



METALLOGRAPHIC
EQUIPMENT & SUPPLIES
CATALOG
2018 - 2019



Welcome to the worldwide headquarters of **LAPMASTER-WOLTERS** in Mount Prospect, IL. This is home to our Metallographic Products Division.



Visit our new metallographic demo laboratory featuring abrasive cutters, precision saws, mounting presses, grinders, polishers, ultrasonic cleaners, microscopes, digital cameras, imaging software and hardness testers.



ORDERING & CONTACT INFORMATION

TO PLACE AN ORDER

Phone toll free	1-877-352-8637
Inside Sales direct phone	1-224-659-7129
Fax	1-224-659-7103
Email	sales@lapmaster.com
Website & MSDS	www.lapmaster-wolters.com
Mailing Address	Lapmaster International LLC 501 West Algonquin Road Mount Prospect, IL 60056

KEY CONTACT INFORMATION

Don Bogacz , Midwest & West Coast Sales	1-224-645-8057	dbogacz@lapmaster.com
John Koch , East Coast & International Sales	1-847-219-1334	jkoch@lapmaster.com
Mike Gavagan , Inside Sales & Service	1-224-659-7129	mgavagan@lapmaster.com

SALES POLICY

Prices are subject to change without notice.

Minimum order \$50.00.

Standard terms Net 30.

All major credit cards accepted.

30 day return policy for supplies. Subject to inspection. May be subject to a restocking fee.

ISO 9001:2008 CERTIFIED

TABLE OF CONTENTS

MACHINERY

Abrasive Cutters	pg. 5
Precision Saws	pg. 11
Mounting Presses	pg. 17
Grinders & Polishers	pg. 22
Ultrasonic Cleaners	pg. 33
Lab Furniture & Accessories	pg. 34
Microscopes	pg. 35
Microscope Accessories	pg. 42
Digital Cameras & Software	pg. 44
Digital Inspection Systems	pg. 48
Hardness Testers	pg. 50

CONSUMABLES

SECTIONING

Abrasive Cut-Off Wheels	pg. 74
Diamond & CBN Blades	pg. 76
Sectioning Accessories	pg. 76

MOUNTING

Compression Mounting Materials	pg. 77
Cold Mounting Materials	pg. 78
Petrographic Mounting Materials	pg. 79
Mounting Accessories	pg. 80

GRINDING & POLISHING

Grinding Wheels	pg. 81
Abrasive Rolls, Strips & Belts	pg. 81
Abrasive Discs	pg. 83
Diamond Discs	pg. 84
Lapping Films	pg. 90
Polishing Cloths & Pads	pg. 91
Magnetic Mounting System	pg. 102
Diamond Compounds	pg. 103
Diamond Lubricants & Extenders	pg. 104
Diamond Aerosol Spray	pg. 104
Diamond Suspension	pg. 105
Abrasive Powders & Slurries	pg. 106

HARDNESS TEST BLOCKS

Rockwell & Microhardness Test Blocks	pg. 108
--------------------------------------	---------

CLEANING SOLUTIONS

Ultrasonic Cleaning Solutions	pg. 109
-------------------------------	---------

ABRASIVE CUTTERS

TR EVOLUTION SERIES

Our best selling and most affordable abrasive cutters. Designed to fit on any standard laboratory table and made with a built-in recirculating system inside the stainless steel base. The direct drive cast iron motor provides the quietest operation and most efficient motor on the market.

TR80 EVOLUTION

Cut-off wheel diameter	10.00" (250 mm)
Max cutting diameter	3.14" (80mm)
Cast iron motor power	1.75 HP (1.3 kW)
Spindle speed	2800 RPM
Built-in recirculating system	4.75 gallons (18 liters)
Weight	176 pounds (80 kg)
Dimensions	24.50" W x 28.75" D x 21.50" H
Power Supply	460V/60 Hz/3 phase <i>(Other voltages available)</i>



TR100 EVOLUTION

Cut-off wheel diameter	12.00" (300 mm)
Max cutting diameter	4.00" (100mm)
Cast iron motor power	3 HP (2.2 kW)
Spindle speed	2800 RPM
Built-in recirculating system	4.75 gallons (18 liters)
Weight	176 pounds (80 kg)
Dimensions	24.50" W x 28.75" D x 21.50" H
Power Supply	460V/60 Hz/3 phase <i>(Other voltages available)</i>

TR INOX SERIES

The TR INOX Series provides a much larger sectioning area and the belt driven cast iron motor allows for port holes on either side of the unit for sectioning of long pieces. Each model is available with a built-in recirculating system or a larger, separate recirculating system.



