

Product Brochure



MetPrep 3[™] Grinder/Polisher w/ PH-3[™] Powerhead for Glove Box

INTUITVE, DURABLE & RELIABLE SYSTEM FOR SEMIAUTOMATIC SAMPLE PREPARATION

GRINDING / POLISHING SYSTEM

Quality Products for Metallographic Sample Preparation & Analysis





PH-3™ Polisher Head - Up

The MetPrep 3™ Grinder/Polisher w/ PH-3™ Powerhead for Glovebox for hot/glove box environments is a powerful system for semiautomatic operation, ideal for low to high volume sample preparation requirements. It is designed to withstand various glove box environments (i.e., alpha-radiation inert) and has an overall reduced size to fit through most glove box portholes. Critical components of the machine have been removed to an external (remote) control box. Removable cover/side plates allow easy access for serviceability.

Intuitive menu navigation with user-friendly touchpad interface and backlit LCD make them easy to use and program. The microprocessor-based system allows up to 25 programmable steps, including parameters for platen speed, comp/contra rotation (sample holder/ platen), cycle time, fluid selection, sample force (LbF or N), sample rotation speed, water rinse and force reduction (on/off, %).

Accessories and consumables are sold separately.

Item	Description	
5-2500-LA	MetPrep 3 [™] / PH-3 [™] Glove Box System, 115V	
	Dims: 13" W x 19.5" D x 22" H (330 x 495 x 559 mm) Weight: 120 lb. (54 kg)	



For use in hot box / glove box environments

Grinder/Polisher Features

- Touchpad switches to control all functions
- External control box to protect critical components
- · Removable side plates that allow easy access for serviceability
- Reduced size fitting through 14" diameter porthole
- Variable platen and jog speed: 40-600 RPM (10 RPM)
- 0.25 HP (190 W) motor with durable reduction gearbox for constant high-torque output
- Variable cycle time: 0-120 minutes (15 second increments)
- Stable aluminum/stainless steel construction
- Emergency shut-off switch

Power Head Features

- Unique tilt-up feature that enables easy access to platen and holder
- Soft-start and force reduction control
- Simple push/pull attachment and removal of holders
- · Quick-lock system that allows sample holder positioning across entire platen surface
- 1/8 HP (95 W) motor with durable reduction gearbox for constant high-torque output
- Variable sample rotation speed: 0-150 RPM (10 RPM) increments)
- · Comp and contra rotation
- Central force sample preparation of up to 6 samples, adjustable from 5-50 lb. in 1 lb. increments (22-219 N in ~5 N increments)
- Individual force sample preparation of up to 3 mounts. adjustable from 0-16 lb. in 1 lb. increments (0-70 N in ~5 N increments)
- Two (2) year warranty
- Designed and manufactured by Allied in the USA





Control Panel with cable

Standard Platens



Standard aluminum platens are precision lapped parallel, then hard anodized for maximum wear resistance. They are used with adhesive backed discs, double sided adhesive discs and paper holding bands, or when converting to a magnetic platen using magnetic bases.

Item	Description	
5-2005	8" (203 mm)	
5-6010	10" (254 mm)	

Magnetic Platens



Magnetic platens combine a standard aluminum platen with a cross-hatched magnetic surface for maximum flatness and adherence. Only one platen is needed throughout the grinding and polishing process, allowing all magnetic system cloths/abrasive discs or ferromagnetic discs to be utilized.

Item	Description	
5-2005M	8" (203 mm)	
5-6010M	10" (254 mm)	

Double Sided Adhesive Discs (Pk/10)



Double sided adhesive discs are adhered to a standard platen and used to secure plain back silicon carbide abrasive discs. Each

provides 25-75 disc pulls depending on grit size, cycle time and force.

Item	Diameter
52-10005	8" (203 mm)
52-10003	10" (254 mm)

PTFE Ferromagnetic Support Discs



These reusable, durable ferromagnetic support discs combine a PTFE surface with a rigid stainless steel disc. This allows adhesive back abrasive discs/polishing cloths to be easily removed after use without any adhesive transfer. The nonslip backing keeps the disc in place even for coarse grinding.

Item	Diameter	
55-52000	8" (203 mm)	
55-52002	10" (254 mm)	

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Equipment is subject to change due to innovations/improvements at any time.



