

Specimen preparation Series:

Instruments description	Suggested Model	Application	Reference Image
Grinder and polishing machine	YMPZ-2	For metallographic sample grinding	
Polishing machine	PG-2B	For metallographic sample polishing	
Mounting press	XQ-1, ZXQ-1,ZXQ-2	For small, corner protection needs to sample, sample preparation	
Precise cutting machine	QG-3 ,QG-5A	Metal, ceramic sample cutting	

1 Grinding and Polishing Machine series:

YMPZ-2 Automatic Metallographic Sample Grinding and Polishing Machine

Detailed Product Description

1. plastic case
2. stepless speed
3. low noise
4. corrosion resistant head
5. quickly-disassembled



Product Details:

Place of Origin	China (Mainland)
Brand Name	CAPTECH
Model Number	YMPZ-2
Grinding method	Automatic
Disk diameter	230mm
Speed	100-1400 r/min, Stepless
Power supply	220V, 1000W
Grinding head speed	20-120 r/min, Stepless

Main parameters:

Grinding method: Automatic

Grinding disk diameter: 230 mm

Speed: 100-1400 r/min, Stepless

Power: 400W

Machine body: Plastic case, Corrosion resistant head, Antirust

Test block: 4

Air pressure: 2.3~8kg/cm²

Grinding head speed: 20-120 r/min, Stepless

Way of pressure: separate pressurized

Sample size: MAXΦ45mm (Selectable, φ25, φ30, φ45 etc.)

Interface: membrane switch, digital display, can set the grinding speed, timing, steering and tank cleaning function

Display: 1. Speed 2. Time countdown 3. Air pressure

Pressurizing force adjustable range: 0-6 Kg

Grinding time: adjustable range 0-100 minutes (It can display the remaining time when grinding)

Rotation angle of grinding head: adjustable

Grinding direction: forward or reverse direction

Specimen chuck: specimen fixture can be quickly replaced (quickly-disassembled function)

Dimension: 757L*623W*645Hmm

Power supply: AC220V, 1000W

Metallographic Sample Grinding and Polishing Machine YMP-1



During the preparation of metallographic samples, the grinding and polishing of the sample are essential procedures. The YMP-1 grinding and polishing machine is developed and designed through extensively market surveys and listen to operate users' suggestions and requirements. The dirt collection dish and cover of this machine wholly adopt glass fiber reinforced plastic; it has novel and esthetic appearance, and it is the newest product. This machine combines three kinds of functions together, change the rubbing, polishing or grinding dish can finish all process such as rough rubbing, fine rubbing, dry rubbing, wet rubbing and grinding and polishing of various samples. It can adapt to the preparations of samples of different materials. The diameters of rubbing, polishing, and grinding dish of this machine are greater than the domestic same products'. The rotation speed of rubbing, polishing, and grinding dish is operated independently, can conduct stepless speed regulation; it is the best apparatus of the preparation of metallographic sample.

Main parameters

Diameter of the abrasive paper: 230mm

Diameter of the rubbing dish: 230mm

Diameter of the polishing dish: 230mm

Diameter of the grinding dish: 230mm

Rotational speed: 100-1400r/min

Electromotor: YSD frequency conversion electrical machinery, 400W, 220V

External dimension: 420×623×320mm

Net weight: 30KG

YMP-2A

Metallographic Sample Grinding and Polishing Machine(4 speed, 2 plates)



During the process of preparation of metallographic sample, the grinding and polishing of sample are the two very important processes, usually adopts two kinds of apparatus: metallographic sample grinding machine and metallographic sample polishing machine; In order to meet the development demands of industry and science and technology of our country, combine users' instructions, our company newly designs and produces YMP-2A model four speed metallographic sample grinding and polishing machine. This machine appearance is novel and esthetic, filth collect dish and cover are wholly made up of glass fiber reinforced plastic. This machine is durable in use, it is extremely convenient to safeguard and maintain; can finish every processes such as rough rubbing, fine rubbing, dry rubbing, wet rubbing, and polishing of various samples; in order to expand preparation demands of different samples, the diameter of grinding dish and polishing dish of this machine is greater than the domestic same products'. There are more choices of different linear velocity on the working range, can increase 20-30% of effective working range, can improve the grinding and polishing quality of samples, and this machine rotates steadily, the noise is low, it is an ideal and perfect metallographic sample making machine with complete functions.

