## GUANGU TECHNOLOGY (SUZHOU) CO., LTD.



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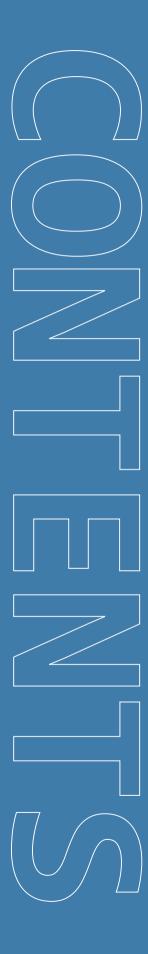
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# GUANGU MAGNETIC POLISHER



Solve surface treatment problems such as hardware burrs welding spots, and knife marks at one time



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#### **COMPANYPROFILE**

Guangu Technology (Suzhou) Co., Ltd. is located in Suzhou City, Jiangsu Province, which is known as the "Jiangnan Water Town". Since its establishment, it has focused on R&D, design, production and sales of water treatment, magnetic grinding and polishing machines, magnetic rolling and polishing machines for deburring the dead corners of precision metal parts, and other automation machines. Guangu strives to become a well-known domestic brand of deburring machines and magnetic polishing machines for precision small parts.

Aiming at the current problem of metal surface polishing, cleaning and deburring in China, Guangu has launched a fully polishing equipment to deburr inner hole and dead corner that can replace manual work efficiently: magnetic polishing machine, magnetic grinding machine, magnetic rolling and polishing machine, magnetic deburring machine, all Automatic polishing and grinding equipment such as automatic deburring machines and related grinding and polishing consumables.

Guangu magnetic polishing machine has undergone precise and rigorous engineering design, strict production management and quality control system, so that each part has undergone strict inspection from material selection, processing and production, assembly, debugging and other links. The core components of the equipment are all first-line brand accessories, welcome to visit the factory for samples.

## **ICORPORATE CULTURE**











#### **CERTIFICATE OF ASSETS**















We have ISO quality management system certification, EU CE certification qualification. The company team is made up of experienced professionals who are continuously trained and re-educated to maintain our competitiveness in the industry. If you choose us, you will get a partner with excellent qualifications and professional capabilities. We will provide you with high quality products and excellent service.



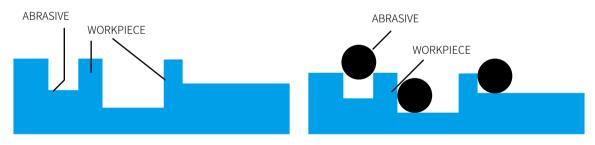
#### **Features**

#### **Device Overview**

Thank you for purchasing Guangu magnetic polishing machine! Guangu magnetic polishing machine is a new type of polishing and deburring machine cleaning equipment independently developed. The company's equipment adopts first-line brand accessories at home and abroad. It is simple, easy to operate, and unique in design, which fundamentally solves the problem of traditional polishing, cleaning and deburring. It solves the post-processing problems such as polishing and grinding of damaged workpieces, dead angles, inside pipes, through holes, blind holes, etc., and improves the polishing efficiency and product quality.

#### **Working Principle**

Guangu magnetic polishing machine uses super electromagnetic force to drive small magnetic grinding steel needles, so that the polishing needles generate high suspension flow, reversing and tumbling, and the steel needles gently slide over the surface of the workpiece, rub on the inner holes, inner and outer teeth and surfaces of the workpiece to achieve polishing cleaning, removal of oil and impurities, removal of burrs, etc. Achieve precision polishing effect without affecting the accuracy or damaging the workpiece.



The magnetic needle of the magnetic polishing machine can grind the inside of the hole, the crack, the right angle, the thread of the metal workpiece, etc., and the fine grinding speed is fast

When the traditional polishing machine grinds metal workpieces, the inside of the hole, the gap, and the right angle cannot be ground

Grinding Schematic Diagram Of Magnetic Polishing Machine And Traditional Polishing Machine



## **Features**

## Equipment introduction

01	Realize deburring, chamfering, polishing, cleaning and other multiple functions.
02	For irregular parts, holes, tubes and other dead corners, cracks can be polished and cleaned.
03	Low grinding cost, 304 stainless steel magnetic needle, extremely low consumption.
04	The grinding speed is fast, the average grinding time is 5-15 minutes each time, the workpiece can be changed quickly, and the grinding workpiece can be changed without stopping the machine.
05	Variable frequency adjustment to meet various polishing requirements.
06	Polished without dead ends.
07	The operation is simple, safe and technology-free, and one person can control several machines.
08	The equipment voltage, motor frequency, and running time are intuitive and clear, and easy to operate.
09	After the finished parts are ground, there will be no deformation, no dead angle, no damage to the surface, and no impact on precision.

