

## BALDA ELECTRIC SURFACE LAPPING MACHINE

### 温州巴尔达电器有限公司 WENZHOU BALDA ELECTRIC CO., LTE

地址:浙江省温州市鹿城区戍浦北路408号 ADD: NO.408 SHUPU NORTH ROAD LUCHENG WENZHOU ZHEJIANG CHINA

网址/WEBISTE:www.klymj.com www.rimiseal.com 邮件/E-MAIL: info@chinarimi.com 50575747@qq.com

手机/微信/MOBILE/WECHAT: +86 13115771572 Whats App: +86 13115771572

电话/TEL: 0086-577-67467301 0086-577-67337631

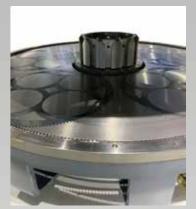
## 高精度平面研磨&抛光

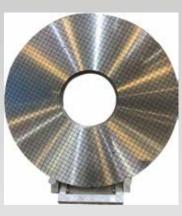
PRECISION SURFACE LAPPING&POLISHING

### 温州巴尔达电器有限公司

WENZHOU BALDA ELECTRIC CO., LTD







# 数控

双面研磨机 平面研磨机

平面抛光机

AUTO DOUBLE SURFACE LAPPING MACHINE SURFACE POLISHING MACHINE

## **COMPANY INTRODUCTION**

温州巴尔达电器有限公司位于浙江省温州市鹿城轻工业园区。公司拥有上万平米 的现代化厂房,员工一百多人,规模以上工业企业。

公司生产和销售双面数控研磨机、平面抛光机、机械密封等,并提供各种材质的 零部件进行平面研磨&加工服务。其次还销售研磨机所需要的各种配件、耗材、超声波、 光带测试设备。平面研磨机应用领域广泛,在机械密封件、五金配件、汽车配件、玻 璃制造、光学眼镜、医疗器械、国防航空、电子电镀、珠宝、轴承等行业得到广泛应用。 本公司生产的研磨机特别适用于各种高精度的工件平面磨削和抛光。如机械密封件的 摩擦副的石墨环、陶瓷环、碳化硅环、碳化钨环、水龙头阀芯、石英晶体片、眼镜玻璃片、 叶泵油片、活塞环等各种金属及非金属片状工件平面磨削加工。

本公司拥有创新的员工队伍,先进的研磨机设计技术和丰富的实践经验,可根据 客户的实际需求,提供整套平面研磨工艺流程,从设计开发、生产制造、安装调试、 技术培训 到售后维修服务。为客户着力提高劳动生产率,降低生产成本,提高产品质量, 使您获得丰厚的回报。

WENZHOU BALDA ELECTRIC CO LTD is located in LuCheng industrial area of WenZhou China. The company has more than 20,000 square meters factory house, and employee 100+, industrial enterprises above designated size.

The company produce and sell lapping machine. flat polishing machine. Mechanical seals. and offer all kinds of materials' surfaces lapping and polishing, and offer spare parts of lapping machine and lapping abrasive, lapping pad, lapping plate etc.The lapping machines and polishing machines are used widely in many fields such as: Mechanical seals, Hardware. Auto parts. Glasses. medical apparatus and instruments. aerospace and defense. electric parts. Diamond and bearings. The lapping machines and polishing machines offer high accuracy flat surface lapping and polishing. Especially lapping and polishing of Carbon rings, Ceramic rings, Sic rings, TC rings, Faucet Spool, quartz plate, glasses, oil pump Vane, Piston rings and all kinds of metallic and non-metallic's lapping and polishing.

Our Company has rich experience in lapping and polishing of flat surface .We have ourselves lapping and polishing workshops of sealing rings. We offer design and assembly and technical support of lapping and polishing machines according to the clients' requirements.