Main parameters

Diameter of the grinding dish: 230mm

Diameter of the polishing dish: 230mm

Rotation speed: 1000/500r/min, 600/300r/min

Electromotor: YSD802-4/8, 0.25/0.37KW, 380V

External dimension: 710×620×350mm

Net weight: 80Kg

YMP-2B
Metallographic Sample Grinding and Polishing Machine(2speed,2palted)



In the preparation of the metallographic specimens, the grinding and polishing of the specimen are two important processes, generally done by the specimen grinding machine and the specimen polishing machine. In order to meet the needs of industrial, scientific and technological developments of our country and satisfy the requirements of the clients, our company has designed and produced a new specimen grinding and polishing machine YMP-2B.

With a beautiful aesthetic shape, the machine has the dirt collecting plate and the cover entirely cast out of glass steel and is used to complete various processes such as the rectification, lapping, dry grinding, water grinding and polishing. The machines produced in our country so as to meet the needs of preparing various specimens. The selection of more different linear speeds on the working surface can increase 20-30% of the grinding and polishing of the specimen as the efficiency of the preparation of the specimens. The rotation of the machine is stable with little noise and hence the machine is an ideal and excellent equipment with complete functions for the preparation of metallurgical specimens.

Main parameters

Diameter of the grinding dish: 230mm

Diameter of the polishing dish: 230mm

Rotational speed: 500r/1000r/min

Electromotor: YS7124, 0.55KW, 380V, 50HZ

External dimension: 710×650×370mm

Net weight: 80kg

MP-1 Metallographic Sample Grinding and Polishing Machine



MP-1 (Auto) Metallographic Sample Grinding and Polishing Machine



Main parameters	MP-1	MP-1 (Auto,with polisher)
Grinding Wheel Unit Diameter	230mm	
Grinding Disc Diameter	230mm	
Polishing Wheel Unit Diameter	230mm	
Abrasive Wheel Unit Diameter	230mm	
Platen Speed	500/1000rpm	
Electromotor	YSD802-4/8 380V 50Hz	
The Total Dimensions	680×480×360mm	360×480×680mm
The Net Weight	52Kg	70Kg

MP-1 Single Unit dual speed Metallographic Sample Grinding and Polishing Machine can be used to prepare grind, pre-grind and polish. Once changing grind/polish unit, it can do all kinds of preparation work. MP-1 operates steadily in low noise, easily change speed and grind/polish units. The sizes of units are larger than the same products in China, so it can increase work area to 20-30%. MP-1 can be installed with PD-1 Polisher to become a versatile auto polisher. MP-1 is the best choice for metallographic preparation. Customers choose platen speed: 500/1000rpm, 400/800rpm, 300/600rpm, 200/400rpm.

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PG-2B

Metallographic Sample Polishing Machine



PG-2B was designed after collecting many customers' suggestions. PG-2B has nice appearance, logical structure, low noise, and it is easy to operate and maintain. PG-2B can be used for 2 persons at the same time. The size of the polishing wheel and the transmission power are bigger than other products in China. PG-2B can adjust to all kinds of materials polishing work. PG-2B is equipped with polishing water supply system. PG-2 B is the ideal equipment for metallographic sample polishing.

Main parameters

Polishing Wheel Diameter: Dual wheels 230mm

Platen speed: 650rpm, 800rpm

Electromotor: YS7124 0.55kW 380V (220V custom-made) , 50Hz

The Total Dimensions: 740×700×320mm

The Net Weight: 55Kg

2、 Mounting Press

XQ-1 Metallographic Sample Mounting Press

XQ-1 Metallographic Sample Mounting Press is designed for mounting small or abnormal-shape and difficult-to-hold samples. Use thermo solidification plastic to mount the sample is convenient work of grinding and polishing. XQ-1 is a mechanical Mounting Press. Heating is operated by Digital Temperature Controller, all the properties are stable. To operate more safely, XQ-1 is equipped with a fence cover board. XQ-1 is the best choice for Sample Mounting.



Main parameters

Mold Diameters: $\Phi 22$, $\Phi 30$, $\Phi 45 \times 15$ mm

Heater specification: 650W 220V 50Hz

The Total Dimensions: 340×260×430mm

The Net Weight: 32Kg

ZXQ-1 Automatic Metallographic Sample Mounting Press

Automatic Metallographic Sample Mounting Press is used to mosaic small specimens, specimens in irregular shapes, or specimens which are not easy to take up-the preceding process before grinding and polishing metallographic or rock specimens. The mosaic operation serves to facilitate the grinding and polishing operations of the specimens and the routine observation of the composition of the material under the metallographic microscope. The machine is heated, and intensified with pressure automatically. After the formation of the specimen under pressure, it stops the operation and discharges the pressure also in an automatic way. With another press of the knob, the machine automatically turns up the specimen, which may be taken away. Note: It is only for the hot solid materials (such as urea-formaldehyde molding powder and bakelite powder) with the temperature automatically regulated and controlled.



