



iPoli-2D-200M Metallographic Manual Grinding Polishing Machine

Instruction Manual



Anhui Mikrosize Precision Instrument Co.,Ltd

Add: A-4035 RuiFeng Business Expo, Wuhu City, China, 241000.

Web: www.mikrosize.com **Email:** mikrosize@mikrosize.com

Contents

1. Touch Screen Use	1
2. Important Notes and Safety Importance	2
3. The Purpose and Characteristics of the Polishing & Grinding Machine	3
4. Main Technical Index	3
5. Outline of Structural Characteristics	4
6. Installation Method	5
7. Using Method: Polishing	6
8. Using Method: Grinding.....	6
9. Matters Need Attention	7
10. Troubleshooting	7
11. Maintenance	8

1.Touch Screen Use

1.Plug in the power, turn on, run for about 10 seconds, touch screen will appear the following interface, as shown below:



2.Select run time (1- 1000 seconds), select speed (touch screen default speed 150r/min, 300r/min, 600r/min, 800r/min), also can choose stepless (press the down arrow) according to user needs, when selecting stepless shall be at standstill, and then select reversible press run key to operate. As follows (time setting)



3.The top right corner of the  display is in English toggle key, press it will appear the following figure (selecting the desired input method):



4. After use, press the stop button to stop the operation.

2. Important Notes and Safety Importance

When use this grinding machine,must comply with these safety matters , so as to avoid the fire,electric shock and injury.

1. Read and understand all the rules.
2. Keep in mind the use of electric appliances.
3. Comply with all warnings and regulations in the documents provided by the product.
4. If the use of rules and safety information has been contradictory,subject to safety information. If you can 't solve the contradiction, ask the seller or service organization for help.
- 5.In the cleaning machine appearance, please unplug the power plug ,do not use cleaning fluid or keroosene, using only the wet cleaning machine.
- 6.Do not put the equipment on the unstable table, otherwise, the equipment falls, essy to cause serious damage.
7. Do not allow any items on the power, grinding and polishing machine.
8. Not to overload power socket plate on the wall, so as not to cause a faire or electrical shock.
9. In order to avoid the risk of electric shock,do not break down the polish-grinding machine.If need to be reaaired, should ask the maintenance technician to repair. Opening or removing the cover will expose you to dangerous voltage or other dangerous.In correct reassembly,will occur in the future use of electric shocks.
- 10.In the following situations ,pull off the plug from the wall,and please the qualified maintenance technician to repair.
Power cord,plug or cable damage or wear.
Girding and polishing machine according to rules,but the machine is not working. The grinding and polishing machine is down or case is damaged.
The performance of the grinding machine suddenly changed obviously.
Only to allow adjustment of the use of the manual mentioned in the manual.
11. Save the manual.

3.The Purpose and Characteristics

This grinding and polishing machine is a double disc machine, it 's suitable for pre-grinding and polishing of metallographic sample.It's a necessary equipment for the user to produce metallographic sample. The machine with a cooling device,the sample can be cooled by the pre-grinding,in order to prevent the damage caused by overheating of the sample.The machine is convenient,safe and reliable. It 's the ideal equipment for the factory,scientific research units,as well as laboratories of college and universities.

4.Main Technical Index

- 1.Working voltage:220V 50HZ
- 2.Disc diameter: Φ 200mm speed 150/300/600/800 rpm constant speed and 50-1000rpm stepless speed regulation
- 3.Motor:YSS7124、 550W
- 4.Dimensions:800*640*360
- 5.Weight:65Kg

5.Outline of Structural Characteristics

1.The polish-grinding machine is composed of a base, a polishing disc and a plastic pressing cover.The machine adopts the glass steel casing,which makes the machine more beautiful and generous in appearance.

2. The motor is fixed on the base, the shaft through the triangle belt drive,the disc set on the shaft,driven by the key and rotation,the switch is fixed directly on the body,the flow of the water spray pipe can be adjusted by the panel knob.