## 双面研磨机S610 S800

Auto double faces lapping machines



#### 机器参数 Machine specification

型 号 Model		S610	\$800	
最大磨削直径 Max lapping diameter of workpiece		180mm	300mm	
工件最薄厚度 Minilapping thickness of workpiece		0.5 mm	0.5 mm	
工件 加工 精度 Workpiece processing accuracy	抛光件表面平面度 Flatness of surface	<0.003mm	<0.003mm	
	粗糙度 Roughness	0.1 Ra	0.1 Ra	
	厚度偏差 Thickness deviation	+/- 0.01mm	+/- 0.01mm	
机器	抛光盘直径(外径) Lapping plate diameter	610mm	800 mm	
参数 Machine parameters	研磨盘转速R/Min Rotary speed	上盘32,下盘60	上盘32,下盘60	
	主电机 Main motor	4KW,380V	4KW,380V	
气压 Pressure		0.2-0.6Mpa	0.2-0.6Mpa	
汽缸直径*高度 Cylinder diameter*height		100*450mm	100*450mm	
外形尺寸(长*宽*高) Machine L*W*H (Meter)		1150mm*950mm*2300mm	1250mm*1050mm*2300mm	
重量 G.W.(KGS)		1500kg	1800kg	

#### 研磨机特点 Machine features

- (1)、本机采用单片机数显控制,在自控状态下,达到预设高度,自动停机。
- (2) 本机上下盘,太阳轮,游星轮,形成相互协调的磨削运动,达到工件上下表面同 时研磨,本机采用调速做到平稳启动和停机。
- (3) 本机主传动有换向装置,游星轮可以正反两个方向运动。还配有修正轮用于修正 上下研磨的平行度误差。配有对工作压力的可调机构,当加工不同材质时可任意选择 轻、重压力。

### 适用范围 Scope of application

该机适应于工件的高度和平面研磨,可用于研磨各种机械密封环、陶瓷磨片、汽缸活 塞环、油泵叶片、轴承端面、合金、冶金等金属和非金属片状工件平面磨削加工。

- (1) This machine adopts the digital display control of a single chip microcomputer, which utomatically shuts down when reaching a preset height under automatic control
- (2) The upper and lower plates of the machine, the sun wheel, and the traveling star wheel form a coordinated grinding motion to achieve simultaneous lapping of the upper and lower surfaces of the workpiece. The machine adopts speed regulation to achieve stable startup and shutdown
- (3) The main transmission of this machine has a reversing device, and the traveling star wheel can move in both directions. A correction wheel is also equipped to correct the parallelism error of upper and lower grinding. Equipped with an adjustable mechanism for working pressure, you can freely choose between light and heavy pressures when lapping different materials.

This machine is suitable for the height and surface lapping of workpieces, and can be used  $for the surface \ lapping \ of \ various \ mechanical \ seal \ rings, \ ceramic \ rings \ lapping, \ cylinder \ rings \ lapping, \ rings \ lapping, \ rings \ ring$ piston rings, oil pump blades, bearing end faces, alloys, metallurgy, and other metal and

## 平面研磨机(单面抛光机) D610-5

One side Surface Polishing machine D610-5





### 机器参数 Machine specification

찍 목 Polishing machine model		DC10 F		
型 号 Polishing machine model		D610-5		
最大磨削直径 Max lapping diameter of workpiece		180mm		
工件最薄厚度 Minilapping thickness of workpiece		0.5mm		
	抛光件表面平面度 Flatness of surface	0.6um		
工件 Workpiece 加工 processing	粗糙度 Roughness	0.01Ra		
精度 accuracy	光带 Light band	1条/One light band		
	厚度偏差 Thickness deviation	+/-0.01mm		
机器	抛光盘直径 (外径*内径) Polishing plate diameter (Outside diameter*inner diameter)	610mm*250mm		
参数 Machine	研磨盘转速 Rotary speed	0-60R/Min		
parameters	抛光盘平面度 Flatness of polishing plate	≤0.025mm		
	主电机 Main Motor	1.5 KW, 1450r/min, 380V		
外形尺寸(长*宽*高) Machine sizes(L"W"H)		950mm*800mm*800mm		
重 量 Gross weight(kgs)		900kg		

