

MQ8260A / MQ8260A × 20 曲轴磨床 / Crankshaft Grinding Machine



MQ8260A 曲轴磨床

MQ8260A Crankshaft Grinding Machine

规格 / Specification: $\Phi 580 \times 1600$ 、1800mm

机床概述

本机床适用于汽车、拖拉机和柴油机制造厂和修理厂磨削发动机曲轴的曲柄颈和主轴颈。

机床的主要配置

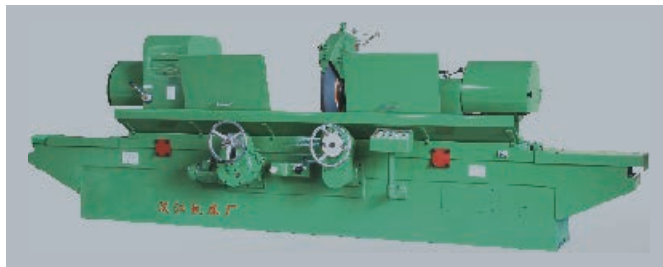
1. 头架采用皮带变速，可获得 3 种不同转速。
2. 头、尾架卡盘可选用十字卡盘结构，专用工装。
3. 头架传动链中采用摩擦离合器，调整操作方便。
4. 工作台纵向运动，分手动和机动。
5. 砂轮架快速进退，由液压装置控制。
6. 砂轮轴采用 $\Phi 80$ 毫米，刚性足、强度高。
7. 砂轮架采用滚动导轨。
8. 床身导轨、砂轮架导轨润滑通过油泵自动循环。
9. 本机床可以选用数显装置，砂轮架可选用北航动静压主轴系统。

General Description

This machine is intended for use in the automobile, tractor, diesel engine works and their repairing shops to grind both crankshaft journals and crankshaft arms.

Structure features

1. Flexible belt drive for speed change—3 speeds of work spindle obtainable;
2. Two types of chucks on headstock and tailstock—called union chuck and cross chuck (see pictures at the back), provided for users to select according to their own preference;
3. Friction clutch used in the headstock transmission chain for easy adjustment;
4. Table traverse operated both by hand and by power;
5. Rapid approach & withdrawal of wheel carriage effected by hydraulic means;
6. The wheel spindle being 80mm in diameter has good rigidity and strength;
7. Rolling guideways employed for movement of wheel carriage;
8. Table and wheel carriage lubricated automatically by oil pump circulation;
9. A digital device for cross feed display, and a hydrostatic & dynamic wheel spindle available as optional elements.



MQ8260A × 20 曲轴磨床

MQ8260A × 20 Crankshaft Grinding Machine

规格 / Specification: $\Phi 580 \times 2000$ mm

机床概述

本机床适用于汽车、拖拉机和柴油机制造厂和修理厂磨削发动机曲轴的曲柄颈和主轴颈。

机床的主要配置

1. 头架采用双速电机和皮带变速，可获四种不同转速。
2. 头尾架卡盘采用一字卡盘，可调偏心距 120mm，也可选用专用工装。
3. 头架传动链中采用摩擦离合器，调整操作方便。
4. 工作台纵向运动，分手动和机动。
5. 砂轮架快速进退，由液压装置控制。
6. 砂轮架采用滚动导轨，砂轮轴采用 $\Phi 80$ mm 优质材料，刚性好，强度高。
7. 床身导轨贴塑、摩擦力小。
8. 床身导轨、砂轮架导轨润滑通过油泵自动循环。
9. 本机床可以选用数显装置。

General Description

The crankshaft grinding machine MQ8260A×20 is intended for use in the automobile, tractor, diesel engine works and their repairing shops to grind crankshaft journals and crankshaft arms.

Structure features

1. Using double-speed motor and belts for changing speed of work spindle—4 speeds obtainable;
2. Union chucks used on headstock and tailstock enabling an adjustable eccentricity up to 120mm; cross chucks can be optional if required;
3. Friction clutch used in the headstock transmission chain for easy adjustment;
4. Table traverse operated both by hand and by power;
5. Rapid approach & withdrawal of wheel carriage effected by hydraulic means;
6. Rolling guideways employed for movement of wheel carriage; the wheel spindle being 80mm in diameter has good rigidity and strength;
7. Table surface coated with plastic for less friction;
8. Lubrication of table & wheel carriage in an automatic cycle by oil pump;
9. Digital display for cross feed of wheel carriage is optional.

