

MIDLAND METROLOGY LIMITED

MPoli-230A

Metallographic Auto Grinder Polisher
(Grinding Polishing Disc Diameter:230mm)



Product Feature & Application

Product Feature

- Single chip micro computer for controlling grinding and polishing.
- Anti corrosion and durable.
- Strong large support chassis ensuring precision of rotary balance.
- Stepless speed and four speed control.
- Rotation direction is switchable.
- Spindle leak proof design ensuring no damage to bearing.
- Washing function.
- Magnetic grinding function for easy replacement.
- Teflon disc surface so no residue.
- Automatic locking and timing function making operation safe and convenient.



MPoli-1-230A Single Disc



MPoli-2-230A Dual Discs

Product Application

MPoli-230A can effectively replace the manual grinding and polishing processes so greatly saving labour force. Improving grinding and polishing quality and sample preparation efficiency. The ideal equipment for metallographic sample preparation

User Friendly

Both grinding head operation panel and grinding disc operation panel design. Waterproof cover. Grinding head with electricity and air pressure input.



Grinding Head Operation Panel



Grinding Disc Operation Panel



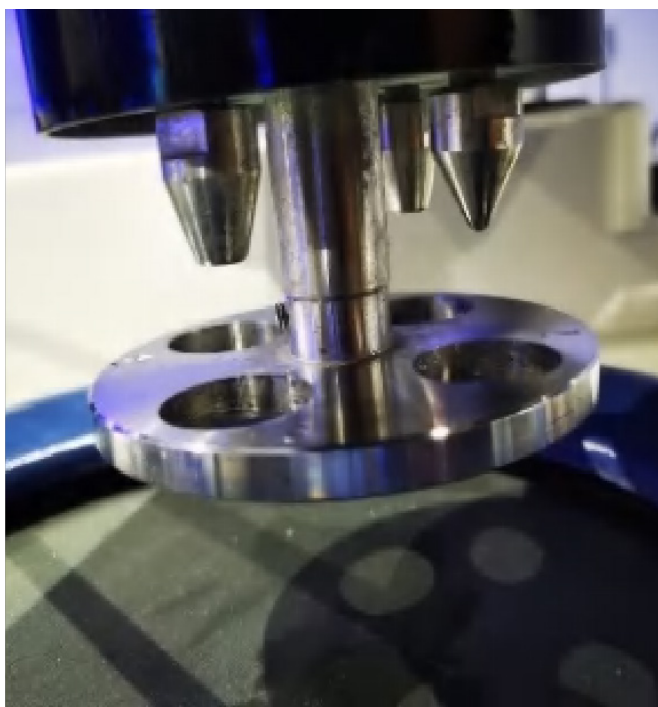
Waterproof Cover



Waterproof Cover



Waterproof Cover



Grinding Head



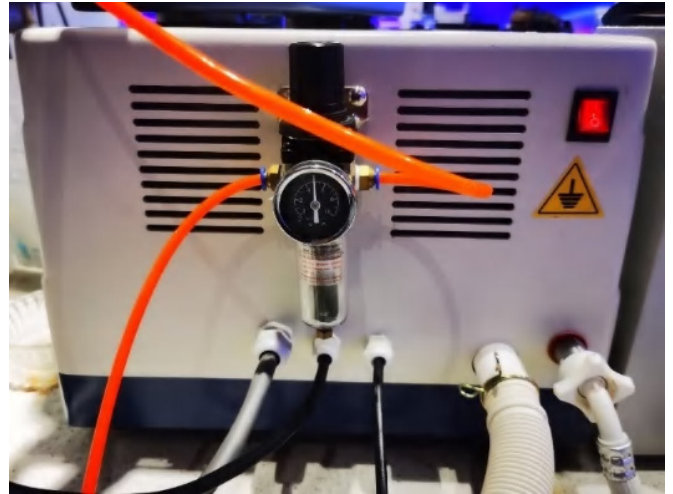
Grinding Head with Electricity & Air Pressure

User Friendly

Air pressure adjustment system. Water cooling system with water inlet/outlet.