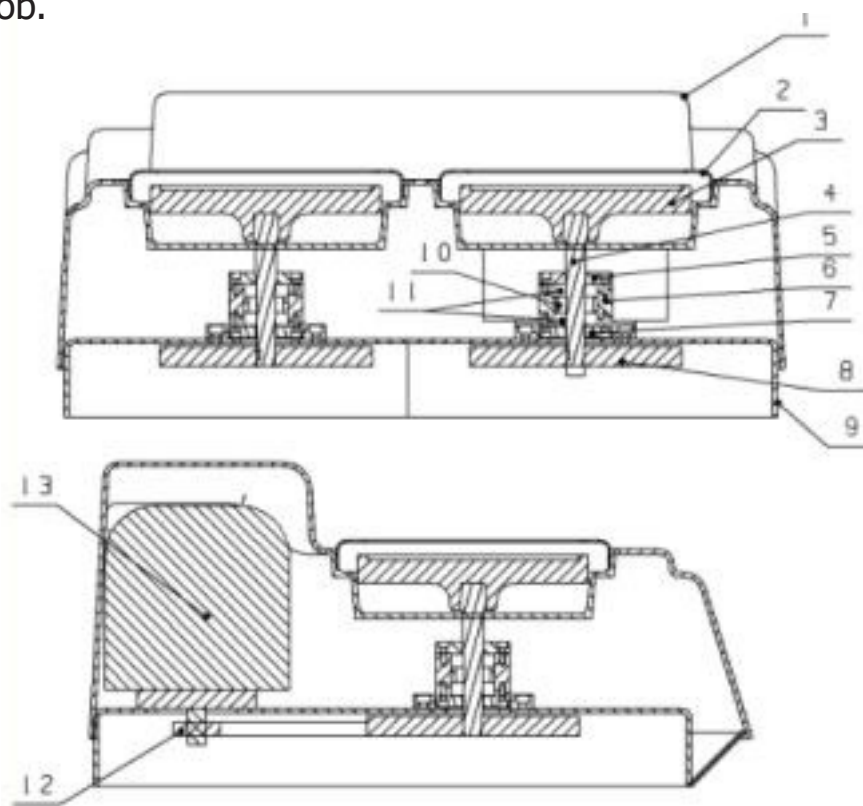


Fig.- 1 Structure diagram

- | | | |
|----------------------------|------------------------------|-----------|
| 1. Shell | 7. Lower end cover | 13. Motor |
| 2. Water retaining ring | 8. Big belt wheel | |
| 3. Grinding/Polishing disc | 9. Underpan | |
| 4. Main shaft | 10. Sleeve | |
| 5. Upper end cover | 11. Deep groove ball bearing | |
| 6.Seat of bearing | 12. Small belt wheel | |