Main parameters

Formed under pressure: $\phi 22\text{mm}$, $\phi 30\text{mm}$, $\phi 45\text{mm}$

The Heater: 220V 650W

The Total Electric Power: 1000W

Inverter: 300W The Total Dimension: 380×350×420mm

Net Weight: 50Kg

ZXQ-2 Automatic Metallographic Sample Mounting Press

For metallographic rock phase sample analysis, mosaic is the first step in the sample preparation process, especially for some difficult holding tiny samples, irregularly shaped samples, or the need for automatic grinding and polishing samples, the mosaic is an important step before sample preparation. ZXQ-2 automatic metallographic sample mounting press is an advanced automatic sample mosaic equipment, controlling the whole mosaic process by program, one-touch operation of heating, pressurization, loading, cooling, unloading process. ZXQ-2 automatic metallographic specimen mounted machine sent mosaic program for curing, especially for the thermoset material, such as electric jade powder, bakelite powder material. ZXQ-2 automatic metallographic sample mounting press has the characteristics of machine bulls, by replacing the steel die sets, free to choose $\phi 22$, $\phi 30$, $\phi 45$ mosaic size. Therefore it has broad applicability. Using ZXQ-2 automatic metallographic sample mounting press, your sample work will be more easily and with less effort, mosaic quality will be better and more stable.



Main parameters

Sample repression Specifications: $\Phi 22\text{mm}$, $\Phi 30\text{mm}$, $\Phi 45\text{mm}$

Heater: 650W, 220V

Total power supply: 1000W
Inverter: 300W
Dimensions: 380 × 350 × 420mm
Net Weight: 50Kg

3 Cutting machine

Cutting Machine QG-3

QG-3 Jinxiang Sample Cutter can be used in the cutting of general all-facies and lithofacies sample materials, which could guarantee the cutting of optimum samples under the safe conditions. The machine adopts the all-sealing structure and quick clamping mechanism, and also attaching the special purpose cooling water tank for the use of coolant circulation, prolonging the service life, perfecting and facilitate the operation. The machine's inner and outer covering shell, tongs mouth, operating board, and other main spares are all made of stainless steel material, which is the optimum equipment of cutting samples.



Main parameters

Maximal Cutting Section: $\Phi 85\text{mm}$

Platen Speed: 2800/min

Grinding Wheel Sheet Specification: 300×1.5×32mm

Electromotor: Y100L-2 3kW 380V 50Hz

Dimension: 730×700×540mm (750×730×1200mm Stand type)

Weight: 125kg (180kg Stand type)

QG-5A Metallographic Sample Cutting Machine

QG-5A multifunctional cutting machine is mainly used for cutting irregular general metallographic sample materials such as round cylinder and polygon and protruding platforms, etc. This machine adopts double-shells totally closed structure and double quick clamp organization. It can guarantee cutting under absolutely safe status, this machine equipped with front, back board, the thickness of sample can be changed arbitrarily, and the speed of entering is controllable. In order to avoid the sample organization burns because of being overheated in cutting, this machine is furnished with the strong cooling system, and can avoid little burn of the sample surface while cutting and falling, can increase the cutting section, improve the utilization ratio of cutting emery wheel slice; it has convenient advantages in operation, maintenance; it is the extremely good apparatus for cutting irregular sample materials.



Main parameters

Maximum cutting section: 100mm×100mm

Rotation speed: 2800r/min

Specifications of cutting slice: $\phi 350 \times 2.5 \times \phi 32$

Electromotor: Y112M-2, 4KW, 380V, 50Hz

External Dimensions: 800×660×1380mm

Net weight: 315Kg

QG-5 Metallographic Sample Cutting Machine



Description:

QG-5 multifunctional cutting machine is mainly used for cutting irregular general metallographic sample materials such as round cylinder and polygon and protruding platforms, etc. This machine adopts double-shells totally closed structure and double quick clamp organization. It can guarantee cutting under absolutely safe status, this machine equipped with front, back board, the thickness of sample can be changed arbitrarily, and the speed of entering is controllable. In order to avoid the sample organization burns because of being overheated in cutting, this machine is furnished with the strong cooling system, and can avoid little burn of the sample surface while cutting and falling, can increase the cutting section, improve the utilization ratio of cutting emery wheel slice; it has convenient advantages in operation, maintenance; it is the extremely good apparatus for cutting irregular sample materials.

Main parameters

Maximum Cutting Section: 100mm×120mm

Platen Speed: 2800r/min

Specifications of Cutting Slice: $\phi 380 \times 2.8 \times \phi 32$

Electromotor: Y112M-2,4KW, 380V, 50Hz

Total Dimensions: 760×850×1400mm

Net Weight: 380Kg