



**MLP-CM86
CUTTING MACHINE(BASIC TYPE)
OPERATION MANUAL**



Safety precautions

Before installing and using the product, please read the manual carefully, and pay special attention to the reminders and suggestions, and observe the precautions; to avoid damage to the equipment, fire and personnel injury!

- ◆ Check the power supply voltage input range before accordance with the equipment

Whether the equipment grounding meets the requirements
 operators must conduct pre-job safety operation training and can use the machine

- ◆ The determines whether the surrounding environment meets the installation requirements

- ◆ The operates the equipment according to the operating procedures

- ◆ The is unplugged when cleaning the equipment

- ◆ When fails, do not decompose the equipment without authorization.

Ask professional personnel to avoid electric shock

- ◆ Please keep this manual properly

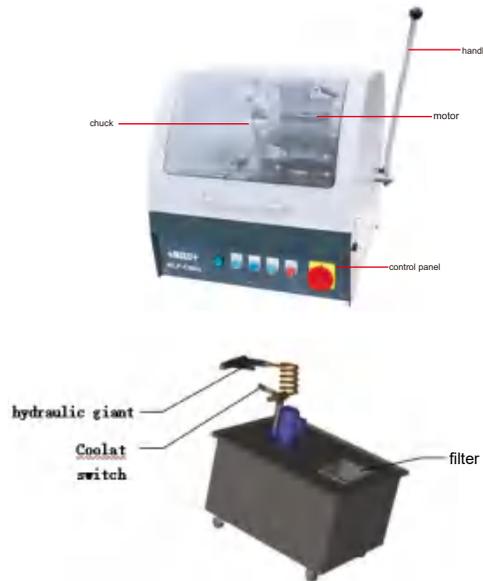
Introduction

MLP-CM86 sample cutter is suitable for cutting the samples of various metal and non-metallic materials to observe the metallographic and lithographic organization of the materials. This machine has a cooling device, using the configured coolant can take away the heat generated during the cutting, to avoid the sample overheating and burn the sample tissue. The machine is easy to use, safe and reliable. It is one of the necessary equipment for factories, scientific research institutions and laboratories in universities and colleges.

Main technical indicators

| | |
|---------------------------------|---------------|
| Maximum cutting diameter | Ø80mm |
| Cutting blade | Ø250×2×Ø32mm |
| Rotation speed | 2800r/min |
| Power | 3KW |
| Power supply | AC 380V, 50Hz |
| Dimension | 690×790×670mm |

Schematic diagram of the whole machine



Please read the following clauses carefully!

Prepare before work

1. Install the machine on a stable, vibration-free workface.
2. Install the inlet pipe, the outlet pipe should be lower than the body inlet, so as to avoid poor drainage.
3. Check whether the electrical power cord, plug connector and other electrical components are in good condition, and then connect to the power supply, start the motor, the motor should be marked consistent according to the direction on the machine.



Our electrical appliances should be used with a three-phase four-wire plug, and must be well grounded.

4. Cutting sheet loading and unloading

- 1) Open the upper cover of the machine, use a randomly equipped wrench, and unscrew the left rotary nut at the spindle end to remove the saw plate clip plate and the cutting plate.
- 2) Install the cutting blade and saw blade clip to the spindle, properly tighten the left rotary nut with a wrench, and then turn the spindle in two circles by hand to check whether both sides of the blade swing is not more than 2mm. If it exceeds 2mm, check the reason for correction.

5. Workpiece clamping

Correctly clamp the workpiece is an important guarantee of safety and reliability. During operation, put the workpiece into the clamp mouth, tighten the clamp handle with a random wrench, and push or turn the sample by hand to check whether the workpiece clamp is stable, otherwise the clamp should be reinstalled.

Operating instructions

1. Description of the operation keys:

- 1) Water pump switch: self-lock button, water pump button can separately control the start and stop of water pump.
- 2) Cut start: non-self-lock button, cut operation start button.
- 3) Cut stop: self-lock button, press this button to stop when the cut is incomplete.
- 4) Lighting switch: self-lock button, lighting button can separately control the lighting switch.

2. Operating instructions:

- 1) After the preparation before completing the work, cover the upper cover of the machine, open the "power switch" clockwise, and the green indicator light of the control panel is on.
- 2) Press the "Cut Start" button, when the cutting motor starts, the cooling water automatically opens, hold the swing arm handle, make the cutting plate slowly contact the sample, cut. After the cutting, the swing arm handle returns to the position, press the "cut stop" button, and the motor stops running, and the cooling water is automatically close.
- 3) Open the upper cover of the cutting room, press the pump switch, clean up with the water gun, press the pump switch " switch again, the pump stop working.



1. The force should be made evenly when cut, and not too hard. It is recommended to slightly lift the handle every 1-2mm when cutting.
 2. Coolant must be selected with better lubricating coolant for configuration (random gift), do not use general tap water as coolant.

Maintenance and maintenance

1. The electromechanical gas adopts a three-phase four-wire system, and a reliable grounding wire must be installed. er the workpiece clamp is stable, otherwise the clamp should be reinstalled.
2. Inlet / drainage pipe shall be unobstructed but not leak.
3. Samples shall not be cut with cracked or broken cutting pieces
4. Working with grinding wheel sheets with a line speed below 35 m / s is not permitted.
5. After each operation, the cleaning and maintenance work should be done well in time. Remove and clean the filter screen on the left rear water outlet of the machine working table to ensure smooth drainage.
6. The coolant should be replaced regularly to prevent deterioration from failure.
7. When the machine is found to have abnormal sound, stop down immediately for inspection.
8. Fill the machine with lubricating oil regularly.



pay attention to:

1. It is recommended to use instrument special test sample cut cooling lubricant, otherwise easy to cause damage to the equipment.
2. The cutting capacity and speed vary according to the cutting sheet and the cut material.