TR80 INOX

Cut-off wheel diameter	10.00" (250 mm)
Max cutting diameter	3.14" (80mm)
Cast iron motor power	3HP (2.2 kW)
Spindle speed	2800 RPM
Built-in recirculating system	6.6 gallons (25 liters)
Weight	286 pounds (130 kg)
Dimensions	33.50" W x 40.50" D x 25.00" H
Power Supply	460V/60 Hz/3 phase <i>(Other voltages available)</i>

TR80 INOX FLOOR MODEL

Same as above plus the following:

Base	Metal cabinet
External recirculating system	10.5 gallons (40 liters)
Weight	352 pounds (160 kg)
Dimensions	33.50" W x 40.50" D x 59.00" H

ABRASIVE CUTTERS



TR100 INOX

Cut-off wheel diameter
 Max cutting diameter
 Cast iron motor power
 Spindle speed
 Built-in recirculating system
 Weight
 Dimensions
 Power Supply

12.00" or 14.00" (300mm or 350mm)
 4.00" or 4.75" (100mm or 120mm)
 4 HP or 5 HP (3 kW or 3.7 kW)
 2500 RPM
 6.60 gallons (25 liters)
 385 pounds (130 kg)
 36.00" W x 40.50" D x 27.00" H
 460V/60 Hz/3 phase
 (Other voltages available)

TR100 INOX FLOOR MODEL

Same as above plus the following:

Base
 External recirculating system
 Weight
 Dimensions

Metal cabinet
 10.5 gallons (40 liters)
 385 pounds (175 kg)
 35.50" W x 40.50" D x 61.00" H

TR100 INOX PLC FLOOR MODEL

Cut-off wheel diameter
 Max cutting diameter
 Cast iron motor power
 Spindle speed
 Built-in recirculating system
 Weight
 Dimensions
 Power Supply

12.00" or 14.00" (300mm or 350mm)
 4.00" or 4.75" (100mm or 120mm)
 4 HP or 5 HP (3 kW or 3.7 kW)
 2500 RPM
 10.0 gallons (40 liters)
 385 pounds (130 kg)
 36.00" W x 41.00" D x 61.00" H
 460V/60 Hz/3 phase
 (Other voltages available)

Control panel
 Available feed options

PLC Touchscreen
 Manual table feed
 Automatic table feed
 Automatic wheel feed
 Manual cross-feed table

Available optional recirculating system

Metal INOX frame base with wheeled recirculating system, 26.4 gal.



PETROGRAPHIC SECTIONING

Our large range of cutters can be configured for sectioning of any type of petrographic sample. Our available diamond wheels, cross-feed translation table and special clamping devices provide a quick solution for all rock and mineral sectioning requirements.



ABRASIVE CUTTERS



TR100S INOX FLOOR MODEL

Cut-off wheel diameter	12.00" or 14.00" (300mm or 350mm)
Max cutting diameter	4.00" or 4.75" (100mm or 120mm)
Max cutting length (with optional longitudinal feed work table)	15.75" (400mm)
Cast iron motor power	4 HP or 5 HP (3 kW or 3.7 kW)
Spindle speed	2500 RPM
Built-in recirculating system	10 gallons (40 liters)
Weight	462 pounds (210 kg)
Dimensions	23.50" W x 33.00" D x 71.00" H
Power Supply	460V/60 Hz/3 phase (Other voltages available)
Available feed options	Manual table feed Automatic table feed Automatic wheel feed Manual cross-feed table
Available control panel	PLC Touchscreen

TR100L INOX FLOOR MODEL

Cut-off wheel diameter	14.00" or 16.00" (350mm or 406mm)
Max cutting diameter	4.75" (120mm)
Max cutting length	21.50" (550mm)
Cast iron motor power	5 HP (3.7 kW)
Spindle speed	2500 RPM
Built-in recirculating system	16.40 gallons (100 liters)
Weight	550 pounds (175 kg)
Dimensions	36.00" W x 54.00" D x 61.00" H
Power Supply	460V/60 Hz/3 phase (Other voltages available)
Available feed options	Manual table feed Automatic table feed Automatic wheel feed Manual cross-feed table
Available control panel	PLC Touchscreen

