

MultiPol

Automatic Grinder and Polisher

GRINDING/POLISHING



2026
3 / 2

TROJAN (SUZHOU) MATERIAL TECHNOLOGY CO.,LTD

MultiPol Automatic Grinder and Polisher

MultiPol is a fully automatic metallographic grinding and polishing system engineered for high-load and high-repeatability industrial preparation environments. The system features a central loading mechanism, enabling controlled and quantitative material removal with a removal accuracy of up to 0.1 mm. This ensures stable preparation conditions for reliable micro-structural analysis.

Equipped with a 6-channel automatic dosing system, MultiPol provides consistent consumable distribution throughout the preparation cycle, supporting uniform surface quality and process stability. The system is compatible with Ø250 mm to Ø300 mm platens, offering flexibility for diverse specimen sizes and preparation requirements.



Features:

◆ Advanced Process Control for Maximum Repeatability

MultiPol integrates automated control of critical preparation parameters, including applied load, platen speed, rotational direction, and processing time. By eliminating operator-dependent variations, the system ensures controlled and repeatable material removal throughout each preparation stage. Predefined preparation methods can be executed via single-command activation, guaranteeing consistent process conditions across batches, operators, and production shifts. This significantly enhances reproducibility and supports reliable micro-structural evaluation.

◆ Process Documentation & Standardization

MultiPol integrates automated control of critical preparation parameters. The system enables structured documentation of preparation parameters and process data, including: Specimen holder configuration; Defined preparation methods; Consumable dosing parameters; Individual process step duration; All parameters can be stored and recalled, facilitating standardized preparation protocols and ensuring long-term process stability. This structured process control supports laboratory quality systems and provides a foundation for traceable, validated sample preparation workflows in industrial and R&D environments.

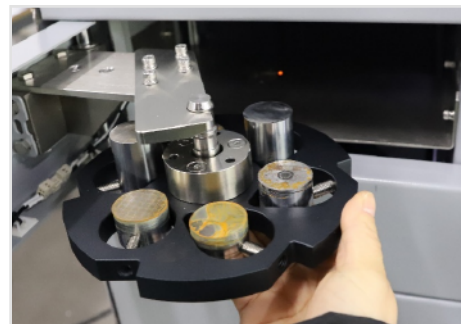


Features:

♦ High-Throughput Processing Capability

MultiPol adopts a synchronized drive structure combined with an integrated cleaning program, reducing cycle time between preparation stages.

The system accommodates up to 8 specimen holders per batch, enabling simultaneous processing of different specimen types and improving preparation throughput while reducing the likelihood of rework.



♦ User-Oriented Interface Design

The automatic dosing system features a visual monitoring layout and quick-connect structure, allowing real-time observation of consumable levels and efficient replacement.

The fully automated operation minimizes manual intervention, enabling rapid setup and operation without extensive operator training, while maintaining controlled and consistent preparation conditions.



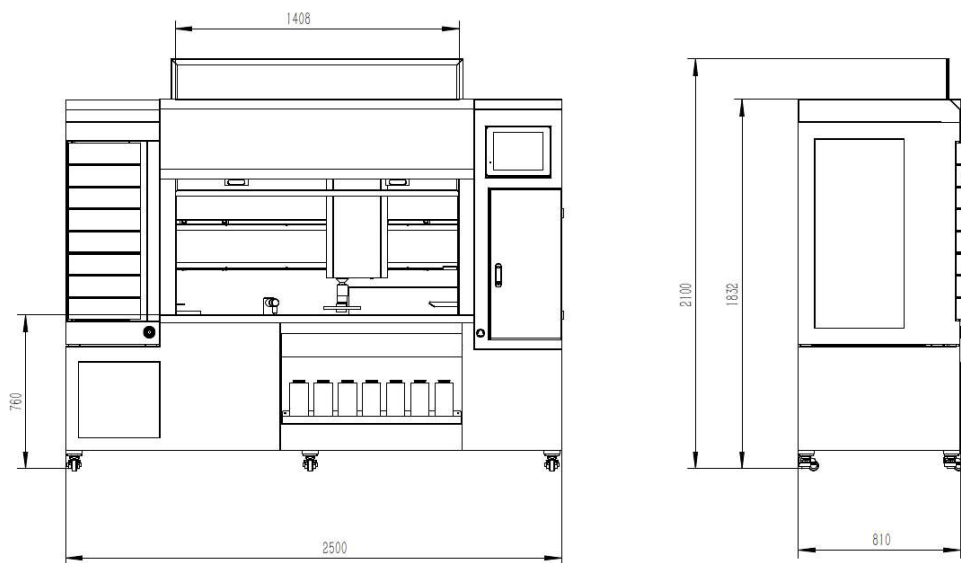
Technical Data:

Model		MultiPol-1	MultiPol-2
Input	Power Supply	3x380V, 8Kw	3x380V, 4Kw
	Compressed Air	>0.6MPa	
	External Water Supply	<0.3MPa	
Central Loading Unit	Motor	0.75Kw	
	Specimen Holder Speed	50-200rpm, CW, CCW	
	Specimen Holder Diameter	Maximum: 180mm	
	Applied Central Force	30-300N	
	Maximum Specimen Height	10-40mm	
Pre-Grinding Station	Motor	4.0Kw	×
	Speed Range	100-1500rpm	×
	Diameter	300mm	×
	Material Removal Control	0.1–10 mm (accuracy ±0.1 mm)	×
	Dressing Depth Control	50-200um	×
	Dressing Mode	Automatic (time-based or material removal-based);Manual	×
Polishing Station	Motor	2.2Kw	
	Platen Speed	50-600rpm	
	Platen Diameter	250mm, 300mm	

Disc Storage Unit	Capacity	8
	Abrasive Mounting	PSA-backed discs
Specimen Storage Unit	Capacity	8
	Door Interlock	Electromagnetic locking with status indicator
Automatic Dosing Unit	Diamond Suspension	4x1L, Flow Range: 0.1-35mL/min
	Alumina / Colloidal Silica	2x1.2L, Flow Range: 0.5-54mL/min
	Stirring	Integrated
	Level Monitoring	Low-level detection
Drying Unit	Cleaning Method	Ultrasonic cleaning + water rinse
Drying Unit	Drying Method	Air blow drying
User Interface	Display	12" touchscreen

Dimension Figure

Unit: mm



TROJAN (SUZHOU) MATERIAL TECHNOLOGY CO.,LTD

Tel: +86-512-65283666

Email: sales@trojanchina.com

Web: www.trojanworld.com

Add: Building 26, No.228 Gongtang Road, Luzhi Town, Wuzhong Suzhou, China

