



Metallographic Instrument

Grinder Polisher Machine





Features:

In the process of preparation of metallographic sample, pre grinding, polishing and grinding are the indispensable procedures. this machine SYMP-10 is produced with ppc sewage collection plate and cover and is the latest product with a new and beautiful appearance. this machine is controlled by single chip microcomputer, grinding disc 100rpm-1400rpm of stepless speed regulation with digital tube display. the motor is dc brushless motor and don't need to replace the brush, used for a long time. the machine is non-toxic painted. strong large support chassis design ensures the precision rotary balance. powerful motor brings strong power and efficient grinding and polishing experience. spindle leak-proof design ensures the bearing almost without damage and the super mute design brings a good experience. it supports for fast disk system, with the use of elasticity, and can be used with automatic grinding device. features: low noise, convenient operation, beautiful appearance, safe use.

This machine can be adapted to various materials preparation of test samples. the polishing disc diameter is larger than the domestic similar products. the platen speed of polishing disc operates independently. it is the best equipment of metallographic sample preparation.



Product structure diagram

(SYMP-10 Metallurgical Grinder & Polisher Machine)



Rotary nozzle:

The sample can be cooled and rinsed during grinding and polishing, and can be rotated as required

Holder:

Clamping the sample can generate 5-170 (N) pressure by setting

Color screen touch operation panel:

Set the rotation speed and direction of the working plate, Start and stop control of the whole machine.

Grinding disc:

Also called "working plate", it is an important part of the grinding and polishing test. Fur cloth and other consumables are fixed on it, and the sample is polished.

Feet:

Adjust the level and stability of the fuselage

Technical Specification:

Model	SYMP-10
Disc Diameter	230mm
Abrasive Paper Diameter	230mm
Speed	Stepless speed 100~1400r/min, or Four speed 300, 600, 900, 1400r/min
Rotational Direction	Clockwise or Counterclockwise
Electromotor	DC brushless motor, 220V, 600W
Control and Display	Film key operation, Nixie tube display, With washing function
Power Supply	220V, 50Hz, 6A
Dimensions	420×660×330mm
Net Weight	30kg

Structure Instruction

Upgrade the magnetic suction chassis, bid farewell to the clamp and pressure ring, and improve the working efficiency

Automatic tooth sampling reduces the uncertainty of the results caused by manual sample preparation and is more stable. Easy to control, more reproducible sample preparation.

Multi sample holder

The fixture can be removed as a whole, and 6 samples can be polished at the same time, which is very convenient.



1. Speed regulation of frequency converter

The rotation speed of the grinding and polishing machine can be changed between 50-1000r/min.

2. Stable rotation

It has the characteristics of compact structure and low noise.

3. Grinding disc

Fix the abrasive paper, flannelette and other consumables on it, and polish the sample.

4. Wide application

Suitable for metal, rubber, plastic, composite materials, hard alloy, mineral, fiber reinforced materials, biological materials (teeth, bone).

Accessory standard:

No.	Name	Specification	Qty
1	Machine Body		1 set
2	Grinding and Polishing Disc	230mm	2 pcs
3	Ferrule		2 pcs
4	Abrasive Paper	230mm	4 pcs
5	Polishing Cloth	230mm	1 pc
6	Water Inlet Pipe		1 pc
7	Water Outlet Pipe	Φ32mm	1 pc
8	Water Inlet Filter Screen		1 pc
9	Usage Instruction Manual		1 copy

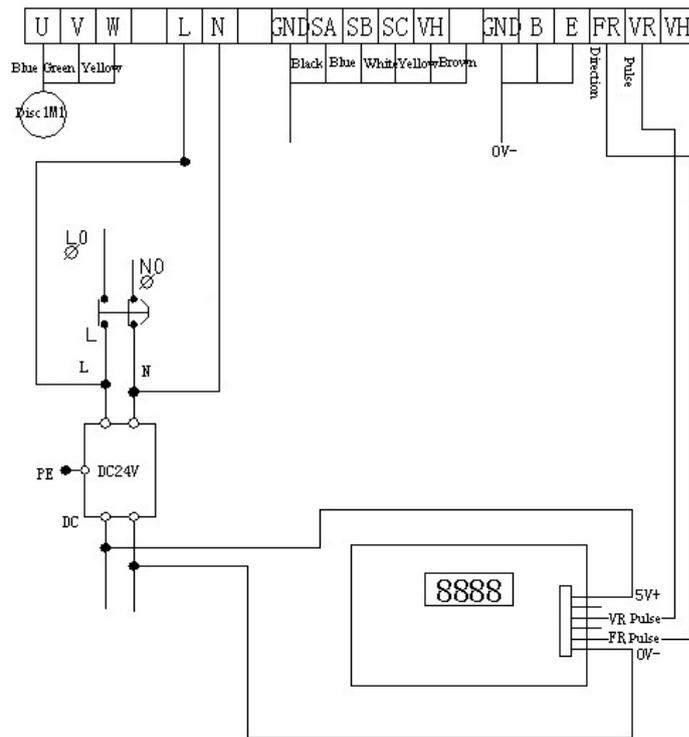
First、 Installation

1. Put this machine on the smooth work table and take down the packing plastic housing.
2. Inspect whether various components of the machine is complete or not, complete the clearing.
3. Put through the water inlet pipe and the discharge pipe, pay attention on the altitude of draining water place should be lower than the freeing port.
4. Insert the plug adapter into the electric outlet. Before the insertion, you should inspect whether the supply voltage is congruous, whether the ground connection of line is reliable.

Second、 Usage

1. At first, take down the plastic lid, change the abrasive disc or polishing disk (loading disk must do the cleaning work), and then loaded on plastic lid and click switch to required speed position, and then go on grinding and polishing work.
2. Preliminary grinding: at first, put on abrasive disc, put water sand paper to the plate, open the water valve to make water continuously flows into the rotary abrasive disc, because of the effect of centrifugal force, the water in abrasive disc was thrown outside, i.e., the atmosphere will tightly pressure in water sand paper in the disk, but water should not be too big, only need to continuously flows into the plate.
3. Polishing: put on the polishing plate, and at first, put a small amount of oil in the polishing plate, then stick polishing fabric paste in the disk, but must pay attention to the paste fabric must do vouchers to stick in the disk, and then drip on right amount polishing liquid or polishing paste and water on fabric surface to polishing work, to ensure the use of safe, general woolen cloth fabric is to use bonding method, all the accessories (ring) will stick fabric closely in the disk, but must be used after fabric wetting.
4. When stop, should turn off the water valve after shutdown, avoid the water into the bearing inside, damage bearing and electric, influence the normal use of equipment.

Electricity principle diagram:



Maintenance

- 1、 Not allowing to strengthen over-pressure to the sample while using, in case that frequency converter and motor overload and cause damage.
- 2、 Do not allow to use already damaged abrasive paper and polishing fabric while using, so as not to influence the rubbing quality and cause accident.
- 3、 Should do the daily clean work of maintaining well after using, remove the sediment timely in the blow down pass-way while not using, in order to make the water drain off unblocked, should close the plastics cover timely while not using, in case that the incidental falls into the plate, and influence the grinding quality thereafter.
- 4、 This machine should change the lubricating grease in the bearing of the motor in time after long-term administration; generally change once every year.

Special note: If the motor doesn't rotate, such as that press RUN key the motor doesn't turn or the grinding disc doesn't rotate suddenly for the big resistance, then please turn off the power switch and power on system after one minute, and find out the cause of block, brushless motor phase lack or hall switch line broke or loose can also cause the not rotating of motor.