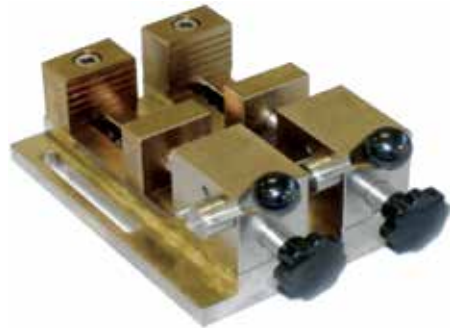


ABRASIVE CUTTERS

CLAMPING DEVICES FOR ALL TR SERIES ABRASIVE CUTTERS



Single Jaw Quick Cam Vises



Double Jaw Quick Cam Vises



Single Jaw Screw Type Vises



Double Jaw Screw Type Vises



Compound Vises



Vertical Clamping Kit



Petrographic Vises

ABRASIVE CUTTERS

MT SERIES LARGE PETROGRAPHIC SAMPLES CUTTER

The MT 500 cut-off machine is used for preliminary cuts of large samples (max 400 x 170 mm). It is built with a robust stain-less steel body, with a polycarbonate hood, fastened to a strong steel structure in which a wheeled stainless steel tank is located. The machine has a strong work-table with longitudinal and transversal manual movements for cutting slices. A fast clamping device locks the petrographic sample to the work-table. Cooling and cleaning systems are directly connected to the water supply. When the cutting wheel motor starts, automatically a water-spout hits both sides of the cutting wheel. Water is also sprinkled in the bottom of the machine for cleaning the inside walls.

A metallic grid holds coarser cutting residues while the water falls underneath in the stainless steel tank that is connected to the sewer system of the laboratory. The machine is equipped with a manual washing gun for internal cleaning. Special attention has been paid to guarantee maximal operating security: - the electric board is water tight- the push-button panel has low tension (24 V) - the hood opens only when the cutting wheel is not moving - an internal light allows the control of all cutting steps- full protection of the operator is guaranteed with the strong structure of the cut-off machine, the irremovable cutting wheel guard and the transparent polycarbonate hood. The longitudinal translation can be made automatic using an advancement system with adjustable speed (0-250 mm/min), with engaging clutch and anterior and posterior stop sensors.



MT 500

Cut-off wheel diameter	20.00" (500mm)
Max cutting capacity	6.70" x 15.75"
Cast iron motor power	7 HP
Recirculating system	26.42 gallons (100 liters)
Weight	2,640 pounds
Dimensions	44.00" W x 76.00" D x 68.00" H
Power Supply	460V/60 Hz/3 phase <i>Other voltages available.</i>
Standard feeds	Manual table feed Manual cross-feed

ABRASIVE CUTTERS

SECOMET SERIES

These large abrasive cutters are capable of sectioning extra large parts up to 8.00" x 19.60" in size. The units come standard with a manual table feed semiautomatic wheel feed movement. Optional automation includes automatic table feed with programmable stroke travel, automatic wheel feed and automatic cross feed for cutting slices.



	SECOMET 400	SECOMET 500	SECOMET 600
Cut-off wheel diameter	20.00" (500 mm)	20.00" (500 mm)	24.00" (600mm)
Maximum cutting capacity	6.70" x 15.75"	6.70" x 19.6"	8.00" x 19.60"
Cast iron motor power	15 HP	15 HP	15 HP
Recirculating system	66 gal (250 litre)	66 gal (250 litre)	66 gal (250 litre)
Weight	2640 pounds	3080 pounds	3146 pounds
Dimensions	44.00"w x 76.00"D x 68.00"H	44.00"w x 79.00"D x 68.00"H	44.00"w x 79.00"D x 68.00"H
Power supply	460V/60 Hz/3 phase (Other voltages available.)	460V/60 Hz/3 phase (Other voltages available.)	460V/60 Hz/3 phase (Other voltages available.)
Standard feeds	Manual table feed Semi-auto wheel feed	Manual table feed Semi-auto wheel feed	Manual table feed Semi-auto wheel feed
Optional automatic feeds	Automatic table feed Automatic wheel feed Motorized cross movement	Automatic table feed Automatic wheel feed Motorized cross movement	Automatic table feed Automatic wheel feed Motorized cross movement

PRECISION SAWS

MICROMET EVOLUTION SERIES

Our most economical precision saws are quite a step up from the old slow speed diamond saws. These units are variable speed/high speed (0-2,100 RPM) and can accommodate silicon carbide wheels for quickly sectioning non-ferrous material and aluminum oxide wheels for quickly sectioning ferrous materials. They can also use CBN blades for sectioning hard ferrous materials and diamond blades on just about any material.