Air Pressure Adjustment



Water Cooling/Electric/Air Pressure System



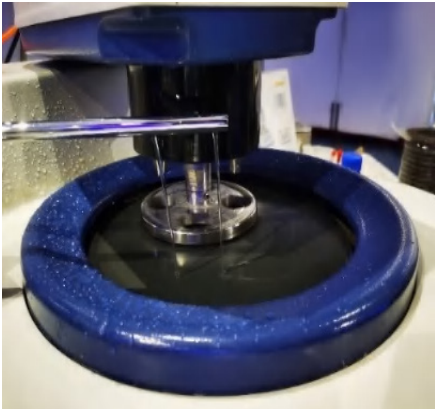
Water Inlet/Outlet



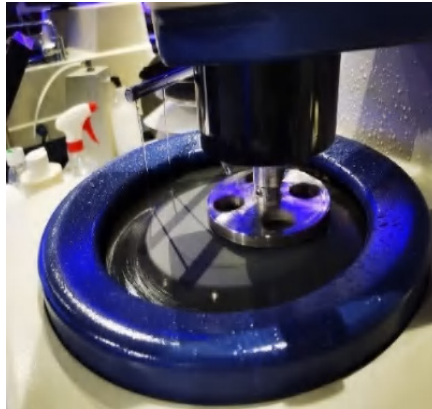
Air pressure Meter

User Friendly

Automatic wet grinding and washing function. Manual operation.



Wet Grinding



Wet Grinding



Washing Function



Manual Operation



Manual Operation

Ordering Information



MPoli-1-230A Auto Grinder Polisher

~25mm Sample Holder Diameter
~30mm Sample Holder Diameter
~40mm Sample Holder Diameter



MPoli-2-230A Auto Grinder Polisher

~25mm Sample Holder Diameter
~30mm Sample Holder Diameter
~40mm Sample Holder Diameter

Web:www.midland-metrology.co.uk

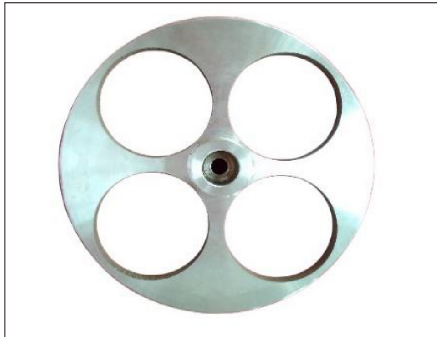
Email:sales@midland-metrology.co.uk

Technical Specification

Model	MPoli-1-230A	MPoli-2-230A
Product Name	Metallographic Auto Grinder Polisher	
Disc Diameter	230mm	230mm
Abrasive Paper Diameter	230mm	230mm
Disc Speed	Stepless Speed 100~1000r/min, or Four Speeds 250, 500, 750, 1000r/min	
Disc Rotational Direction	Clockwise or Counterclockwise	
Disc Electromotor	DC Brushless Motor, 220V, 600W	
Head Electromotor	Stepper Motor, 200W	
Head Speed	Stepless Speed 20~120r/min	
Timing Set	0~99min	0~99min
Sample Holding Qty.	4 pcs	4 pcs
Sample Holder Specification	~25mm, ~30mm, ~40mm (Choose One) or Customized Specification	
Pressure Method	Single Air Pressure	Single Air Pressure
Pressure Force	0~60N	0~60N
Control and Display	Keypanel Operation , LED display, Grinding Head Automatic Locking and Washing Function	
Power Supply	220V, 50Hz, 6A	220V, 50Hz, 8A
Machine Dimensions	420×660×630mm	757×660×630mm
Net Weight	50kg	78kg

Single Air Pressure Sample Holder

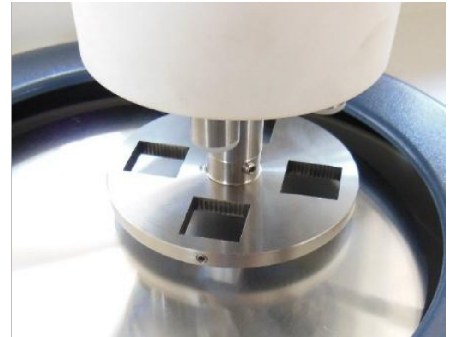
Standard Round Style sample holder. 4 holes and customised with different shapes according to end users.



