



**BANBROS ENGINEERING PVT. LTD.**

The Precision Measurement People

# AUTOMATIC GRINDING & POLISHING MACHINE

- **VALUE**
- **VERSATILITY**
- **PERFORMANCE**



**BUTOPOL-2000XP**

**DESCRIPTION:**

Model **BUTOPOL-2000XP** is a kind of double-disc pneumatic type automatic metallographic specimen grinding and polishing machine equipped with automatic polishing head and stepless speed changing. It features advanced performance and high degree automation and can finish the whole process of rough grinding, fine grinding, rough polishing and finishing polishing automatically. It is the necessary metallographic specimen preparing instrument for using in factories, scientific research institutes and laboratories of colleges.

**FEATURES:**

- Individual samples are loaded independently.
- Central force loading of the sample disc, fix six samples at one time, complete all grinding and polishing processes, and ensure the complete plane of each sample by the grinding.
- Grinding & polishing disc and sample disc: set and run all grinding and polishing parameters, such as rotating speed, grinding and polishing time, rotation direction, water valve on/off, etc., which are automatically saved and easy to call.
- Touch screen interface: it is convenient to set grinding and polishing parameters, intuitive status display and simple operation.
- The rotation direction of both grinding & polishing disc and sample disc can be switched, and the rotation speed changing is stepless.
- Working modes:
  - (1) Fully automatic mode:

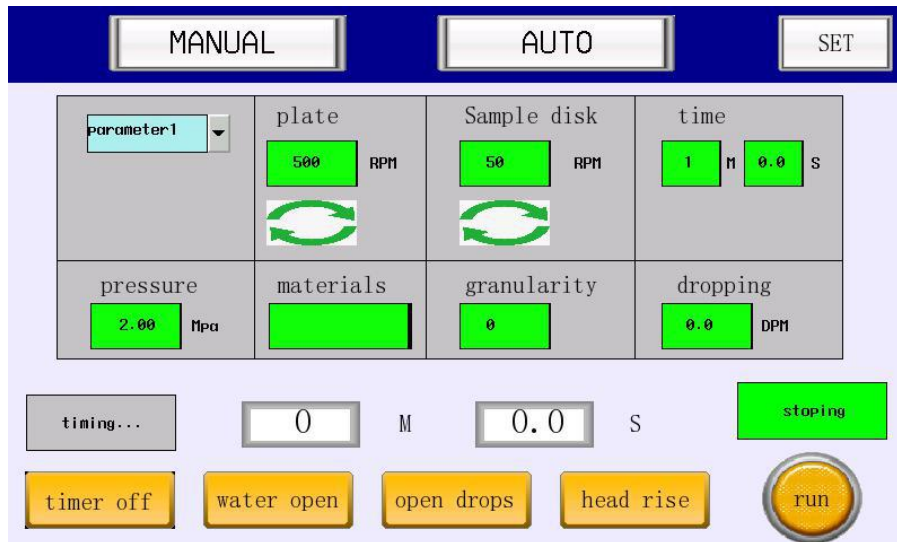
According to the sample materials or the habits of users, 30 sets of processes (processes) can be set and called, and each process can contain 10 process parameters (for each process, for a certain grinding or polishing process, process parameters: grinding disc and grinding head rotation speed, grinding and polishing time...)
  - (2) Single operation mode:

According to each grinding and polishing process, 30 process parameters can be set and called: grinding disc and grinding head rotation speed, grinding and polishing time, water on-off
  - (3) Manual mode:

Operate a function of the equipment separately
- Four channel automatic dispenser (optional):
  - (1) The main machine of the grinding and polishing machine controls the four channel dispenser. The type and speed of dispenser are controlled by the grinding and polishing machine.
  - (2) There are three working modes of the dispenser: manual, online and automatic.
  - (3) Connect the dispenser with the grinding & polishing machine and drip liquid according to the parameters set by the grinding and polishing machine. Each mode can set dripping speed and dripping time independently.
- The USB flash disk stores 300 processes, which can be imported and exported.



- Electromagnetic automatic locking of grinding head, replacing manual grinding head locking wrench, which is more convenient.
- By easily replacing the magnetic anti sticky disc, all processes such as rough and fine grinding, rough and fine polishing of various samples can be completed. One disc is equivalent to several discs.
- Mobile terminal remote control operation (optional).