M8260 × 30 / MQ8260C 曲轴磨床 / Crankshaft Grinding Machine



M8260 × 30 曲轴磨床

M8260 × 30 Crankshaft Grinding Machine

规格 / Specification: $\Phi 600 \times 3000\text{mm}$

机床概述

M8260x30 曲轴磨床型是一种结构简单、操作方便、适应性广泛的曲轴磨床，该机床适用于汽车厂、拖拉机厂以及船舶柴油机修理厂修理及磨削中型发动机曲轴的曲柄颈。

机床的主要配置

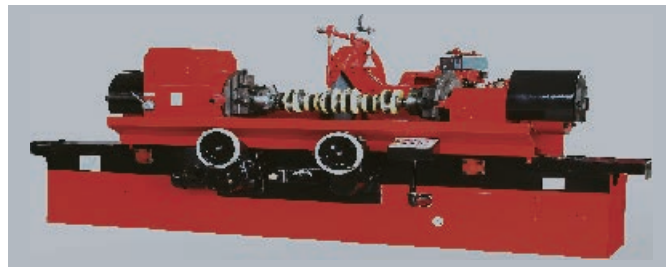
1. 机床由机械、电气、液压控制、以手动控制为主。
2. 工作台纵向移动可手动也可机动；砂轮架横向移动，有手动亦有液压快速进退运动。
3. 砂轮架主轴的旋转采用液压、电气连锁机构。
4. 头、尾架的传动结构相同，工件的旋转是由头、尾架伺服电机通过减速机构传动的，同时头、尾架伺服电机采用专用的电气同步驱动系统。
5. 砂轮主轴由装于砂轮架上的电机通过皮带轮和三角带轮驱动，砂轮主轴为套筒式结构，砂轮主轴采用北航动静压主轴，并采用单独供油系统，配备专用的油箱和风冷装置。
6. 机床配备独立电箱。
7. 砂轮架主轴采用独立的润滑装置。
8. 机床配置独立的冷却系统，并配置磁性分离器过滤，有效地过滤。

General Description

M8260×30 Crankshaft Grinding Machine has a property of simple structure, convenient operation and wide application, and is intended for use in automobile, tractor and boat-diesel engine repairing shops to grind crankshaft arms for medium-sized engines.

Structure features

1. The machine mainly operated by hand.
2. Table traverse operated either by hand or by power; Rapid approach & withdrawal of wheel carriage effected by hydraulic means;
3. Wheel spindle rotation controlled by a hydraulic & mechanical interlocking mechanism.
4. Workpiece rotation driven by servo motors controlled by an electrical synchronous system;
5. The hydrostatic & dynamic wheel spindle driven by pulleys, equipped with separated oil system, separated lubrication device, special oil tank, and air cooling device as well;
6. The machine equipped with an independent electrical-cabinet, coolant system and magnetic separator;
7. Lubrication of guideways operated automatically by hydraulic system;
8. The machine has an independent coolant device attached with a magnetic separator filtering the dirt efficiently.



MQ8260C 曲轴磨床

MQ8260C Crankshaft Grinding Machine

规格 / Specification: $\Phi 600 \times 1600\text{mm}$ 、1800mm

机床概述

本机床是我公司在 MQ8260A 基础上研发生产的，适用于汽车、拖拉机和柴油机制造厂及修理厂磨削发动机曲轴的曲柄颈与主轴颈。

机床的主要配置

1. 头架采用皮带变速，可获得 3 种不同转速，罩壳可开启，更换皮带方便。
2. 头、尾架卡盘可选用十字燕尾卡盘结构。
3. 头架传动链中采用摩擦离合器，调整操作方便。
4. 单层工作台倾斜 10 度，刚度好，精度高，纵向运动分手动和机动。
5. 砂轮架快速进退，由液压装置控制。
6. 砂轮轴采用 $\Phi 80$ 毫米，刚性足、强度高。
7. 砂轮架采用滚动导轨。
8. 床身导轨、砂轮架导轨润滑通过油泵自动循环，床身导轨贴塑。

General Description

The crankshaft grinding machine MQ8260C is modified on the base of the MQ8260A and intended for use in automobile, tractor, diesel engine works and their repairing shops to grind crankshaft journals and crankshaft arms.