MICROMET EVOLUTION

Available feed methods

Cut-off wheel diameter
Maximum cutting diameter
Motor power
Spindle speed
Built-in recirculating system
Dimensions of cutoff wheel zone
Weight
Dimensions
Power supply

Manual chop saw or manual chop saw with counterbalance weight system
3.00" to 5.00" (76mm to 127mm)
1.57" with 5.00" wheel
1/8 HP (95W)
0-2,100 RPM
0.075 gal. (0.28 ltr)
4.30" L x 6.30" W x 7.75" H
33 lbs. (14.97 kg)
12.00" W x 11.75" L x 11.75" H
115V/60 Hz/1 phase
(Other voltages available)



MICROMET SERIES

The MICROMET Series of precision saws offers larger sectioning capability capable of accommodating up to 8.00" cutting wheels and have variable speed/high speed (0-3,000 RPM) capabilities for applications using all types of cutting wheels for sectioning the widest range of materials.

MICROMET

Available feed methods

Cut-off wheel diameter
Maximum cutting diameter
Motor power
Spindle speed
Built-in recirculating system
Dimensions of cutoff wheel zone
Weight
Dimensions
Power supply

Manual chop saw or manual chop saw with counterbalance weight system

5.00" to 8.00" (76mm to 203mm)
2.36" with 8.00" wheel
1/3 HP (250 W)
0-3,000 RPM
1.10 gal. (4.16 ltr)
4.30" L x 6.30" W x 7.75" H
83 lbs. (37.65 kg)
19.75" W x 18.00" D x 15.00" H
115V/60 Hz/1 phase
(Other voltages available)

PRECISION SAWS

MICROMET SERIES ACCESSORIES

PRINTED CIRCUIT BOARD TABLE CUTTER ATTACHMENT FOR MICROMET

The table cutter attachment can be installed at the factory on the MICROMET Precision Saw or it can be added in the field to an existing unit.



PETROGRAPHIC THIN SECTIONING SAMPLE HOLDER FOR MICROMET

After proper cleaning of sample, it is cemented to a glass slide and has to be re-sectioned to remove excess material. This operation may be performed with the MICROMET Precision Saw fitted with the glass slide vacuum sample holder. Thanks to the micrometric movement of the sample holder, it is possible to position the slide in relation to the cutting wheel to obtain specimens of the desired thickness.

PETROGRAPHIC THIN SECTION GRINDING ATTACHMENT FOR MICROMET

This grinding attachment can be connected to the MICROMET Precision Saw and allows the thinning operation of a petrographic sample mounted on a glass slide. The slide is held by a vacuum sample holder. This holder can hold all types of glass slides, including the circular ones with 1" diameter. The structural characteristics of this machine allow thinning without vibrations and the preparation of flat parallel-faced samples. The preparation of thin sections is simple and fast and with reproducible results.

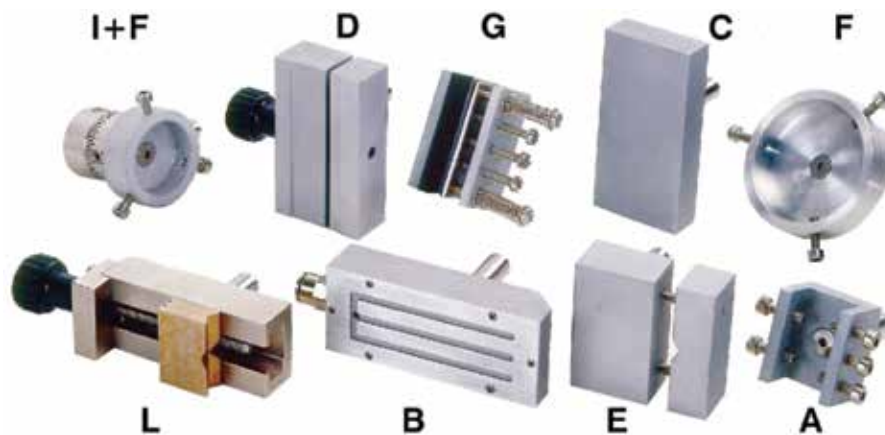


PRECISION SAWS

MICROMET AUTOMATIC SERIES

The MICROMET AUTOMATIC Precision Saw features an automatic electro-hydraulic sample advance system and can accommodate up to 6.00" sectioning wheels