5.Outline of Structural Characteristics

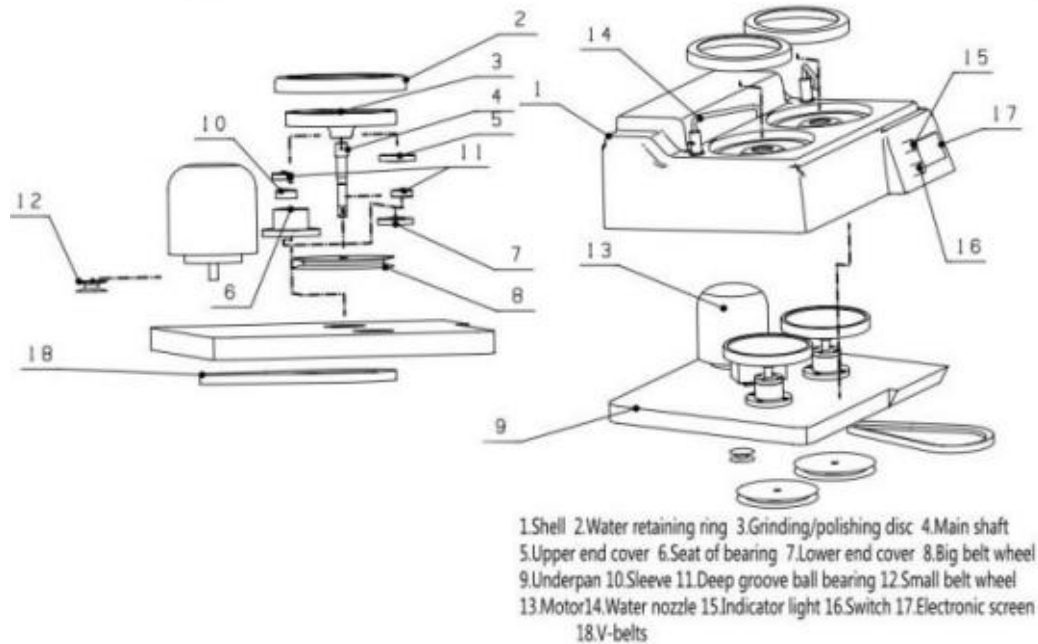



Fig. -2 Explosion diagram

6.Installation Method

1. With the machine outside the packing box to open.
2. Remove the machine side of the packaging,remove the equipment.
3. Place the machine on the flat without the debris and solid.
4. To plug in the back of the machine into the inlet and drain pipe.
5. Connect the earthing wire well, the earthing wire should be connected hard to the marked point of  on the back of the machine.
- 6.The polishing pad is packed in cartons and placed on the base of device. When the initial installation of the polishing disc removed,mounted on the griding machine spindle.With a rubber hammer mill selling in axial down beat to grinding selling loose so far.
- 7.Plug the power plug in the socket of the 220Vvotage,turn on the power switch start the macine according to the operation method ,check the operation is normal.
8. Inspecton is completed,you can use the operation.

7. Using method:polishing

1. With the pressure sensitive adhesive polishing fabric paste on the right side of the disc. If is a self polishing fabric, it should be laid on the right in the polishing disk.
2. Put the external pressure ring on the outer circle of the disc, thereby fixing the non pressure sensitive adhesive.
3. Put the good polishing agent coated on the fabric.
4. Open the power switch, the polishing disc rotation, the grinding specimen forced to live and gently close to selling first will sample according to throw the disc's center position, side edge polishing outward translation sample.
5. The operation of the feeling of fabric is very large, should be the polishing agent and then dilute some of the.
6. polishing fabric damage, should be replaced in time, so as to avoid damage to the specimen.

8. Using Method: Grinding

1. Put the water sand paper soaked, flat on the left lap, pressing buckle ring.
2. Open the left switch and adjust the flow of water.
3. Open the power switch, so that the grinding wheel counterclockwise rotation.
4. Hold the cut well sample hard and gently close to sandpaper, good contact does not beat with specimen and sandpaper to be can be forced to suppress the sample grinding.
5. The intensity of the friction is not so that the surface of the heat caused by the friction of the organization is good (about 2kgf).

9. Matters Need Attention

1. For the first use, should hit the Grinding/Polishing disc downward along the axial direction with a rubber hammer, and make the matching between the Grinding/Polishing disc 3 and the Main shaft 4 closely, if not, would affect the performance of the machine.
2. The machine must be earthed well, and grounding device is reliable.
3. Inlet and outlet water pipes must be unimpeded, the connecting parts can not leak.
4. Don't run the machine in a long time under the turn speed less than 50rpm.

10. Troubleshooting

1. Abnormal sound
 - a. Check whether the foot screw is screwed down.
 - b. The machine should be putted on a level and solid table.
2. LCD Screen has no display
 - a. Check whether the Power line plugs tight and has no loosening.
 - b. Check the whether the Fuse is damaged.
3. The machine runs abnormal
 - a. The machine should run under the condition of 220V(+/- 10%)AC, 50Hz, check whether the power supply is right.
 - b. Check whether the setting of turn speed is correct.