## I Equipment advantages and application range

#### **Equipment introduction**

Braking function: automatic braking with electronic anti-phase current output electrodes. Advantages: no friction, no loss, durability, and energy saving.

The equipment adopts the overall structural frame.

The national standard steel plate shell has no gaps as a whole, and the structure is firm, thick and stable. Five-process high-temperature anti-stripping and anti-corrosion treatment.

Safety measures: start by light contact, design of all cooling components in the control part, no leakage, safe.

Rotation: During work, the turntable has no power loss, and the 4KW motor has no deceleration phenomenon between no-load and load at any speed, It can be detected for 1000 hours without stopping. The equipment is stable and energy-saving.

#### **Equipment introduction**

It is suitable for grinding and polishing metal workpieces such as gold, silver, copper, aluminum, zinc, magnesium, and stainless steel. Such as: gold and silver jewelry, fashion accessories, metal parts of electronic products, precision bolts, metal products with complex shapes, stationery accessories, instrument accessories.

- 1- Centering, cutting, CNC automatic lathe parts
- 4- Zinc alloy, aluminum alloy die-casting parts

2- Aerospace, medical device parts

5- Precision stamping parts

3- Precision spring, shrapnel parts

6- Electronic Computer Communication Parts



## PRODUCT PARAMETERS |



PARAMETERS AND SPECIFICATIONS			
Model	GG8520		
Power supply	AC380V(50\60HZ)16A		
Equipment size	640*520*1088		
Grinding tank size	Φ 350(Cylindrical Barrel)		
Motor power	2.2KW*1		
Machine weight	168kg		
Operation mode Forward and reverse			
Maximum processing capacity	0-10KG		
Auxiliary material	Stainless Steel Needle 3kg, Grinding Liquid 25L, Rubber Pad 1PCS, Separator 1PC Steel Needle Separator 1PCS, Instructions 1PCS.		



## PRODUCT PARAMETERS



PARAMETERS AND SPECIFICATIONS		
Model	GG8620	
Power supply	AC380V(50\60HZ)16A	
Equipment size	740*620*1088	
Grinding tank size	Φ 450(Cylindrical Barrel)	
Motor power	3.0KW*1	
Machine weight	188KG	
Operation mode	Forward and reverse	
Maximum processing capacity	0-12KG	
Auxiliary material	Stainless Steel Needle 4kg, Grinding Liquid 25L, Rubber Pad 1PCS, Separator 1PCS, Steel Needle Separator 1PCS, Instructions 1PCS.	



## PRODUCT PARAMETERS!



PARAMETERS AND SPECIFICATIONS			
Model	GG8720		
Power supply	AC380V(50\60HZ)16A		
Equipment size	840*720*1088		
Grinding tank size	Φ 500(Cylindrical Barrel)		
Motor power	4.0KW*1		
Machine weight	218KG		
Operation mode	Forward and reverse		
Maximum processing capacity	0-18KG		
Auxiliary material	Stainless Steel Needle 6kg, Grinding Liquid 50L, Rubber Pad 1PCS, Separator 1PCS, Steel Needle Separator 1PCS, Instructions 1PCS.		



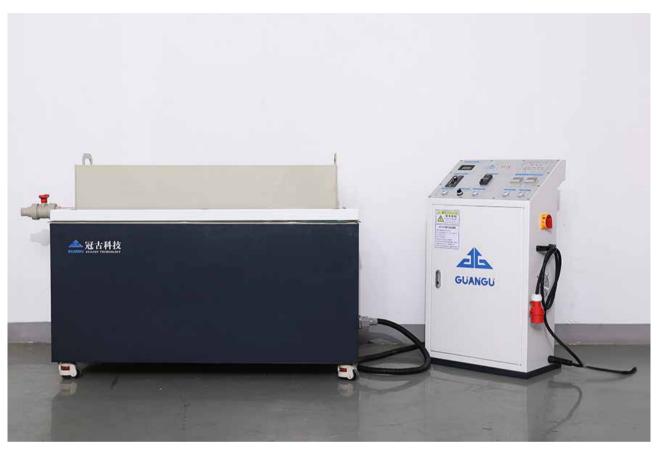
## **IPRODUCT PARAMETERS**



PARAMETERS AND SPECIFICATIONS			
Model	GG8850		
Power supply	AC380V(50\60HZ)16A		
Equipment size	1200*720*1088		
Grinding tank size	900*500(Square Bucket)		
Motor power	4.0KW*1		
Machine weight	288KG		
Operation mode	Forward and reverse and translation		
Maximum processing capacity	0-30KG		
Auxiliary material	Stainless Steel Needle 4kg, Grinding Liquid 25L, Rubber Pad 1PCS, Separator 1PCS, Steel Needle Separator 1PCS, Instructions 1PCS.		