Feed methods	Automatic electrohydraulic sample advance system
Cut-off wheel diameter	4.00" to 6.00" (102mm to 152mm)
Maximum cutting diameter	1.77" with 6.00" wheel
Motor power	1/3 HP (250 W)
Spindle speed	0-3,000 RPM
Built-in recirculating system	1.50 gal. (5.69 ltr)
Weight	99 lbs. (44.90 kg)
Dimensions	19.75" W x 23.75" D x 16.50" H
Power supply	115V/60 Hz/1 phase (Other voltages available.)



CLAMPING DEVICES FOR ALL MICROMET SERIES PRECISION SAWS

- Type A Sample Holder, for irregular shaped samples
- Type B Sample Holder, vacuum type to hold glass slides
- Type C Sample Holder, for gluing glass slides
- Type D Sample Vise, for glass slides
- Type E Sample Holder, with "V" groove for bars and tubes
- Type F Sample Holder, rotating design for round mounts up to 1.25"
(Type I also required)
- Type G Sample Holder, for thin samples
- Type I Goniometric Sample Holder for 360° rotation (Type F also required)
- Type L Micro Vise
- Type M support for small vise and sample holders, 90°
- Type P Sample Holder, vacuum type for petrographic glass slides

PRECISION SAWS

SECOTRON MANUAL SERIES

This manual 3-Axis precision saw features a "Y" cutting table for longitudinal movement with a maximum travel of 250mm and ± 0.01 mm accuracy. The, "Z" height of the wheel is controlled by an external crank with 50mm travel and accuracy of ± 0.05 mm.



SECOTRON 200 MANUAL

Available feed methods	Manual Y and Manual Z Axis
Cut-off wheel diameter	8.00" (200mm)
Maximum cutting diameter	1.57" with 5.00" wheel
"Y" Table maximum travel	10.00" (250mm)
"Y" Table accuracy	± 0.01 mm
"Z" height maximum travel	1.97" (50mm)
"Z" height accuracy	± 0.5 mm
Motor power	1/8 HP (95 W)
Spindle speed	0 – 3,000 RPM
Built-in recirculating system	3.17 gal. (12.00 ltr)
Weight	143 lbs. (64.86 kg)
Dimensions	24.50" W x 23.50" D x 17.75" H
Power Supply	115V/60 Hz/1 phase (Other voltages available)

PRECISION SAWS

SECOTRON PLC SERIES

These automatic 3-Axis Precision Saws feature a touchpad control panel that controls cutting force, feed rate, speed. Length of cut, X-Y direction of table, the motor voltage absorption, work & pause time for step cutting and coolant pump on or off. "Z" height adjustment is controlled by external handle. The cutting force and the table feed rate are automatically adjusted during the cut if the size and hardness of the work-piece changes to maintain a true feed and pressure rate throughout the cut. The body, cutting area and collection basket are made of high quality stainless steel. The T-slotted work table (250x250mm) supports a variety clamping devices to meet every cutting need.



SECOTRON 200 PLC

Available feed methods
Cut-off wheel diameter
Maximum cutting diameter
"Y" Table maximum travel
"Y" Table accuracy
"Z" height maximum travel
"Z" height accuracy
Motor power
Spindle speed
Built-in recirculating system
Weight
Dimensions
Power Supply

Automatic X-Y-Z and Manual Z Axis
8.00" (200mm)
1.57" with 5.00" wheel
10.00" (250mm)
± 0.01mm
1.97" (50mm)
± 0.05mm
1/8 HP (95 W)
0 – 3,000 RPM
3.17 gal. (12.00 ltr)
143 lbs. (64.86 kg)
24.50" W x 23.50" D x 17.75" H
115V/60 Hz/1 phase
(Other voltages available)



SECOTRON 300 PLC FLOOR MODEL

Available feed methods	Automatic X-Y-Z and Manual Z Axis
Cut-off wheel diameter	10.00" (250mm)
Maximum cutting diameter	1.57" with 5.00" wheel
"Y" Table maximum travel	13.78" (350mm)
"Y" Table accuracy	± 0.01mm
"Z" height maximum travel	8.00" (200mm)
"Z" height accuracy	± 0.05mm
Motor power	5 HP (3.73 kW)
Spindle speed	0 – 3,000 RPM
Built-in recirculating system	3.17 gal. (12.00 ltr)
Weight	330 lbs. (149.69 kg)
Dimensions	24.50" W x 23.50" D x 17.75" H
Power Supply	460V/60 Hz/3 phase (Other voltages available)

MOUNTING PRESSES



IPA SEMIAUTOMATIC SERIES

Our new semiautomatic mounting press provides a tremendous value while producing mounts that are of equivalent quality as any automatic mounting press. Program the heating temperature & time and the cooling temperature, pump up to appropriate pressure and produce an excellent mount in minutes.