Standard Sample Holder



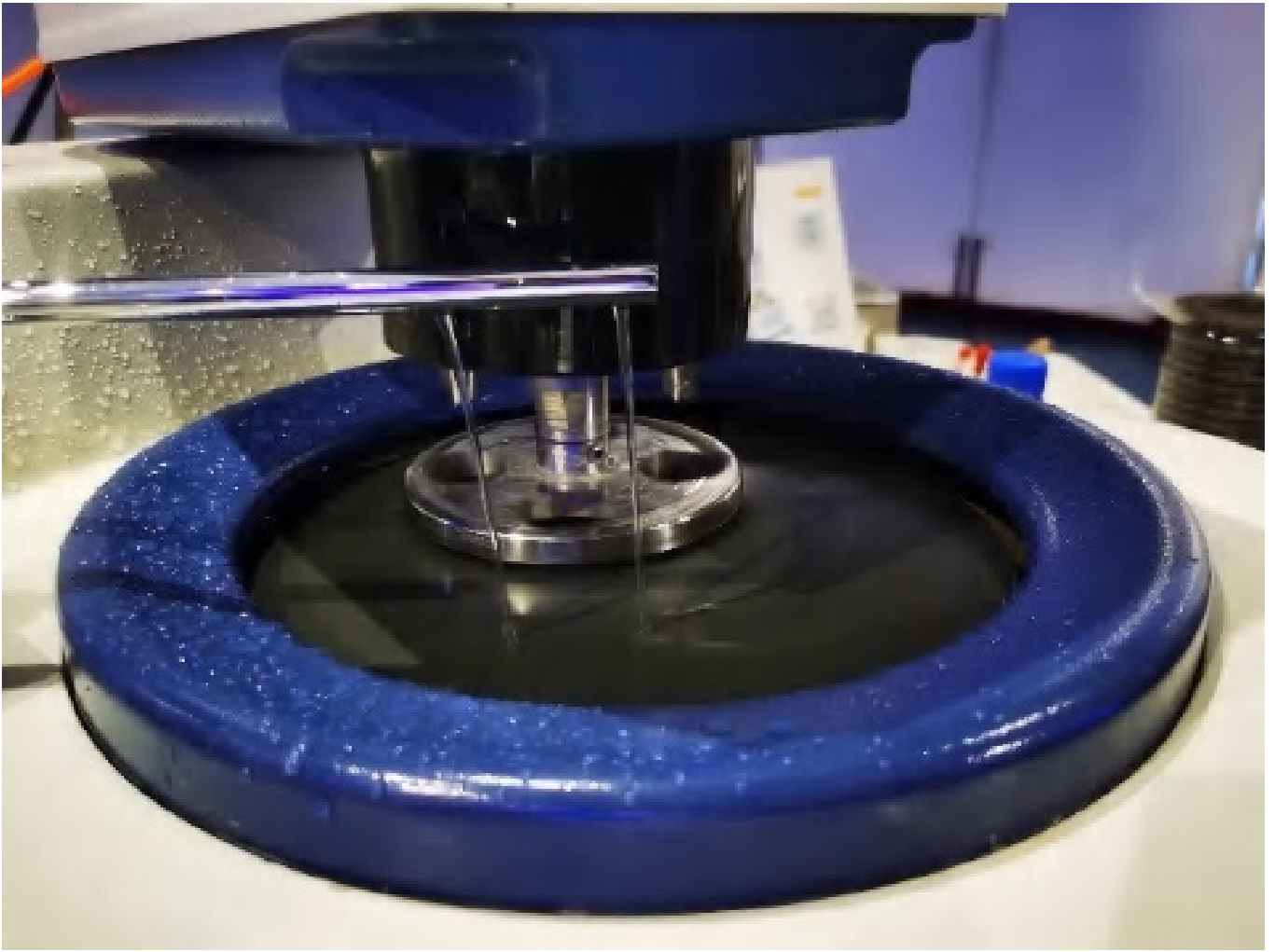
Standard Sample Holder



Customerized Sample Holder

Rinse & Spin Function

A rinse and spin function is included to prevent contamination between polishing steps with just one button touch. The rinse and spin function will turn on the water, Spin the platen at a user defined speed for a user defined time. The water is turned off during the last seconds of the cycle to remove excess water in preparation for the next polishing step.



Burst Dispensing (Optional)

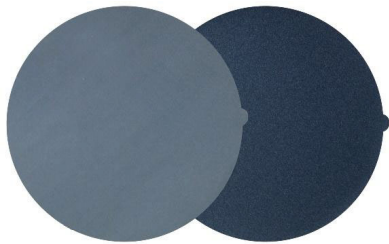


Packing List

Name	Specification	Qty
Machine Mainframe	/	1 set
Grinding Head	/	1 pc
Grinding Polishing Disc	230mm	1 pc
Magnetic Disc	230mm	1 pc
Teflon Pad	230mm	YMPZ-1: 4 pcs YMPZ-2: 6 pcs
Abrasive Paper	230mm	6 pcs
Polishing Cloth	230mm	2 pcs
Water Inlet Pipe	/	1 pc
Water Outlet Pipe	~32mm	1 pc
Water Inlet Filter	/	1 pc
Air Pipe	~6mm	1 pc
Air Filter	/	1 pc
Inner Hexagon Spanner	2mm, 3mm, 5mm	each 1 pc
Usage Instruction Manual	/	1 copy

