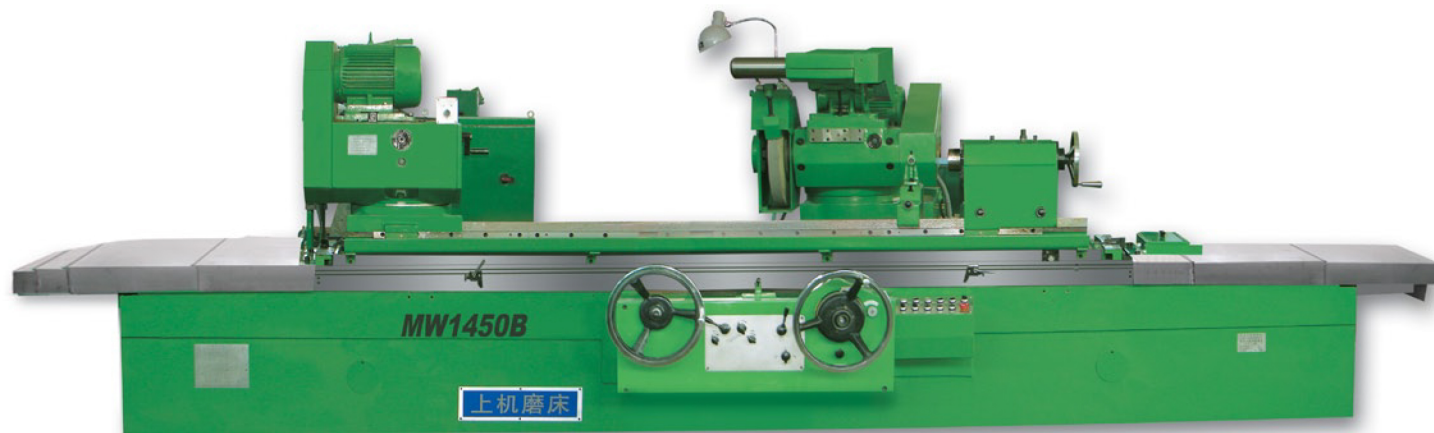


Φ500mm大型万能外圆磨床系列

MW1450B万能外圆磨床



机床用途与性能特征

- MW1450B型是MW1450A的更新换代产品，是一种手动操纵、电气、液压控制的万能外圆磨床，适用于圆柱形回转体工件的外圆或内孔表面磨削，用于单件小批生产的场合。
- 机床工作台纵向移动可由液压无级变速传动，也可用手轮传动。砂轮架横向进给由液压作微量自动周期进给和快速进退，也可用手轮实现粗、细两种进给。工作台纵向运动，砂轮架快速进退，砂轮周期进给等均有操作按钮、电气、液压控制。
- 头架主轴采用一滚一滑轴承结构，轴承间隙可调，适应顶尖或卡盘的各种磨削。头架在逆时针90度范围内可作任意角度调整，摆动头架或工作台或砂轮架的角度即可磨削不同锥度的内外圆锥形工件。
- 砂轮架和工作台导轨采用静压润滑。砂轮主轴由三块扇形轴瓦支承，将砂轮架体壳上的内圆磨架翻下即可磨削内孔。附有多套内圆磨杆可供选择订购。
- 工件、外圆砂轮、内圆砂轮、液压泵和冷却泵分别由独立电机驱动。
- 机床的各运动部件均具有电气、液压联锁机构，操作安全可靠。

Main Applications and Structural Features

- Model MW1450B universal cylindrical grinder is an improved version, renovated in design and structure from the basic model MW1450A, operated under the control of electric and hydraulic systems or by manual intervention. It is suitable for grinding external and internal cylindrical or conical surfaces of rotational parts in single-kind, and small batch production.
- The table longitudinal traverse is actuated hydraulically at infinitely variable speed or operated by hands. The rapid approach and withdrawal, the intermittent micro infeed of the wheelhead are also effected by hydraulic means. In addition, the latter can be manually operated in coarse or fine infeed mode. All the above power functions are accomplished by push-buttons, electrical and hydraulic control.
- The structure of workhead spindle employs a rolling and a sliding bearing with their clearance adjustable. It is suitable for various grinding between centers or on chucks. The workhead can be swivelled counterclockwise with in 90°. And by swiveling either the workhead or work table or wheelhead, the external and internal surfaces of workpiece with different taper can be ground.
- The worktable and wheelhead guideways are hydrostatically lubricated. The grinding wheel spindle runs in a pair of partial journal bearings, each of which consists of three tilting segmental shoes. The internal grinding attachment bracket on the wheelhead can be turned down for grinding internal parts and multi-sets of extension bars are attached for option.
- Workpiece, external and internal grinding wheels, hydraulic pump and coolant pump are all driven separately by their individual motors.
- Each motion part of the grinder is controlled by electric and hydraulic interlocking mechanism. The external and internal wheel covers are strong and reliable, thus the grinder can be operated with ease and safety.