IPA SA 30

Mount size	1.25" (30 mm.)
Maximum heating temperature	400F (200 °C)
Cooling temperature	Adjustable to desired temperature
Weight	79.37 lbs. (36 kg)
Dimensions	8.86" W x 18.90" D x 26.77" H
Power supply	115V/60 Hz/1 phase

IPA SA 40

Mount size	1.50" (40 mm.)
Maximum heating temperature	400F (200 °C)
Cooling temperature	Adjustable to desired temperature
Weight	79.37 lbs. (36 kg)
Dimensions	8.86" W x 18.90" D x 26.77" H
Power supply	115V/60 Hz/1 phase

IPA EVOLUTION SERIES

Our best selling and most economical automatic mounting press heats and cools under pressure for excellent edge retention and a mount cooled down to any desired temperature.

IPA EVOLUTION 1.00"

Mount size	1.00"
Maximum heating temperature	400F (200 °C)
Cooling temperature	Adjustable to desired temperature
Weight	55.12 lbs. (25 kg)
Dimensions	8.66" W x 18.90" D x 26.77" H
Power supply	115V/60 Hz/1 phase

IPA EVOLUTION 1.25"

Mount size	1.25"
Maximum heating temperature	400F (200 °C)
Cooling temperature	Adjustable to desired temperature
Weight	55.12 lbs. (25 kg)
Dimensions	8.66" W x 18.90" D x 26.77" H
Power supply	115V/60 Hz/1 phase

IPA EVOLUTION 1.50"

Mount size	1.50"
Maximum heating temperature	400F (200 °C)
Cooling temperature	Adjustable to desired temperature
Weight	55.12 lbs. (25 kg)
Dimensions	8.66" W x 18.90" D x 26.77" H
Power supply	115V/60 Hz/1 phase



MOUNTING PRESSES

IPA SERIES

The IPA can use any type of mounting material and will produce up to 2.56" (65mm) diameter mounts! All models have an optional ultra-deep mold cylinder available which can produce two full 0.63" (16mm) high mounts with spacer included.



IPA 1.25"

Mount size	1.25"
Maximum heating temperature	400F (200 °C)
Cooling temperature	Adjustable to desired temperature
Weight	93 lbs. (42.18 kg.)
Dimensions	15.75" W x 15.75" D x 20.00" H
Power supply	115V/60 Hz/1 phase

IPA 1.50"

Mount size	1.50"
Maximum heating temperature	400F (200 °C)
Cooling temperature	Adjustable to desired temperature
Weight	93 lbs. (42.18 kg.)
Dimensions	15.75" W x 15.75" D x 20.00" H
Power supply	115V/60 Hz/1 phase

IPA 2.00"

Mount size	2.00"
Maximum heating temperature	400F (200 °C)
Cooling temperature	Adjustable to desired temperature
Weight	93 lbs. (42.18 kg.)
Dimensions	15.75" W x 15.75" D x 20.00" H
Power supply	115V/60 Hz/1 phase

IPA 65

Mount size	2.50" (65mm)
Maximum heating temperature	400F (200 °C)
Cooling temperature	Adjustable to desired temperature
Weight	93 lbs. (42.18 kg.)
Dimensions	15.75" W x 15.75" D x 20.00" H
Power supply	115V/60 Hz/1 phase

IPA EMA

Mount size	Exchangeable Mold Assembly. Unit comes standard with a 2.00" Mold Cylinder and there are optional 1.25" and 1.50" Mold Sleeves available.
Maximum heating temperature	400F (200 °C)
Cooling temperature	Adjustable to desired temperature
Weight	93 lbs. (42.18 kg.)
Dimensions	15.75" W x 15.75" D x 20.00" H
Power supply	115V/60 Hz/1 phase

MOUNTING PRESSES

IPA ELECTROHYDRAULIC SERIES

A robust automatic mounting press that has a built-in electrohydraulic pump so there is no need for incoming compressed air connection. Can accept all forms of mounting powders and will make from 1.25" to 2.00" mounts.