## PRODUCT PARAMETERS |



PARAMETERS AND SPECIFICATIONS			
Model	GG1380		
Power supply	AC380V(50\60HZ)16A		
Equipment size	1380*800*1088		
Grinding tank size	1200*600(Square Bucket)		
Motor power	5.5KW*1		
Machine weight	410KG		
Operation mode	Forward and reverse and translation		
Maximum processing capacity	0-35KG		
Auxiliary material	Stainless Steel Needle 10kg, Grinding Liquid 50L, Rubber Pad 1PCS, Separator 1PCS, Steel Needle Separator 1PCS, Instructions 1PCS.		



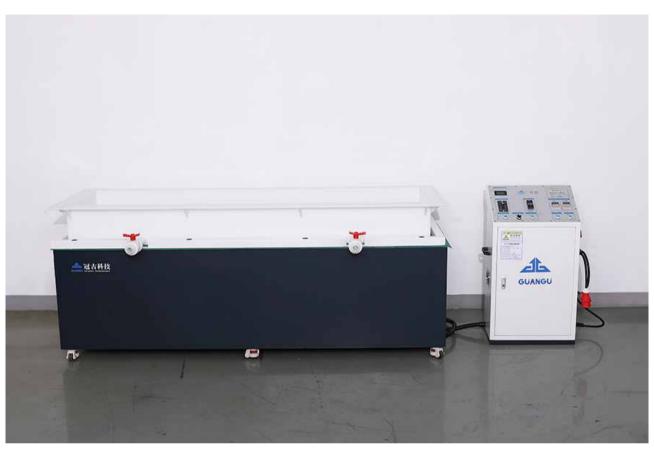
## **IPRODUCT PARAMETERS**



PARAMETERS AND SPECIFICATIONS			
Model	GG1980		
Power supply	AC380V(50\60HZ)16A		
Equipment size	1980*720*1088		
Grinding tank size	1800*520(Square Bucket)		
Motor power	4.0KW*2		
Machine weight	580KG		
Operation mode	Forward and reverse and translation		
Maximum processing capacity	0-60KG		
Auxiliary material	Stainless Steel Needle 4kg, Grinding Liquid 25L, Rubber Pad 1PCS, Separator 1PCS Steel Needle Separator 1PCS,Instructions 1PCS.		



## PRODUCT PARAMETERS |



PARAMETERS AND SPECIFICATIONS			
Model	GG2380		
Power supply	AC380V(50\60HZ)16A		
Equipment size	2380*800*1088		
Grinding tank size	2200*600(Square Bucket)		
Motor power	5.5KW*2		
Machine weight	660KG		
Operation mode	Forward and reverse and translation		
Maximum processing capacity	0-70KG		
Auxiliary material	Stainless Steel Needle 14kg, Grinding Liquid 100L, Rubber Pad 1PCS, Separator 1PCS, Steel Needle Separator 1PCS, Instructions 1PCS.		



## **IPRODUCT PARAMETERS**



PARAMETERS AND SPECIFICATIONS			
Model	GG2980		
Power supply	AC380V(50\60HZ)16A		
Equipment size	2980*720*1088		
Grinding tank size	2800*520(Square Bucket)		
Motor power	4.0KW*3		
Machine weight	780KG		
Operation mode	Forward and reverse and translation		
Maximum processing capacity	0-80KG		
Auxiliary material	Stainless Steel Needle 24kg, Grinding Liquid 150L, Rubber Pad 1PCS, Separator 1PCS, Steel Needle Separator 1PCS, Instructions 1PCS.		