11. Maintenance

1.First, check whether the Grinding disc/Polishing disc fit correctly and tight before using the machine.

2.Check whether the Power supply system is normal.

3.Clean the Grinding disc, Polishing disc & the Shell of the machine after end of the work.

Note: Don't scrape above parts with any sharp objects.

4.When cleaning the LCD Screen, must do this with clear and soft cotton textiles.

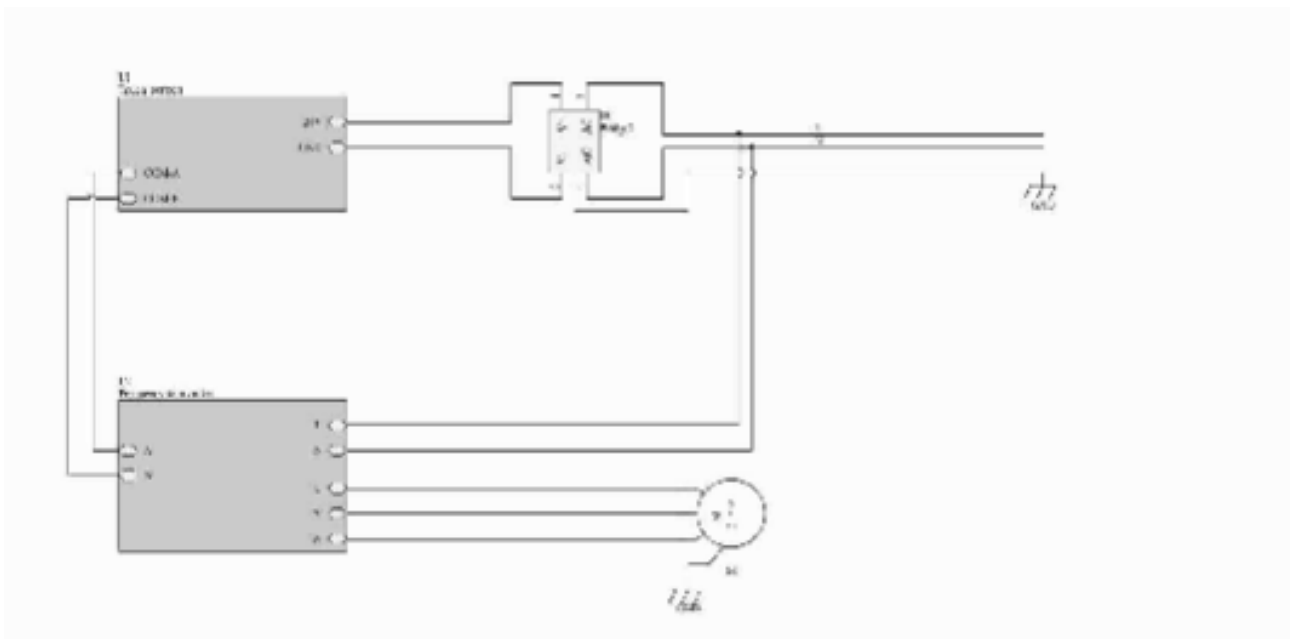


Fig.-3 Electrical diagram

Mikrosize Distributors Worldwide

Coventry,UK /Warsaw,Poland/Burago di Molgora, Italy/Langgöns,Germany/
Madrid, Spain/Istanbul,Turkey/Minsk,Belarus/Moscow , Russia /Sao Paulo, Brazil/
Mexico City ,Mexico/Penang, Malaysia/Bangkok Thailand etc.....



Anhui Mikrosize Precision Instrument Co.,Ltd

Factory Producing Add: N013 Shuiku Road Shatou, Changan Town, Dongguan, China.

International Trading Office: A-4035 RuiFeng Business Expo , Wuhu City, China.

Web: www.mikrosize.com Email: mikrosize@mikrosize.com