MW1450B

万能外圆磨床

技术规格参数 Specifications and Technical Parameters

可磨外圆直径Grinding O.D. dia.	Φ25 ~ 500 mm
可磨内孔直径Grinding I.D. dia.	Φ30 ~ 200 mm
中心高Center height	270 mm
最大工件重量Max. workpiece weight	2000 kg
可磨最大工件长度(外圆/内圆) Max. grinding length(O.D./I.D.)	1000、1500、2000、3000、4000/320 mm
砂轮尺寸(外径×宽×内径)Wheel size (O.D.×W×I.D.)	Φ500×75×Φ305 mm
砂轮转速Wheel speed	1330,665 r/min
内圆磨具转速Internal grinding attachment speed	10000、6000、4200、3000 r/min
工作台最大移动量Max. worktable traverse	1000、1500、2000、3000、4200 mm
工作台最大移动速度Max. worktable travel speed	0.1 ~ 3 m/min
砂轮线速度Wheel peripheral velocity	35 m/sec
砂轮架快速移动量Wheelhead rapid approach and withdrawal traverse	100 mm
自动周期进给量(粗/细)Automatic intermittent infeed (fine/coarse)	0.02/0.0025 mm
手动微量进给量(粗/细)Manual microfeed (fine/coarse)	0.02/0.0025 mm
油泵排量Hydraulic pump displacement	25 mL/r
油泵压力Hydraulic pump pressure	2.5 Mpa
冷却液流量Coolant flow	50 L/min
电机总功率Total motor power	15.8 kw
砂轮电机功率Wheel head motor power	外圆: 5/7.5, 内圆: 1.5kw
机床重量(约) weight(Almost)	8000、8600、9900、11350、14000 kg
外型尺寸(长×宽×高)Overall dimensions (L×W×H)	(4920、6020、8620、10240、12000)×2620×1600

机床主要附件 Main Accessories

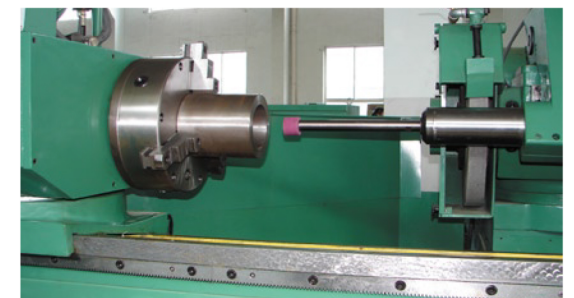
全套电器设备	Complete set of electric equipment	
冷却设备	Complete set of coolant equipment	1套1set
开式中心架	Open-type steady-rest	1套1set
砂轮外圆修整器	Cylindrical wheel dresser	1套1set
砂轮法兰盘	Wheel adaptors flange	1件1pc.
砂轮平衡轴	Wheel balancing mandrel	1件1pc.
机床垫铁(按顶尖距)	Levelling wedge for (1000/1500/2000/3000mm)	12/12/12/18/22套set
内圆磨具	Internal grinding attachment	1套1set

特殊定货附件 Extra Accessories

砂轮平衡架Wheel balancing stand	1件1pc
磁性分离器Magnetic separator	1件1pc
镶块顶尖Carbide tipped center	2件2pcs
闭式中心架Close-type steady-rest	1套1set
圆弧修整器Radius dresser	1套set
端面修整器End-face dresser	1套set
内圆磨杆Internal grinding attachment	1套set

机床工作精度(标准试件) Working Accuracy(Criterion for the Piece)

圆度Roundness	3 μm
纵截面内尺寸一致性Uniformity of dia. in longitudinal section	8 μm
表面粗糙度(外圆/内圆)Surface roughness(external/internal)	Ra0.32/0.63 μm



图为MW1450B内圆磨具和内圆磨架，磨具主轴均采用滚动轴承支承，通过更换皮带轮可获四种转速，以磨削不同直径的内孔。Internal grinding attachment and its supporting bracket for Model MW1450B are shown on fig. Rolling bearings are used for the spindle of grinding attachment. Changing pulley can obtain 4 kinds of speeds for grinding various diameter holes.

