



Brief

UNIPOL-802 automatic precision grinding and polishing machine is suitable for grinding and polishing of various materials. This machine is equipped with a $\varnothing 203\text{mm}$ grinding and polishing disc and two processing stations, which can be used for grinding and polishing planes $\leq \varnothing 80\text{mm}$. UNIPOL-802 automatic precision grinding and polishing machine with suitable auxiliary equipment can get high quality grinding surface.

Main Feature

- Ultra-flat polishing disc (flatness per $25\text{mm} \times 25\text{mm}$ less than 0.0025mm).
- Super precision rotation axis (tray end jump less than 0.01mm).

There are two processing stations, which can automatically grind multiple samples at the same time.

- Spindle rotation adopts stepless speed regulation control mode, and is equipped with a digital display meter real-time display of the number of revolutions.


Equipped with timer, can accurately control the working time (between $0\text{-}300\text{h}$).

- Optional automatic drip feeder or circulating pump, so that the grinding more convenient and quick.

Technical Parameter

Name	UNIPOL-802 Automatic precision grinding and polishing machine
Model	UNIPOL-802

<p>Installation condition</p>	<p>This equipment is required to be used at an altitude of less than 1000m, a temperature of 25 °C ± 15 °C, and a humidity of 55% Rh ± 10% Rh.</p> <ol style="list-style-type: none"> 1. Water: The equipment is equipped with upper and lower water outlets, which need to be connected to tap water and drainage by themselves. 2. Electricity: AC220V 50Hz, must have good grounding 3. Gas: None 4. Worktable: size 800mm × 600mm × 700mm, bearing more than 200kg 5. Ventilation device: no need
<p>Product details</p>	<p>UNIPOL-802 automatic precision grinding and polishing machine is suitable for grinding and polishing samples of crystals, ceramics, infrared optical materials (such as zinc selenide, zinc sulfide, silicon, germanium and other crystals), metals, glass, rock samples, ore samples, PCB boards, refractory materials, composite materials and other materials. It is one of the ideal grinding and polishing equipment for scientific research and production experiments. This machine is equipped with a Ø203mm grinding and polishing disc and two processing stations, which can be used to grind and polish planes ≤ Ø80mm. In the grinding process, the two processing stations can swing left and right at a certain frequency, and at the same time push the carrier block to swing left and right. The carrier block rotates while revolving with the grinding plate, so that the sample does irregular movement and the surface quality of the ground sample is uniform. The carrier block equipped with the grinding and polishing machine is a precision cylindrical metal block with high flatness and parallelism, so that the surface of the ground sample also has high flatness and does not chamfer the edge of the sample, which is especially suitable for samples with high edge requirements. If the UNIPOL-802 automatic precision grinding and polishing machine is equipped with appropriate accessories (GPC-50A precision grinding and polishing controller), it can mass produce high-quality plane grinding and polishing products. GPC-50A precision grinding and polishing instrument can closely control the flatness and parallelism of the ground sample. The UNIPOL-802 precision grinding and polishing machine can grind the sample by adding abrasive to the grinding disc, or grind the sample by sticking sandpaper on the polishing disc. The sandpaper or polishing pad is loaded by magnetic adsorption, which is convenient for loading and unloading. The specific choice of sandpaper grinding or abrasive grinding can be selected according to the material of the ground sample.</p>
<p>Main parameter</p>	<ol style="list-style-type: none"> 1、Voltage: 110/220V 2、Power : 275W 3、Spindle speed: minimum starting speed ~ maximum speed 10~250rpm 4、Station: 2pcs

	5、 Number of swing of support arm: 0-9 times/min	
	6、 Pallet end jump: 0.008/180mm	
	7、 Polishing plate: $\varnothing 203\text{mm}$	
	8、 Load tray: $\varnothing 80\text{mm}$	
	9、 Product specification: <ul style="list-style-type: none"> • Dimension: $580\text{mm} \times 420\text{mm} \times 350\text{mm}$ • Weight: 68kg 	


GPC-50A Precision grinding and polishing controller










The GPC-50A precision grinding and polishing control instrument is referred to as the grinding and polishing control instrument, which is mainly used to control the flatness and parallelity of the surface of the ground sample, so that the ground and polished sample has high dimensional accuracy and excellent surface state. The grinding and polishing control instrument is made of high-quality stainless steel material, with beautiful appearance and exquisite manufacturing process, which is mainly suitable for UNIPOL-802 grinding and polishing machine. The GPC-50A precision grinding and polishing control instrument is an indispensable precision instrument for grinding and

polishing of workpieces. It is especially suitable for small-sized thin sheet samples with high surface quality requirements. The special sample carrier block of the grinding and polishing control instrument is connected with the control instrument by thread. The sample is mounted on the sample carrier block in the form of adhesion. The diameter of the sample carrier block is not more than 50mm and the thickness is not more than 10mm.

The parallelism and flatness of the ground sample surface can be strictly controlled, and the control accuracy is high. The grinding process can be used with a digital display thickness gauge to observe the grinding amount of the sample at any time, especially suitable for grinding samples with high surface parallelism and flatness and sample thickness requirements.

Name	GPC-50A Precision grinding and polishing controller	
Model	GPC-50A	
Installation condition	<ol style="list-style-type: none"> 1. This equipment is required to be used at an altitude of 1000m below, a temperature of 25 °C 15 °C and a humidity of 55% RH 10% RH. 2. Water: water supply. 3. Electricity: None. 4. Qi: None. 5. Overall dimension: φ89mm * 154mm 6. Ventilation: Required. 	
Main parameter	1. Diameter of sample carrier plate: Ø52mm	
	2. Axial travel of the sample carrier: 10mm (the indexing nut moves one grid, and the sample carrier moves 0.025mm axially)	
	3. Accuracy of digital display meter: 0.001mm	
	4. No-load pressure of sample plate: 500g	
	5. Size of bearing sample: diameter ≤ 50mm, thickness ≤ 8mm	
	6. Product specification:	
<ul style="list-style-type: none"> • Dimension: OD 89mm, height 154mm 		

Standard Accessories

Sr.	Name	Quantity	Picture
1	Cast iron grinding disc	1	
2	Cast aluminum polishing disc	1	
3	Load tray	2	
4	Repair disc ring	2	
5	Polishing pads (matt leather, synthetic leather, polyurethane)	1 each	
6	Corundum grinding powder	0.5kg	
7	Paraffin rod	4	
8	Counterweight (total 400g)		