is controlled by OMRON high-performance motion controller, stable and reliable operation.
- Integrated platform, with TFT liquid crystal color touch panel. The human-machine interface especially made for honing shows humanistic feature.
- Intermittent oil lubrication system, to extend the service life of the sliding member.

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规格参数

Specifications parameters

项目Item	EDHM16SL	EDHM30SL
珩孔直径范围 Honing diameter	Φ30mm~Φ160mm	Φ30mm~Φ300mm
主轴最大往复行程 Max. spindle reciprocating stroke	1600mm	2000mm
最大珩孔深度 Max. honing depth	1500mm	1800mm
主轴旋转方式 Spindle rotation mode	伺服电机，配减速机 Servo motor, with reducer	
主轴转速范围 Range of spindle speed	10-200r/min	
主轴往复形式 Spindle reciprocation mode	伺服电机往复，滚珠丝杠线轨传动 Servo motor, ball screw, Line rail	
主轴往复速度 Spindle reciprocating speed	2.5-25m/min	
珩磨头进给方式 Honing head feed mode	伺服电机丝杠传动/液压比例控制定压双进给 Coarse: Servo motor, Fine: Hydraulic proportional constant pressure double feed	
工作台驱动方式 Table driver mode	液压转台/移动工作台Hydraulic rotary table/Mobile Workbench	
工作台工位数 Number of stations in table	转台rotary table:2; 移动工作台Mobile Workbench:1	
工作台尺寸Dimension of table	Φ650mm	800X800mm
加工精度honing accuracy	圆柱度Cylindricity: ≤0.02mm, 粗糙度Roughness: Ra0.2-0.4 μm	
电气控制系统 CNC system	欧姆龙NX1P2控制系统、EtherCAT总线技术 OMRON NX1P2、EtherCAT BUS Technology	
液压系统Hydraulic unit	2.2KW变量泵，配风冷机 2.2 KW variable pump, air cooler	
冷却系统Cooling unit	分离水箱、磁辊纸带两级过滤恒温冷却系统、配油冷机 Separate tank, magnetic drum 2-stage paper filter, constant temperature cooling system, with oil cooler	
测量系统Measuring system	日本东京量仪V2，在线测量 V2 On-line measuring system from Tokyo, Japan	
珩磨头及珩磨连杆 Honing head and connection rod	双进给珩磨头，珩磨砂条涨缩压力分级可控 Double-feed honing head, controllable extension/retraction pressure of honing sticks in different stages	
珩磨夹具 Honing Fixture	下压式油缸 Down-pressing cylinder	
机床颜色 Machine color	机座：深灰色、其他：白色 Base: dark grey; other: white	
机床总功率 Total power	30KVA	40KVA
机床净重 Net weight	8500KG	10000KG
机床外形（长×宽×高） Overall dimensions (L×W×H)	1630×2570×5620 mm	2150×2655×6520