Operation interface



Electromagnetic automatic lock & remote

**TECHNICAL SPECIFICATIONS:**

Model No.	BUTOPOL-2000XP
Grinding & Polishing Disc Diameter	254mm (optional 230mm, 203mm) with magnetic disc
Grinding Disc Rotation Speed	50~1000 rpm (Forward and reverse rotation direction can be switched)
Sample Disc Speed	30~200 rpm (Forward and reverse rotation direction can be switched)
Manual Mode	30 sets of parameters could be selected, each one can be set and called separately
Automatic Mode	30 sets of processes, each set of process contains 10-step parameters (from step 1 to step 10 automatically, each step has an independent setting of parameters)
Sample Holder	Ø30mm, 6-hole (optional 20mm, 6-hole, 40mm/50mm 3-hole, or others can be customized)
Grinding Head Locking Mode	Electromagnetic automatic lock
Working Air Pressure	Not less than 0.6 MPa
Motor Power	0.75Kw
Power Supply	AC 220V, 50/60Hz, Single phase, 2KW
Dimensions & Weight	760 x 730 x 700mm & 74kg

**STANDARD ACCESSORIES:**

Item Name	Q'ty	Item Name	Q'ty
BUTOPOL 2000XP	1 set	Diamond suspension polishing liquid, 6 micron 200ml	1 pc
One side sticky abrasive paper (250mm) 180#	2 pc	One side sticky polishing cloth (250mm), flocking (brown)	1 pc
One side sticky abrasive paper (250mm) 800#	2 pc	One side sticky polishing cloth (250mm), canvas	1 pc
One side sticky abrasive paper (250mm) 1000#	2 pc	Anti-sticky disc (250mm)	2 pc
Waterproof ring	2 pc	Magnetic working plate (250mm)	2 Pc
Input-water pipe 8mm	1 pc	Power cable (Aviation plug joint)	1 pc
Output-water pipe 25mm	1 pc	Data cable (Aviation plug joint)	1 pc
Hose hoops 18-32	1 pc	Triangle valve Ø12.7mm	1 pc
Hook	1 pc	Teflon tape	1 pc
Rubber pad with strainer Ø12.7mm	1 pc	Fast twist joint SNZ08-04	1 pc
Touch pen	1 pc	Filter piece Ø12.7mm	4 pc
Technical documents: Machine manual, certificate, packing list 1 share for each			

**OPTIONAL ACCESSORIES:****Air pump (optional)****Air pipe 6mm x 3m (optional)****Huawei M6 tablet PC (10.2", 4GB+64GB Wi-Fi)****4-channel polishing liquid dispenser**

<b>Metallographic grinding paper</b>	<b>GSC250A</b>	<ul style="list-style-type: none"> <li>• 100 pieces /package</li> <li>• Material: black carborundum</li> <li>• Sand size: P80# 120# 180# 320# 600# 800# 1000# 1200# 1500# 2000#</li> <li>• Size: Φ250mm</li> <li>• Waterproof and one side sticky, can be attached on the grinding plate directly</li> </ul>
<b>Anti-sticky disc</b>	<b>MAGNOMET</b>	<ul style="list-style-type: none"> <li>• Anti-sticky disc: 5 pieces/box</li> <li>• Diameter: Φ250mm</li> <li>• Surface coating with Special anti-sticky layer, can attach the sticky paper and polishing cloth directly, and easily replace without sticky mark.</li> <li>• Can be reused</li> </ul>
<b>Polishing cloth</b>	<b>FT250A</b>	<ul style="list-style-type: none"> <li>• Polishing cloth 10 pieces/package</li> <li>• Velvet fabric(long floss) / canvas (short floss)/ Woolen cloth (short floss) / silk cloth (no floss)</li> <li>• Φ250mm</li> <li>• One side sticky, can be attached directly on the grinding plate</li> </ul>
<b>Diamond grinding and polishing liquid</b>	<b>DSU</b>	<ul style="list-style-type: none"> <li>• Diamond grinding and polishing liquid, 500ml/bottle</li> <li>• Diamond suspending in the liquid, can be dropped automatically or watering pot, Uniformly distribution</li> <li>• Size: 0.25, 0.5, 1, 1.5, 2.5, 3, 3.5, 5, 6, 7, 9, 10, 14, 15, 20, 28, 40micron, for different material</li> </ul>

\* Due to continuous product development, Image &amp; specification can be upgrade.