#### 研磨机特点 Machine features

- (1) 平面抛光机是一种以平面螺纹盘加研磨膏进行工件抛光加工的机床设备,主要应用陶瓷磨片、汽缸活塞环、油泵叶片等各种材料的机械密封的机械密封环、硅、石英晶体、蓝宝石、金属等材料的平面抛光机。
- (2) 本机床采用齿轮箱变速、齿轮、皮带传动以及无极变速,时间控制,中心太阳轮传动 5 个游星轮,具有操作简单、维修方便、稳定性高、平面度高和平行度好等特点。
- 适用范围 Scope of application

该机适应于工件的高度和平面研磨,可用于研磨各种机械密封环、陶瓷磨片、 汽缸活塞环、油泵叶片、轴承端面、合金、冶金等金属和非金属片状工件平 面磨削加工。

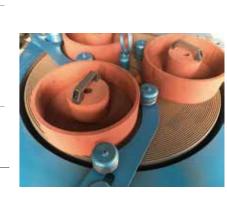
- (1) surface polishing machine are used in a planar threaded plate and lapping abrasiveto polish workpieces. It is mainly used for mechanical sealing of various materials such as ceramic abrasive discs, cylinder piston rings, oil pump blades, and other materials such as mechanical sealing rings, silicon, quartz crystals, sapphires, and metals.
- (2) This polishing machine adopts gear box transmission, gear, belt transmission, and stepless speed change, with time control. with 5 carrier rings. It is characterized by simple operation, convenient maintenance, high stability, high flatness, and good natallelism.

This machine is suitable for the height and surface lapping of workpieces, and can be used for the surface lapping of various mechanical seal rings, ceramic rings lapping, cylinder piston rings, oil pump blades, bearing end faces, alloys, metallurgy, and other metal and

## 挡圈式调速平面研磨机(单面抛光机)

One side Surface Polishing machine





### 机器参数 Machine specification

抛光机型号 Polishing machine model		D380-3	D610-3	D800-3	D1000-3	D1200
最大工件磨削直径 Max lapping diameter of workpiece		140mm	230mm	300mm	420mm	512mm
工件最薄厚度 Minimum workpiece thickness		0.50mm	0.50mm	1.0mm	5.0mm	5.0mm
工件 粗超度 加工 Roughness		Ra0.01	Ra0.01	Ra0.01	Ra0.01	Ra0.01
精度 Workpiece	平面度 Optical flat	0.60um	0.60um	0.60um	0.60um	0.60um
accuracy	光带 Light band	1-2 条	1-2条	1-2条	1-2条	1-2条
Machine parameters	磨盘尺寸 Lapping plate size Outside Diameter *thickness	380mm*40mm	610mm*50mm	800mm*50mm	1000mm*60mm	1200mm*60mm
	转速(R/MIN) Rotary speed	0-72r/min	0-72r/min	0-72r/min	0-72r/min	0-72r/min
电机	以功率Motor power	0.75kw, 220v/380v	1.5KW,380v	1.5kw, 380v	4.0kw,380v	7.5kw,380v
外形尺寸 (长×宽×高) Machine sizes(L*W*H)		700*650*400 Mm	950*800*800 mm	1300*1050*1100 mm	1600*1300*1000 mm	1800*1620*1100 mm
机器重量 Machine Weight		300kg	900kg	1100kg	1700kgs	2200kgs

### 研磨机特点 Machine features

平面抛光机是一种以平面螺纹盘加液体研磨液进行工件抛光的机床设备, 主要应用于陶瓷磨片、汽缸活塞环、油泵叶片、各种机械密封的密封环, 以及硅、石英晶体、蓝宝石、金属材料等外圆平面抛光。