#### **GRINDING CONSUMABLES**

#### Magnetic steel needle regular size table (special can be customized)



SIZE (dia*len) mm					
0.2*5MM	0.3*5MM	0.4*5MM	0.5*3MM	0.5*5MM	0.5*8MM
0.6*5MM	0.7*5MM	0.8*3MM	0.8*5MM	0.8*10MM	1.0*5MM
1.0*8MM	1.0*10MM	1.2*5MM	1.2*8MM	1.2*10MM	1.5*5MM
1.5*8MM	1.5*10MM	1.8*5MM	1.8*8MM	2.0*5MM	2.0*8MM

#### Guangu Magnetic Grinding Steel Needle Selection Instructions

The thicker the magnetic steel needle, the stronger the polishing strength. Of course, the polishing and grinding strength can also be controlled by adjusting the operating frequency of the control panel of the magnetic polishing machine. When choosing a stainless steel needle for the first time, you must first understand the material of the processed parts. For stainless steel For hard parts such as steel and iron, it is recommended to choose a stainless steel needle with a diameter above 0.8. For copper and aluminum parts with soft materials, it is recommended to choose a stainless steel needle with a diameter below 0.8. In addition, the final stainless steel needle model, the hole diameter of the part to be processed and other gaps can also be determined by actually trying several times to determine the thickness of the steel needle abrasive. Generally, it is recommended to use a 5mm long steel needle for polishing.

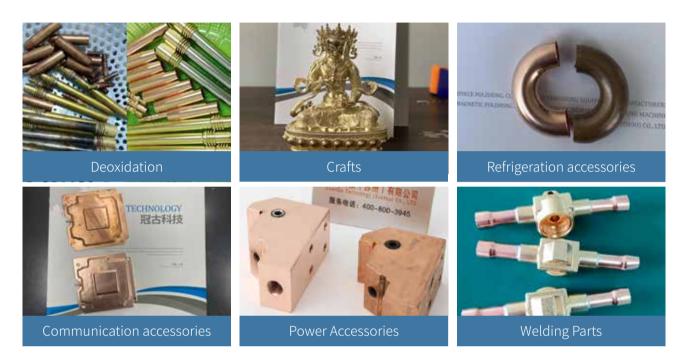
#### **PRECAUTIONS**

The stainless steel magnetic needle is a semi-permanent grinding material, which can be used continuously for many times. The stainless steel magnetic needle is a tiny needle-shaped object, and it should be handled carefully when using it. When the stainless steel needle is not in use, please clean it and dry it before storing.

