



**MetPrep 3™ Grinder/Polisher**  
**w/ PH-3™ Powerhead for Hot Cell Environments**

*INTUITIVE, DURABLE &  
RELIABLE SYSTEM  
FOR SEMIAUTOMATIC  
SAMPLE PREPARATION*

GRINDING / POLISHING SYSTEM

Quality Products for Metallographic Sample Preparation & Analysis



The **MetPrep 3™ Grinder/Polisher w/ PH-3™ Powerhead for Hot Cell 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/contr 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
5-2510-LA	MetPrep 3™ / PH-3™ for High Gamma Radiation, 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 connected with a cable up to 18' (5.5 m)
- Designed with easy service in mind
- No rubber or plastic components
- Durable chain drive for the platen and sample rotation motors
- Removable side plates that allow easy access for serviceability
- Reduced size - if necessary it can fit through a 14" (356 mm) diameter porthole
- Variable platen and jog speed: 50-600 RPM (10 RPM increments)
- 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
- Lifting lugs for power head and grinder/polisher base
- Emergency shut-off switch

## Power Head Features

- Unique tilt-up feature that enables easy access to platen and holder
- Produces flat mounts with individual force polishing
- Soft-start and force reduction control
- Simple push/pull attachment and removal of holders
- Individual force pressure pistons are easily replaceable cartridges
- 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
- 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)
- Designed and manufactured by Allied in the USA 



*Unique tilt-up feature*

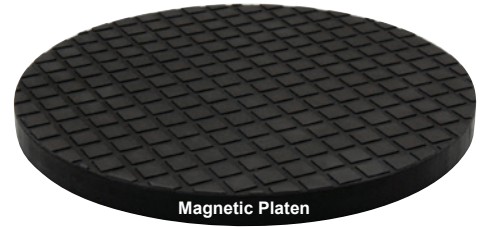
## Standard Platens



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)

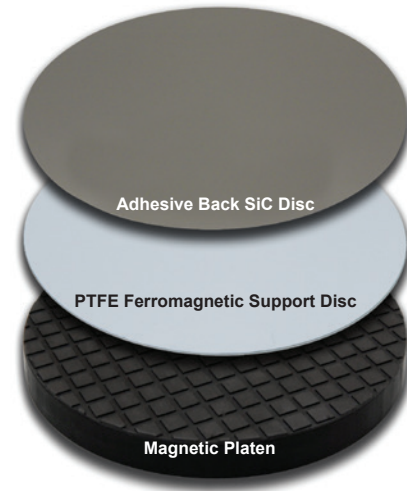
## Double Sided Adhesive Discs (Pk/10)



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)

# Global Distribution of the World's Finest Products



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



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HIGH TECH PRODUCTS, INC.

- Cerritos, California
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310.635.2466 Worldwide / 800.675.1118 U.S. & Canada  
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