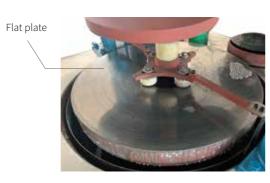
本机床主要采用齿轮箱变速,齿轮、皮带传动以及无极调速,挡臂式传动3个游星轮,具有操作简单、维修方便、稳定性高、平行度好等特点。

- 1. surface polishing machine are used in lapping plate and lapping abrasive fluid to polish workpieces. It is mainly used for mechanical sealing such as ceramic, carbon, Silicone carbide, Tungsten carbide, cylinder piston rings, oil pump blades, quartz crystals, sapphires, and metals and non-metal faces.
- 2. This polishing machine adopts gear box transmission, gear, belt transmission, and stepless speed change, with time control. With 3 carrier rings. It is characterized by simple operation, convenient maintenance, high stability, high flatness, and good narallelism

## 气动平面抛光机 QD670-4

LAPPING MACHINE & POLISHING MACHINE Pneumatic Surface Polishing machine QD670-4





#### 机器参数 Machine specification

气动平面抛光机 Pneuma	气动平面抛光机 Pneumatic Surface Polishing machine model		
最大磨削直径 Max lap	最大磨削直径 Max lapping diameter of workpiece		
工件最薄厚度 Minim	工件最薄厚度 Minimum workpiece thickness		
工件加工精度	粗超度 Roughness	Ra0.01	
Workpiece	光带 Lightband	1条	
pro	厚度偏差 Thickness deviation	+/-0.01	
Machine parameter	磨盘 lapping plate size	∮ 670* ∮ 180*50mm	
	(OD*ID*H)mm		
	转速 R/MIN	0~72r/min	
电机功率	电机功率 Motor power		
外形尺寸	外形尺寸 Machine sizes		
(长×宽×ī	(长×宽×高)(L*W*H)		
	900kgs		

#### 机器特点 Machine features

- (1) QD670-4 平面抛光机是一种以平面螺纹盘加抛光液进行工件研磨抛光的机床 设备,主要应用于陶瓷磨片、汽缸活塞环、油泵叶片、各种物质的机械密封的密封环, 以及硅、石英晶体、蓝宝石、金属材料等的平面抛光。
- (2) 本机床主要采用气动加压升降、变频器调速,涡轮减速机、链式联轴器传动以 及无极调速, 4个游星轮, 具有操作简单、维修方便、稳定性高、平行度好等特点。
- (1) surface polishing machine are used in lapping plate and lapping abrasive fluid to polish workpieces. It is mainly used for mechanical sealing such as ceramic, carbon, Silicone carbide, Tungsten carbide, cylinder piston rings, oil pump blades, quartz crystals, sapphires, and metals and non-metal faces.
- (2) This polishing machine adopts Pneumatic pressure lifting. gear box transmission. Gear and belt transmission and stepless speed change, with time control. With 4 carrier rings. It is characterized by simple operation, convenient maintenance, high stability, high flatness, and good parallelism

单头金刚石磨床 Single head diamond grinding machine

## 双头金刚石磨床

double heads diamond grinding machine



### 机器参数 Machine specification

序号	主要	数值		
1	最大磨	125mm		
2	工件最	1.5mm		
3	工件加工精度 平面度		≤0.03mm	
		粗糙度	0.8Ra	
		厚度偏差	± 0.03mm	
4	金刚石砂轮	直径	180mm*32mm	
		转速	1450r/min	
		电机	3-4KW	
5	工作台	直径	600mm	
		转速(调速)	1-300转/分	
		电机	1.5kw	
6	外形尺寸(长*宽*高)	1250*750*1550mm		
7	重量	1500kg		