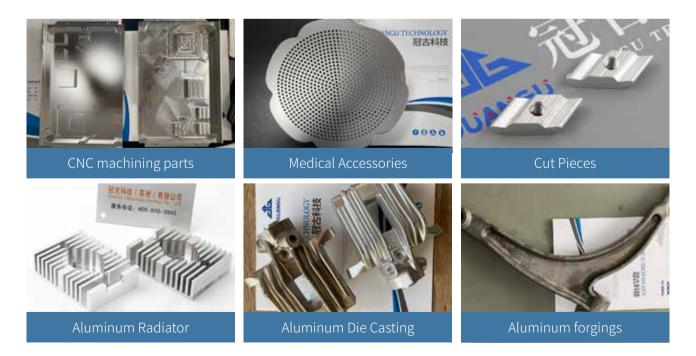


#### **IGRINDING CASE**

#### Copper case



#### Aluminum case





## **GRINDING CASE**

#### Stainless steel case



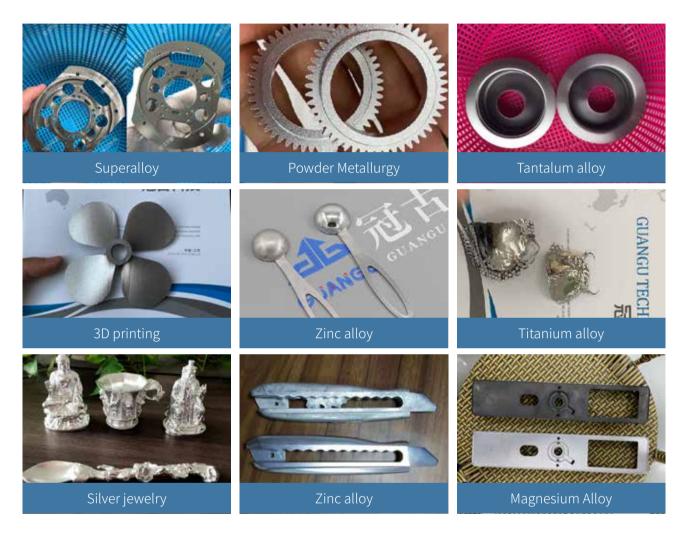
#### Iron parts/carbon steel parts case





## **IGRINDING CASE**

#### Alloy parts/3D printing/other cases





## **USE ANSWER!**

Phenomenon	reason	Countermeasures	
Water leaks from the bottom of the polishing	Bucket bottom pierced with polished needles	Remove the needle with pliers and add some glue to the bottom of the barrel	
bucket	Polished barrels for low wear	buy new barrels	
timer does not flash	switch not activated	Press the start switch to time	
Polishing barrel is fragile	high water temperature	Change the water in time (normal water temperature is within 50 degrees)	
	There are polishing needles in the polishing tank	Regularly clean and keep the grinding tank clean	
Polishing barrel turns while grinding	Water on the surface of the polishing pad or no polishing pad	Drain moisture, plus silicone anti-vibration pad	
The machine vibrates a	A certain foot of the machine is not in the force- bearing position	Adjust the length of the foot to balance the stress position	
lot	Excessive polishing needle placement	Reduce polishing needles	
Pin stuck in workpiece slot	The length of the polishing needle does not match the size of the workpiece	Adjust the size of the polishing needle	
Poor deburring effect	Severe workpiece-to-workpiece collisions	Make a fixture to fix the workpiece	
1 oor deburring enect	The polishing needle is too strong	Adjusting the polishing needle	
Poor deburring effect	Insufficient grinding	Increase the frequency to minimize the distance between the barrel and the machine	
The weekenings is dull	The polishing needle is not strong enough	Replace the thick/long polishing needle to check whether the polishing needle is sufficient	
The workpiece is dull	The polishing agent conflicts with the product material	Replace/Adjust Polishing Fluid	
	Polishing needle too thin/short	Adjusting the Magnetic Polishing Needle Model	
	less polish	Increase the polishing agent and replace it with a high-quality polishing agent	
Polishing the workpiece is inefficient	The workpiece is oily	Polish after degreasing	
	Too much polishing water	reduce water	
	Workpiece excess	Reduce to the appropriate number of workpieces, subject to workpiece tumbling	
Polished barrel, blackened needle	The workpiece is oily	Wash the polishing barrel and polishing needle separately before using	
	abnormal voltage	Check if the voltage is lower than 380V	
Indicates that the	Excessive polishing needle placement	Reduce polishing needles	
machine does not operate when it is normal	Show EO (protection)	Cut off the main power supply and restart the device after the display goes out After the main power supply is displayed and goes out, press the red button on the governor colored stop/resel key	
power trip	damp inside the machine	Change the environment of the machine to the sun for a few hours or use electricity hot blow dryer	
The surface of the	working environment is too hot	Replacing the fan on the back of the machine	
machine is hot	The cooling fan of the machine is broken	Replacing the fan on the back of the machine	
The machine smells like burnt paint	Working voltage is too high	Solve the machine using power	
The voltmeter has no display and the machine	Power input no voltage	Check front-end power	
has no action	machine malfunction	Notify Guangu Company for after-sales maintenance	

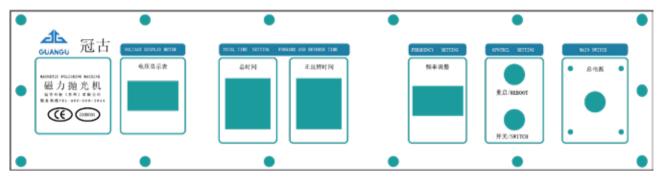
When the above phenomenon occurs, please refer to the information in the table below to verify the reasons and countermeasures for your reference.



