

MW1432B

万能外圆磨床



机床用途与性能特征

- 本系列机床适用于磨削圆柱形、圆锥形的外圆和内孔，也可磨削轴向端面，适用于批量生产，具有精度高、刚性好、磨削效率高、操作方便等优点。
- $\Phi 320$ 系列机床是通过模块化原理设计，增加了机床的刚性强度，发展多种类型规格的系列产品。
- 砂轮主轴、轴承加大，电机功率增加，砂轮直径达500毫米，提高了磨削效率。
- 砂轮架带有自动周期进给，且有左进、右进、双进、无进给四种选择方式。
- 头架在逆时针方向 90° 范围内可任意角度调整，与砂轮架在 $\pm 30^\circ$ 范围内任意角度调整，即可磨削较大内外圆锥形工件。
- 将砂轮架壳体上的内圆磨架翻下即可磨削内圆零件，有6套内圆磨杆供选择使用。
- 机床各运动部件具有电气、液压连锁结构，动作安全可靠。

Main Applications and Structural Features

- The grinding machine series, for production in batch, is suitable for grinding outer and inner cylinders, outer and inner cones, as well as axial end faces. It has features of high accuracy, good rigidity, high grinding efficiency, easy operation, etc.
- $\Phi 320$ Series grinding machines have been developed into diversified series products on the principle of modular design.
- Use of enlarged spindles and bearings of grinding wheels, greater motor power, up to $\Phi 500$ mm grinding wheels improve grinding efficiency.
- Grinding wheel head with automatic cyclic feed provides four selecting modes:left feed, right feed, double feed and no feed.
- Arbitrary angular adjustments of headstock within anticlockwise 90° and grinding wheel head within $\pm 30^\circ$ permit the machines to grind bigger outer and inner-cylindrical workpieces.
- Turning down the internal grinding carriage on the guard cover of grinding wheel head allows inner-cylindrical workpieces to be ground. 6 Sets of inner grinding rods are available for selective use.
- Electrical and hydraulic interlocks make all the moving parts offer safe and reliable movement.

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技术规格参数 Specifications and Technical Parameters

磨削直径范围 Range of grinding O.D	$\Phi 8 \sim 320$ mm
磨削孔径范围 Range of grinding I.D	$\Phi 30 \sim 150$ mm
最大磨削长度 Maximum grinding length	1000/1500/2000/3000 mm
最大磨削深度 Maximum grinding depth	125 mm
中心高 Center height	180 mm
最大工件重量 Max. workpiece weight	150 kg
工作台最大移动量 Maximum travel of worktable	1100/1600/2080/3100 mm
工作台液压移动速度 Hydraulic traverse speed	0.1 ~ 4 m/min
工作台转动范围 Swivel range of worktable	$-3^\circ \sim +7^\circ / -3^\circ \sim +6^\circ / -2^\circ \sim +3^\circ / -2^\circ \sim 3^\circ$
砂轮最大线速度 Maximum peripheral speed of grinding wheel	35 m/s
砂轮规格 Maximum diameter of grinding wheel	$\Phi 500 \times 50 \times \Phi 203$ mm
头架主轴转速 Spindle speed of work-spindle	25,50,75,110,150,220 r/min
头架主轴孔锥度 Taper of moving wheel head	莫氏4号
电机总容量 Total power motor	9 kw
机床外形尺寸 Overall dimensions of the machine	4900 x 1810 x 1515mm/5800 x 1810 x 1515mm/8000 x 1870 x 1515mm/11050 x 1870 x 1515 mm
机床重量 Weight	3700/4500/6000/7500 kg

机床主要附件 Main Accessories

全套电气设备 Complete set of electric equipment	1套 1set
全套冷却设备 Complete set of coolant equipment	1套 1set
砂轮修整器 Wheel peripheral dresser	1套 1set
砂轮压紧盘 Wheel flange	1套 1set
砂轮平衡轴 Wheel balancing mandrel	1套 1set
三爪卡盘 Three-jaw chuck	1套 1set
开式中心架 Open-type steady rest	1套 1set
机床垫铁 Levelling wedge	11/13/15/19套 set

特殊定货附件 Extra Accessories

圆弧修整器 Circular wheel dresser
砂轮平衡架 Wheel balancing apparatus
闭式中心架 Closed centre rest
磨杆 - 用于磨削短孔、莫氏2号、3号、4号、5号、6号等6种规格 Grinding rods with 6 sizes—one type for grinding short hole and Moh's 2,3,4,5,6.

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

序号 No.	简图和试件尺寸 Diagram and Dimension	检验性质 Test Procedure	检验项目 Test Item	允差 Tolerance
P1		磨削顶尖间试件的精度 Grinding the outside diameter of a workpiece mounted between the centers	a.圆度 Roundness b.纵截面内直径的一致性 Consistence of diameters in longitudinal section c.粗糙度 Surface roughness Ra	≤ 0.002 mm ≤ 0.005 mm $Ra \leq 0.32 \mu m$
P2		卡盘上磨短试件的精度 Grinding the outside diameter of short test piece mounted on the chuck	a.圆度 Roundness b.粗糙度 Surface roughness Ra	≤ 0.0025 mm $Ra \leq 0.2 \mu m$
P3		卡盘上磨内孔试件的精度 Grinding the bore of a test piece mounted on the chuck	a.圆度 Roundness b.纵截面内直径的一致性 Consistence of diameters in longitudinal section c.粗糙度 Surface roughness Ra	≤ 0.0025 mm ≤ 0.01 mm $Ra \leq 0.63 \mu m$

安装基础图 Foundation Layout