#### 机器参数 Machine specification

序号	主要	数值		
1	最大磨	125mm		
2	工件最	1.5mm		
3	工件加工精度	工件加工精度 平面度		
		粗糙度	0.8Ra	
		厚度偏差	±0.05mm	
4	金刚石砂轮	直径	180mm	
		转速	1400r/min	
		粒度	80-100	
		电机	3-4KW	
5	工作台	直径	600mm	
		转速(调速)	1-300转/分	
		电机	1.5kw	
6	外形尺寸(长*宽*高)	1600*750*1550mm		
7	重量	2000kg		

### 机器特点

单头金刚石圆台平面磨床,主要由磨头和转盘工作台两部分组成。磨头是由 高速运转的电动机带动金刚石砂轮,对工件进行磨削,而转盘工作台不停 地递送着工件,从砂轮底下通过,完成磨削的工作。磨削速度快,效率高。

### 适用范围:

用于各种金属和非金属材质的工件平面粗磨。特别适合粗磨超硬材料如: 硬质合金、碳化硅、陶瓷、蓝宝石、五金、汽缸活塞环等。

#### 机器特点

双头金刚石圆台平面磨床,主要由两个磨头和转盘工作台三部分组成。磨头是由高 速运转的电动机带动金刚石砂轮,对工件进行磨削,而转盘工作台不停地递送着工 件,从砂轮底下通过,完成磨削的工作。该种机床比单头金刚石圆台平面磨床,磨 削速度更快,效率更高。

#### 适用范围:

用于各种金属和非金属材质的工件平面粗磨。特别适合粗磨超硬材料如: 硬质合金、碳化硅、陶瓷、蓝宝石、五金、汽缸活塞环等。

### 超声波清洗机/平面平晶 ULTRASONIC CLEANING MACHINE

### 研磨盘/研磨膏/研磨垫 PRECISION SURFACE LAPPING&POLISHING



#### SPECIFICATION:

model	HM1200	HM-1500	HM1800	HM2400
Power	1200w	1500w	1800w	2400w
Tank Size	580*380*200	620*400*220	680*450*220	710*580*250
mm				

Electric: 220v (50-60HZ) working frequency: 25KHZ 28KHZ 40KHZ

#### FEATURES:

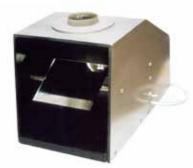
The fully automatic ultrasonic cleaning machine is mainly composed of two parts: an ultrasonic cleaning tank and an ultrasonic generator. The ultrasonic cleaning tank is made of high-quality stainless steel with strong elasticity and corrosion resistance, and the bottom is installed with an ultrasonic transducer vibrator; The ultrasonic generator generates high frequency and high voltage, which is transmitted to the transducer through the cable connection line. The transducer and the vibration plate together generate high frequency resonance, thereby allowing the solvent in the cleaning tank to be washed away by ultrasonic

#### Advantages:

Ultrasonic cleaners are instruments used to remove contaminants. They use transducers to convert the sound energy of a power ultrasonic frequency source into mechanical vibration to clean items, and are widely used in industries, national defense, biomedicine, and other fields.

#### Applications:

Ultrasonic cleaning machine is increasingly widely used in various industries: such as Mechanical industry: rust prevention grease removal; Cleaning of measuring tools; Oil and rust removal of mechanical components;



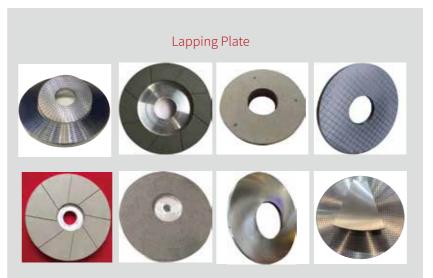


#### OPTICAL FTATNESS MEASURING INSTRUMENTS CHECK FLAT (100mm-300mm) 平面平晶

To measure a piece or part, it is placed with the surface to be measured facing down on the glass set in the top of the check-flat

It measures the flatness of finished components in the range of 1/5th light band or 0.000002" wth the help of optical flat. No skilled technician is required to measure the high flatness accuracy when using the monocromatic check flat. It can be placed near the production opertation.