Variable Grinding Abrasive Paper

Name	Specification
Silicon Carbide Abrasive Paper 230mm	(60#,80#,120#,150#,180#,220#,240#,280#,320#,360#,400#,500#,600#,800#,1000# 1200#,1500#,2000#)
Silicon Carbide Adhesive Abrasive Paper 230mm/250mm/300mm	(60#,80#,120#,150#,180#,220#,240#,280#,320#,360#,400#,500#,600#,800#,1000#,1200#,1500#,2000#)
Aluminium Oxide Abrasive Paper 230mm	(180#,240#,280#,320#,400#,600#,800#,1000#,1200#)
Aluminium Oxide Adhesive Abrasive Paper 230mm/250mm/300mm	(180#,240#,280#,320#,400#,600#,800#,1000#,1200#)
Dry Grinding Metallographic Abrasive Paper 230mm	(W5,W7,W10,W14,W20,W28,W40,W50)



Silicon Carbide Abrasive Paper



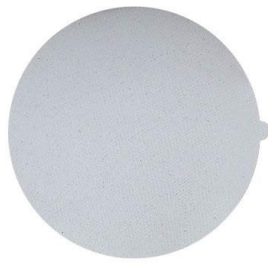
Aluminium Oxide Abrasive Paper



Dry Grinding Abrasive Paper

Variable Polishing Cloth

Name	Application	Specification
Adhesive Polishing Cloth Canvas	W5-W14	230/250/300mm
Adhesive Polishing Cloth Woolen	W3-W5	230/250/300mm
Adhesive Polishing Cloth Red Velvet	W5-W10	230/250/300mm
Adhesive Polishing Cloth Black Velvet	W1-W3	230/250/300mm
Adhesive Polishing Cloth Grey Velvet	W1-W3	230/250/300mm
Adhesive Polishing Cloth Polyurethane	W0.5-W3	230/250/300mm
Adhesive Polishing Cloth Silk	W0.5-W3	230/250/300mm



Polishing Cloth Canvas



Polishing Cloth Woolen



Red Velvet



Black Velvet



Grey Velvet



Polyurethane



Silk

Variable Polishing Agent

Name	Applicatio	Applicatio
Aluminium Oxide Powder	Suitable for the polishing of non-ferrous metal samples.	(W1、W3、W5)
Chromium Oxide Powder	Suitable for the polishing of ferrous metal samples.	(W1、W3、W5)
Synthetic Diamond Grinding Paste	Suitable for the polishing of ferrous and non-ferrous metals, ceramics, composite materials, gemstones, instruments, optical glass and other materials.	(W0.5,W1,W2.5,W3.5,W5)
Diamond Spray	Suitable for the polishing of all kinds of material and instruments parts.	(0.5μm,1μm,2.5μm,3.5μm,5μm,7μm,10μm)
Diamond Suspension (monomorph)	Suitable for iron and steel, non-ferrous alloy metal materials, glass, ceramics, gemstones, etc.	(0.5μm, 1μm, 3μm, 6μm, 9μm, 15μm)
Diamond Suspension (polycrystal)	Suitable for iron and steel, non-ferrous alloy metal materials, glass, ceramics, gemstones, etc.	(1μm, 3μm, 6μm, 9μm, 15μm)
Aluminium Oxide Fine Polishing Suspension	Suitable for final polishing of minerals, iron-based metals, low melting point metals, carbides, printed circuit boards, precious metals, electronic components and other materials.	(0.02μm, 0.05μm)
Silica metals, ceramics, composite materials, Fine Polishing Suspension gemstones, instruments, optical glass and other materials.	Suitable for the final polishing of minerals, iron-based metals, low melting point metals, carbides, printed circuit boards, precious metals, electronic components and other materials.	(0.02μm, 0.05μm)



Aluminium Oxide Powder Chromium Oxide Powder Synthetic Diamond Grinding Paste



Diamond Spray

Monomorph Diamond Suspension Polycrystal Diamond Suspension



Aluminium Oxide Fine Polishing Suspension

Silica Fine Polishing Suspension

Optional Accessories

Name	Specification
Sample Holder	~25mm, ~30mm, ~40mm or customized
Plastic Reduction Ring	~25mm, ~30mm, ~40mm or customized
Teflon Pad	230mm
Abrasive Paper 230mm	180#, 240#, 280#, 320#, 400#, 600#, 800#, 1000#, 1200#, 1500#, 2000#
Adhesive Polishing Cloth 230mm	Canvas, Velvet, Woolen, Long Velvet
Diamond Grinding Paste	W0.5, W1, W2.5, W3.5, W5
Alumina Powder	W1, W3, W5
Chromium Oxide Powder	W1, W3, W5
Diamond Spray	W0.5, W1, W2.5, W3.5, W5
Diamond Suspension	W1, W2.5, W5
Automatic Dropping Device	ZDD-1
Abrasive Paper Storage Rack	Ten layer shelf
Air Compressor	OTS550W-8L