Structure features

1. Work spindle speed adjustable between 3 speeds by simply changing belts;
2. Cross swallow-tailed chucks used in workstock and tailstock;
3. Friction clutch used in the headstock transmission chain for easy adjustment.
4. Single layer table, with an oblique angle of 10 degree; table traverse operated both by hand and by power.
5. Rapid approach and withdrawal of wheel carriage effected by hydraulic means;
6. The wheel spindle being of 80mm in diameter has good rigidity and strength;
7. The rolling guideways employed for movement of wheel carriage;
8. Lubrication of table and wheel carriage operated automatically by oil pump circulation.



十字卡盘
cross chuck



一字卡盘
union chuck

M8160×3000

曲轴磨床 / Crankshaft Grinding Machine

M8160×3000 曲轴主轴颈磨床

M8160×3000 Crankshaft Journal Grinding Machine

规格 / Specification: $\Phi 600 \times 3000\text{mm}$

机床概述

M8160x30曲轴主轴颈磨床是一种结构简单、操作方便、适应性广泛的曲轴磨床，该机床适用于汽车厂、拖拉机厂以及船舶柴油机修理厂修理及磨削中型发动机曲轴的主轴颈。

General Description

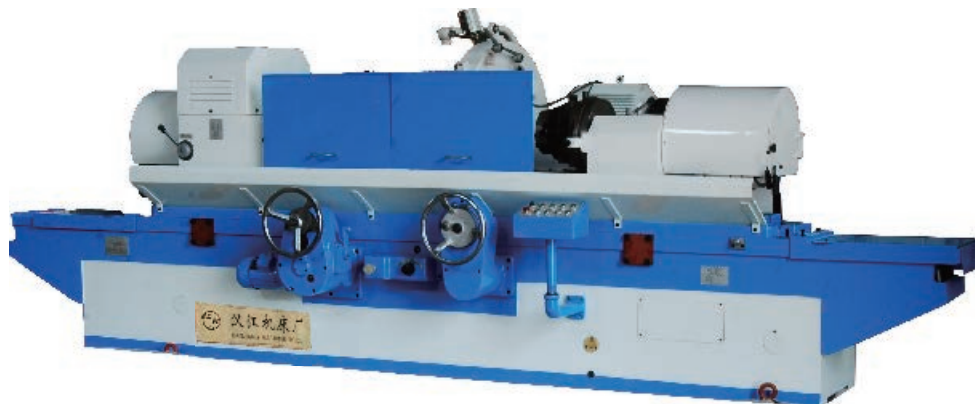
M8160x30 Crankshaft journal grinding machine has a property of simple structure, convenient operation and wide application, and is intended for use in automobile, tractor and boat-diesel engine repairing shops to grinding crankshaft journals for medium-sized engines.

机床的主要配置

1. 头架采用变频电机调速，尾架采用液压自动松开。
2. 头架、尾架配备莫氏6号顶尖。
3. 工作台纵向移动分手动、机动。
4. 砂轮架快速进退，由液压装置控制。
5. 砂轮主轴由装于砂轮架上的电机通过皮带轮和三角带轮驱动，砂轮主轴为套筒式结构，砂轮主轴采用北航动静压主轴，并采用单独供油系统，配备专用的油箱和风冷装置。
6. 床身导轨和砂轮架导轨均为卸荷导轨，移动灵敏、精度高。
7. 工作台纵向移动和砂轮架横向运动配备数显装置。
8. 机床配置独立的冷却系统，并配置磁性分离器过滤。
9. 机床配备独立电箱。

Structure features

1. Work speed is regulated by a motor controlled with a frequency converter, and the tailstock can be released automatically by hydraulic means;
2. The centers for both workhead & tailstock are of taper Morse 6#;
3. Table traverse is operated either by hand or by power;
4. Rapid approach & withdrawal of wheel carriage is effected by hydraulic means;
5. Sleeve-typed hydrostatic & dynamic wheel spindle is driven by pulleys, equipped with separated oil system, separated lubrication device, special oil tank, and air cooling device as well;
6. With the help of hydraulic power, the bed ways and guide ways for wheel carriage are ones are smooth and precise;
7. The machine is equipped with a digital display for table traverse and cross-feed of wheelhead;
8. The machine has an independent coolant system including a magnetic separator.
9. The machine has an independent electrical cabinet.