Optical flats provide the fast , sure and accurate method of obtaining flatness measurement under monocromatic check lite, it is always necessary to have reflective, clean and dry surface on finished component before measuring it's flatness. Flatness measurements are accomplished by readinginterferance(Light) bands which appear on the surface of the work piece when placed under a optical flat. Many configurations of lines appear when the flat is placed gently on work piece surface.





#### 研磨盘

作用:精抛、去除表面毛刺

材质: 球墨铸铁盘、铜盘、陶瓷盘、砂轮盘 研磨盘根据不同的研磨抛光需要,研磨盘表面多选择螺纹状

(细螺纹或者粗螺纹)、方格型、射线型或者纯平的面。

LAPPING PLATE & POLISHING PLATE

produce excellent surface finish, flatness and consistent stock removal rates.

Various types of grooves can be made against the clients' request, Such as threaded (fine or coarse thread), grid shaped, radial shaped, or pure flat surface in the plate.

SPECIFICATION:

Materials: Iron Cast plate, Copper plate, Ceramic plateSizes: 610mm\*40mm 670mm\*40mm 800mm\*50mm 1000mm\*60mm 1200mm\*60mm Special sizes under





#### 研磨垫lapping pad

Some workpieces' lapping need Lapping plate cooperate with Polyurethane Polishing Pads (Used for polishing a wide variety of materials including metals, glass, semiconductor materials, and more)

A polishing pad is a thin disc of fabric or synthetic adhered to the flat surface of a





#### 研磨膏/研磨粉/研磨液

金刚石研磨膏,可以使工件获得高的表面光洁度,由粗到细分别 可用于研磨、精磨、抛光、精抛,最后可出镜面效果,可选用 W1.5, W20, W40 等根据不同工件研磨需要,还可选用绿碳化硅、

白刚玉、稀土等抛光粉

LAPPING ABRASIVE USED IN LAPPING MACHINE

Features: Diamond lapping abrasive Slurry mixing Precision surface finishing with diamond during lapping

Lapping abrasive mixed with water or oil, used in Flat lapping machines and Polishing machines, for high precision and fine finishing of the sealing faces and components.

being the shaping and overall grading (micronizing) of the diamond particles

Oil Based Diamond Paste and Water Based Diamond Paste

Diamond slurry, diamond compound, diamond powders, lubricants, composite plates, polishing pads, and accessories. Offer precision surface finishing into virtually every industrial field

SPECIFICATION: Diamond W1.5, W20, W40,

## 机器配件

#### MACHINE SPARE PARTS

#### 修正轮 Correction wheel





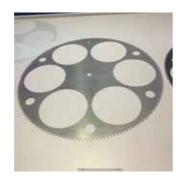




游星轮 CARRIER RING







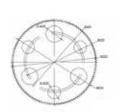








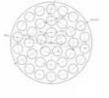




610済星轮 厚度2.9aa 模数: a=2 齿数: ==115

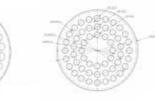


610游星轮 厚度15aa 模数: s=2 齿数: z=115 610海星轮 厚度5aa 模数1 a=2 齿数: ==115



抛光游轮

玻纤板 厚度2mm



HM 860双面商 ♥29.5游星轮 英制齿轮DP12 齿数Z=153 压力角20° 材料: 玻纤板(厚2.4mm)

610双面磨游轮盘#23.5 材料: 胶木板 厚度: 2mm 外圆液齿M=2.0, Z=115

# LAPPING APPLICATION

All kinds of Lapping workpleces









案例1 Case 1



The lapping machines and polishing machines offer high accuracy flat surface lapping and polishing. Especially lapping and polishing of Carbon rings, Ceramic rings, Sic rings, TC rings, Faucet Spool, quartz plate, glasses, oil pump Vane, Piston rings and all kinds of metallic and non-metallic's lapping and polishing.