## **ICODE DISPLAY SOLUTION**

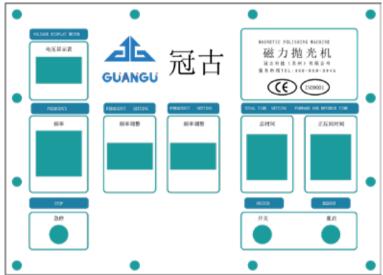
UL	The inverter detects that there is an abnormal sudden increase of overcurrent at the output	Check whether the output power of the motor matches the output power of the inverter Check whether there is a short circuit between the inverter and the motor Increase the acceleration time (P10,12) Check whether the motor is overloaded
00	The inverter detects that there is an overvoltage phenomenon in the internal DC high voltage	Check whether the input voltage is within the rated input voltage range of the inverter and detect whether there is a surge voltage. The internal DC high-voltage side voltage of the inverter is too high due to the motor inertia rising voltage. At this time, you can increase the deceleration time or install a braking resistor (optional).
οН	The inverter detects that the internal temperature is too high and exceeds the protection level	Check whether the ambient tempratue is too high or exceed the protection level. Check whether the air inlet and outlet are blocked. Check whether the heat sink is abnormal. Check whether the ventilation space of the inverter is sufficient.
Lo	Inverter detects internal DC	Check whether the input power is normal
	High side too low	
οĹ	The inverter detects that the output exceeds the tolerable current, and the tolerance is 150% of the rated current of the inverter, which can withstand 60s.	Check whether the motor is overloaded, reduce the torque of p54, increase the output capacity of the inverter
oL!	Internal electronic thermal point relay protection; motor load is too large	Check whether the motor is overloaded Check whether the rated current value of the P52 motor is appropriate Check the electronic thermal relay function setting to increase the motor capacity
075	The motor load is too large	Check whether the motor load is too large Check the setting value of the over-torque detection level (P60-62)
66	Set this time with external multi-function input terminals (M2~M5) AC motor driver	When it is clear that the signal source "bb" disappears immediately, the AC motor driver stops outputting and whether the output wiring is poorly insulated
осЯ	Overcurrent during acceleration	Increase the acceleration time and reduce the torque setting value of P54. Replace the inverter with a larger output capacity. Is the insulation of the output connection of the inverter poor?
ocd	Overcurrent occurs during deceleration	Increase the deceleration time and replace the inverter with a larger output capacity
ocn	When the external multi-function input terminals (M2-M5) set the external abnormality (EF), the AC motor driver stops outputting	After clearing the source of the fault, press the "RESET" button
	Data write error in internal memory IC	Check that the input power voltage is normal and restart the machine
cF2	Internal memory IC data reading error	Check whether the connectors of the internal power supply board of the inverter and the control board are fully connected, press the RESET key and reset the internal parameters to factory settings
GFF	Grounding protection or fuse fault grounding protection The inverter has abnormal output phenomenon, and the output terminal is grounded (the grounding current is higher than 50% of the rated current of the inverter). The power module may have been damaged. This protection system will fail the fuse of the inverter instead of the human body; The LED indicator on the main circuit board shows whether the fuse is faulty	Ground protection; determine whether the IGBT power module is damaged Check whether the ground wire on the output side is poorly insulated Fuse failure; replace the fuse to determine whether the IGBT power module is damaged Check whether the ground wire on the output side is poorly insulated

#### PANEL INTRODUCTION



Frequency conversion series panel

#### Pan control panel -



- Main power supply: The main switch of the input power of the machine. When it is off, all the circuits inside the machine are powered off. When you want to use the equipment, you must turn the main power supply to the on state (ON is on, OFF is off)
- Switch: (red button) press down the timer to start working (can play the role of on and off)
- Restart: (green button) This button is to be switched on and off and the total time will be counted up to work after restarting (pressing is equal to zeroing the total time)
- Frequency: Control the moving speed of the geared motor in the equipment
- Frequency adjustment: Display the working frequency of the motor, and you can adjust the frequency of the motor running (0-60HZ). Do not work at low frequency for a long time, otherwise the motor may be damaged. The parameters have been set before leaving the factory (just adjust the cylindrical frequency Size) Setting parameters privately may affect the normal operation of the device
- Total time: you can set the time for the machine to work for one cycle
- Positive and negative time: You can set the cycle time of positive and negative rotation. Generally, the setting time of positive and negative rotation should not be less than two minutes. It takes time to start and brake to stop during work. If the rated time is set too short, it will take up the normal grinding time
- Voltage and current display: display the voltage of the input power supply and the current during operation

Fuse: When the input current is abnormal, it can protect other electronic components and circuits inside the machine

## **Equipment daily maintenance**

- 1. When using the equipment, prevent the liquid from splashing on the surface of the operating machine. When the polishing liquid splashes on the machine, it should be wiped clean in time
- 2. In order to keep the surface of the machine clean and prolong the service life of the machine, wipe the surface with a cloth after using the equipment
- 3. When the equipment is not in use, the control panel can be covered with a plastic bag
- 4. Lightning protection, in the event of lightning, it is necessary to turn off the power of the machine and unplug the power plug to prevent it from being damaged by lightning
- 5. The grinding barrel is damaged, and the polishing needle is strong when the equipment is running, so when the barrel is placed in the polishing tank, if there is a polishing needle in the polishing tank, it should be cleaned in time

Dear user, thank you for purchasing and using Guangu magnetic grinding machine equipment. Proper daily use and maintenance of machinery and equipment can avoid component damage caused by human factors and prolong the service life of the machine.