MK8180×40**MK82100×50****曲轴磨床 / Crankshaft Grinding Machine****MK8180×40 数控曲轴磨床****MK8180×40 Crankshaft Grinding Machine**规格 / Specification: $\phi 800 \times 4000\text{mm}$ **机床的主要配置**

1. 采用西门子828D数控系统;
2. 机床为工作台移动式;
3. 砂轮主轴用动静压主轴, 刚性好, 精度稳定;
4. 采用砂轮后置修整器 (U、W轴) 修整砂轮;
5. 尾架采用液压尾架。

Structure features

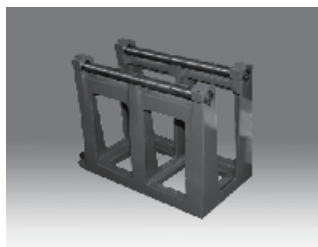
1. NC System: : SIEMENZ 828D;
2. Machine structure: Work table mobile;
3. Machine features: adopting high precision hydro-static wheel spindle featured with good rigidity and stability;
4. Wheel dressing: by diamond rollervia V-W in interpolation;
5. Tail stock move by hydraulic drive。

MK82100×50 数控曲轴磨床**MK82100×50 Crankshaft Grinding Machine**规格 / Specification: $\phi 1000 \times 5000\text{mm}$ **机床的主要配置**

1. 采用西班牙FAGOR数控系统。
2. 机床整体布局为砂轮架移动式。
3. 在刚强的铸铁床身上装有机床的主要部件, 床身由前床身和后床身组成, 前床身的台面上装有机床的头、尾架 (C1、C2 轴), 前床身的前面装有机床的操纵台, 后床身的拖板上装有机床的砂轮架。
4. 砂轮主轴采用高精度的动静压主轴, 刚性好, 精度稳定。
5. 砂轮架拖板和砂轮架沿着贴塑导轨运动, 砂轮架拖板纵向运动 (Z 轴) 是通过交流电机和减速箱机构及齿轮齿条机构进行驱动的, 砂轮架的横向进给 (X 轴) 由后床身上的伺服电机经过减速结构和联轴器驱动滚珠丝杠副运动。
6. 砂轮自动修整器安装在砂轮架后处, 通过二轴 (U 轴、W 轴) 联动, 可自动修整砂轮, 砂轮修整后可自动补偿给进给系统。
7. 头、尾架安装专用工装, 配有曲轴分度装置。头尾架主轴旋转由交流伺服电机同步控制。
8. 机床配备电子手轮。

Structure features

1. Spain FAGOR CNC system;
2. Wheel carriage mobile, table immobile;
3. High-precision hydrostatic & dynamic wheel spindle, good rigidity and stable operation;
4. Plastic-coated guideways on wheel carriage; longitudinal move of wheel carriage (Z axis) driven by AC motor through reduction box and gear & rack, cross feed of wheel carriage (X axis) by servo motor through reduction box and ballscrew;
5. CNC wheel dresser trimming wheel by U & W in linkage, capable for self-compensation after each dressing;
6. Special jigs in headstock and tailstock provided, indexing device available, too;
7. Magnetic separator and paper filter provided with coolant system;
8. Equipped with an electric handwheel.