IPA ELECTROHYDRAULIC 1.25"

Mount size	1.25"
Maximum heating temperature	400F (200 °C)
Cooling temperature	Adjustable to desired temperature
Weight	72 lbs. (32.66 kg.)
Dimensions	8.00" W x 19.00" D x 27.50" H
Power supply	115V/60 Hz/1 phase

IPA ELECTROHYDRAULIC 1.50"

Mount size	1.50"
Maximum heating temperature	400F (200 °C)
Cooling temperature	Adjustable to desired temperature
Weight	72 lbs. (32.66 kg.)
Dimensions	8.00" W x 19.00" D x 27.50" H
Power supply	115V/60 Hz/1 phase

IPA ELECTROHYDRAULIC 2.00"

Mount size	2.00"
Maximum heating temperature	400F (200 °C)
Cooling temperature	Adjustable to desired temperature
Weight	72 lbs. (32.66 kg.)
Dimensions	8.00" W x 19.00" D x 27.50" H
Power supply	115V/60 Hz/1 phase

IPA ELECTROHYDRAULIC 65

Mount size	2.50" (65mm)
Maximum heating temperature	400F (200 °C)
Cooling temperature	Adjustable to desired temperature
Weight	72 lbs. (32.66 kg.)
Dimensions	8.00" W x 19.00" D x 27.50" H
Power supply	115V/60 Hz/1 phase

IPA ELECTROHYDRAULIC EMA

Mount size	Exchangeable Mold Assembly. Unit comes standard with a 2.00" Mold Cylinder and there are optional 1.25" and 1.50" Mold Sleeves available.
Maximum heating temperature	400F (200 °C)
Cooling temperature	Adjustable to desired temperature
Weight	93 lbs. (42.18 kg.)
Dimensions	15.75" W x 15.75" D x 20.00" H
Power supply	115V/60 Hz/1 phase

MOUNTING PRESSES

COMPUPRES ELECTROHYDRAULIC SERIES

Featuring an easy-to-use touchpad LCD display, the COMPUPRES can store all parameters (mounting media name, pressure, heating time, heating temperature, and cool down temperature) for up to 100 mounting procedures. This unit comes standard with an interchangeable 2.00" Mold Cylinder and there are optional 1.00" 1.25" and 1.50" mold sleeves available. The COMPUPRES is also capable of producing two standard size mounts simultaneously with an available duplex spacer.



COMPUPRES

Standard mount size	2.00"
Available mold sleeves	1.00", 1.25" & 1.50"
Maximum heating temperature	400F (200 °C)
Cooling temperature	Adjustable to desired temperature
Weight	120 lbs. (54 kg)
Dimensions	15.75" W x 15.75" D x 20.00" H
Power supply	115V/60 Hz/1 phase (Other voltages available)

COLD MOUNTING ACCESSORIES

VACUUM IMPREGNATION SYSTEM

Friable and porous samples, without the structural characteristics to allow the cut or not sold enough to allow the preparation of the cementing surface, must be embedded in cold resins using the proper molds. Vacuum impregnation equipment allows the embedding of sand-like samples and the impregnation of delicate and fragile samples. Thanks to a translatable and rotatable crucible, it is possible the separate deaeration of the sample and of the resin. Once the proper vacuum has been achieved, the resin can be poured on the sample. This procedure allows the preparation of compact and bubble free samples.



TECHNOMAT PRESSURE CHAMBER

When fast-curing resins are allowed to set in a pressure unit, one obtains bubble- and pore free samples. The physical and chemical properties of the resin however remain completely unchanged. This pressure unit that was designed to suit the special technology of fast-curing resins. The pressure level of 2.0 bar was chosen to make allowance for the polymerization behavior of the cold polymer which is used for embedding metallographic specimens and for taking surface impressions in materials testing.

PETROGRAPHIC THIN SECTION CEMENTING DEVICE

Once you have a flat thin section, you can cement it to a glass slide. The sample cemented to the glass slide can then be sectioned and/or ground down to desired thickness. This device for cementing petrographic samples is built with a robust structure having four pressing springs with plastic pressure discs. This provides parallel mounted specimens using a minimal quantity of cement.



