

## MW1420B

## 万能外圆磨床



## 机床用途与性能特征

- 本机床适用于磨削圆柱形和圆锥形的外圆和内孔，也可磨削轴向端面，宜用于批量生产及各种机械加工行业使用，具有精度高、刚性强、磨削效率高、操作方便等特点，结构先进，造型美观。
- 本系列机床的工作台纵向移动有液压和手动，砂轮架和头架可回转，外圆砂轮采用  $\Phi 400 \times 40 \times \Phi 203$ ，提高了磨削效率及砂轮耐用度。头架主轴可转动，砂轮架实现微量进给，液压系统部分采用低噪音专用油泵，供油平稳，噪音小，工作台液压往复，具有抖动装置，可实现小距离频繁换向功能，提高切入磨削工件时的表面质量。

## Main Applications and Structural Features

- The machine is suitable for grinding external and internal cylinder and cone, and end face of shaft. It can be used for medium- or small-batch production of parts or in tooling shop. Beside its advanced structure and beautiful appearance, it has features of high accuracy, strong rigidity, high grinding efficiency, ease in operation, etc.
- The series grinders are all fitted with worktables capable of longitudinally traveling by hydraulic or manual control and rotatable wheel head and work head. Wheel of  $\Phi 400 \times 40 \times \Phi 203$  used in inner grinding can improve grinding efficiency and wheel durability. When the spindle of work-head is rotating, wheel head will provide fine feed. Use of imported gear pump makes oil be supplied smoothly and with a low noise. Hydraulic reciprocal movement of worktable generates an oscillating effect. A frequent short-range reversing function is thus realized to improve surface grinding quality when a work piece is ground with plunge feed.

## MW1420B

## 万能外圆磨床

## 技术规格参数 Specifications and Technical Parameters

磨削直径范围 Diameter to be ground	$\Phi 8 \sim 200$ mm
磨削孔径范围 Diameter to be ground	$\Phi 13 \sim 80$ mm
最大磨削长度 Max. length to be ground	520/750/1000 mm
中心高 Height of center	125 mm
顶尖中心距 Distance between center	520/750/1000 mm
最大工件重量 Max. workpiece weight	50 kg
工作台最大纵向移动量 Max. longitudinal travel	600/800/1080 mm
工作台最大回转角度 Max. angle of swivel	$-5^\circ \sim +9^\circ / -3^\circ \sim +9^\circ / -3^\circ \sim +7^\circ$
工作台液压移动速度 Hydraulic traverse speed	0.1-4 m/min
工作台手轮-转移动量 Traverse per turn of hand wheel	6 mm/r
头架主轴转速 Spindle speed	60,85,230,120,170,460 r/min
头尾架顶尖锥度 Taper of headstock center	No.3
头架卡盘直径 Dia. of headstock chuck	125 mm
尾架套筒移动量 Stroke of center sleeve	25 mm
砂轮架快速移动量 Rapid travel of wheel head	20 mm
手轮-转砂轮架移动量 Traverse per turn of hand wheel	1 mm
微调手轮-格砂轮架移动量 Movement per graduation on micro adjustment knob	0.00125 mm
砂轮轴转速 Speed of wheel head spindle	2230/1820 r/min
砂轮架移动量 Traverse of wheel head	150 mm
砂轮规格 Max. diameter of grinding wheel	$\Phi 400 \times (40 \sim 50) \times \Phi 203$ 或 $\Phi 300 \times (25 \sim 40) \times \Phi 127$ mm
电机总容量 Total power motor	4.24 kw
机床外形尺寸 Overall dimensions of the machine (L×W×H)	2000×1420×1600/2700×1420×1600/3100×1400×1600
机床重量 Weight of the machine	2500/2900/3100 kg

## 机床主要附件 Main Accessories

1 冷却液箱 Coolant tank	1套set
2 砂轮修整器 Grinding wheel dresser	1套set
3 开式中心架 Center rest open type	1套set
4 砂轮平衡轴 Wheel balancing stand	1套set
5 三爪卡盘 Three-jaw chuck	1套set
6 顶尖 Center	2件piece
7 半顶尖 Half center	2件piece
8 桃子夹头 Driving dog	1套set
9 三角皮带、多楔带、平皮带 V belt/Poly-V belt/Fat belt	各2件pieces each
10 垫铁 Leveling wedge (for krum base)	3件pieces
11 拆卸螺帽 Unlocked nut	1件piece
12 砂轮夹板 Wheel fixers	2套set
13 内磨接长轴 Quill shaft for internal grinding	4件piece
14 内六角套筒扳手 Hex socket wrench	1件piece
15 遮板 Blade	1套set

## 特殊定货附件 Extra Accessories

1 圆弧修整器 Circular wheel dresser	1套set
2 砂轮平衡架 Wheel balancing stand	1套set

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

圆度 Roundness	0.0015 mm
圆柱度 Cylindricity	0.005 mm
粗糙度 Roughness	$Ra \leq 0.32 \mu m$

## 安装基础图 Foundation Layout