汉江曲轴磨床选用附件图 (另计价) Optional accessories (at extra payment)端面修整器
end dresser数显
Digital display砂轮平衡架
wheel balancing stand悬挂测量仪
hanging measuring instrument金刚笔
diamond dresser抛光机
polisher校中心装置
centering device

汉江系列数控曲轴磨床技术参数 *hanjiang cnc crankshaft grinding machine technical parameters*

技术参数 Technical data	MQ8260A	MQ8260A×18	MQ8260Ax20	M8260x30	MQ8260C	MQ8260C×18	M8160×3000	MK8180×40	MK82100×50
工件的最大回转直径 Max. work swing diameter	580mm	580mm	580mm	600mm	600mm	600mm	600mm	800mm	1000mm
工件的最大安装长度 (顶尖间) Max. work length ground (Between centers)	1600mm	1800 mm	2000mm	--	1600mm	1800 mm	3200mm	4000mm	5500 mm
工件的最大安装长度 (卡盘间) Max. work length ground (in 3 jaw chucks)	1400mm	1600 mm	1800mm	2700mm	1320mm	1520 mm	--	4000mm	5000 mm
最大可磨工件的长度 Max. work length	1600mm	1800 mm	2000mm	2700mm	1600mm	1800 mm	3000mm	4000mm	5000 mm
中心高 Center height	300mm	300mm	300mm	320mm	300mm	300mm	320mm	669mm	750mm
砂轮尺寸 (外径×宽×内径) Wheel size (O.D×width×bore)	900×32×305 (mm)	900×32×305 (mm)	900×32×305 (mm)	900×60×305 (mm)	900×32×305 (mm)	900×32×305 (mm)	900×60×305 (mm)	1400×100×305 (mm)	1600×100×305 (mm)
最大工件重量 Max. work weight	120kg	120kg	150kg	600kg	120kg	120kg	1000kg	3500kg	3000kg
砂轮电机功率 Capacity of wheel head motor	7.5kw	7.5kw	7.5kw	15kw	7.5kw	7.5kw	15KW	37kw	37kw
机床总功率 Overall capacity of motors	9.82kw	9.82kw	11.12kw	35kw	9.82kw	9.82kw	32KW	80KVA	100KVA
机床重量(净重) Machine Weight (Net)	6000kg	6500kg	7000kg	16000kg	6000kg	6500kg	13000kg	35000kg	55000 kg
机床外形尺寸 (长×宽×高) Overall dimensions	4166×2037×1584 (mm)	4166×2037×1584 (mm)	4900×2037×1584 (mm)	9720×2290×1840 (mm)	4166×2037×1584 (mm)	4166×2037×1584 (mm)	9720×2290×1840 (mm)	13300×4960×2200 (mm)	13520×6770×2500 (mm)

工作精度 *Working Accuracy*

	MQ8260A	MQ8260A×18	MQ8260Ax20	M8260x30	MQ8260C	MQ8260C×18	M8160×3000	MK8180×40	MK82100×50
圆度(新标准) Ovality(new standard)	0.005mm	0.005mm	0.005mm	0.009mm	0.005mm	0.005mm	0.009mm	0.015mm	0.015mm
纵截面直径的一致性 Oneness, sameness.	0.008mm	0.008mm	0.008mm	0.008mm	0.008mm	0.008mm	0.008mm	0.02mm	0.025mm
表面粗糙度(外圆) Roughness(external)	Ra ≤0.32 μm	Ra ≤0.32 μm	Ra ≤0.32 μm	Ra ≤0.32 μm	Ra ≤0.32 μm	Ra ≤0.32 μm	Ra ≤0.32 μm	Ra ≤0.63 μm	Ra ≤0.63 μm
表面粗糙度(端面) Roughness(end)	Ra ≤0.63 μm	Ra ≤0.63 μm	Ra ≤0.63 μm	Ra ≤0.63 μm	Ra ≤0.63 μm	Ra ≤0.63 μm	Ra ≤0.63 μm	Ra ≤1.25 μm	Ra ≤1.25 μm

汉江曲轴磨床(随机附件图) *Standard accessories*



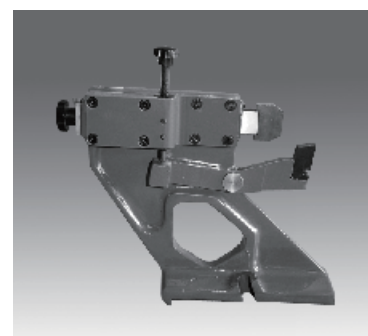
水平样板
horizontal stand



砂轮修整器
wheel dresser



垂直样板
stand



中心架
steady rest