HOT PLATE

A hot plate with adjustable temperature may accelerate the bonding process when used in conjunction with Thin Section Cementing Device.

GRINDERS & POLISHERS



COMPUPLAN COARSE STONE GRINDING MACHINE

For rapid removal of material on the initial grinding step to produce a sample holder of planar mounts, the COMPUPLAN is the right choice. Featuring a newly designed dressing tool system and large roll-out recirculating coolant system, this heavy duty machine compliments a high volume sample preparation process at a great value.

COMPUPLAN

Dimension of grinding wheel	14.00" x 1.75" (355mm x 44mm)
Power of wheel motor	4 HP
Grinding wheel max speed	1,500 RPM
Power head motor power	1/3 HP
Sample holder rotation speed	150 RPM
Weight	551 pounds (249.93 kg)
Dimensions	31.00" W x 24.00" D x 57.00" H
Power supply	460V/60 Hz/3 phase (Other voltages available)

BG100 BELT GRINDER

This wet or dry belt grinder uses standard 4" x 36" abrasive belts features a device and options to hold 1.00", 1.25" or 1.50" metallurgical mounts perpendicular while grinding. This is especially useful for edge rounding and minimizing sample preparation times for automatic polishers.

BG100

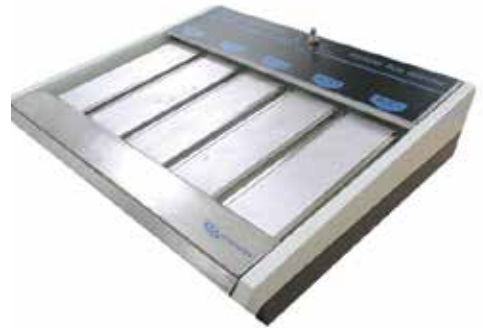
Belt size	4" x 36" (102mm x 914mm)
Motor power	0.75 HP
Cooling system	Water
Spindle speed	2,800 RPM
Weight	120 lbs. (53 kg)
Dimensions	24.75" W x 20.00" D x 14.75" H
Power supply	115V/60 Hz/1 phase (Other voltages available)



GRINDERS & POLISHERS

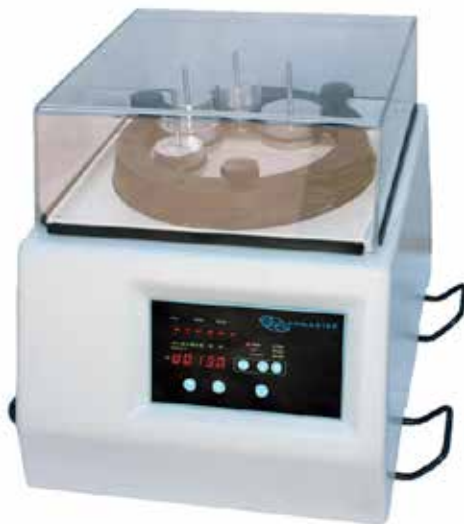
RG500 ROLL GRINDER

This 5-station hand grinder allows the ability to prepare samples from coarse-to-fine grinding. With the 3-7/16" x 60' abrasive rolls available from 240 to 1200 grit; anyone can produce nearly polished samples in minutes. The unit has an easy advancement system to remove used abrasive and provide a fresh abrasive roll area for consistent and rapid grinding. There is a water flow adjustment valve for proper lubrication.



RG500

Roll sizes	3-7/16" x 60'
Available grit sizes	240, 320, 400, 600, 800, 1200
Cooling system	Water
Dimensions	22.25" W x 21.00" D x 8.00" H



VP200 VIBRATORY POLISHER

The VP200 is a 12" vibratory polisher designed to prepare even the most difficult to polish materials with a very gentle polishing action. Polishing is accomplished by setting the default frequency so that the sample begins to vibrate. Changing the voltage varies the rotational speed. The unit features an interchangeable polishing bowl and variety of available sample holders and weights

VP200

Polishing bowl diameter	12"
Drive mechanism	Horizontal frequency control, speed variable voltage
Frequency	1-240Hz
Variable voltage (speed controller)	1-200 volts
Weight	284 lbs. (128.82 kg)
Dimensions	24.00" W x 25.00" D x 18.00" H
Power supply	115V/60 Hz/1 phase (Other voltages available)

GRINDERS & POLISHERS

LS SERIES – BASE UNITS

The LS Series is our grinder/polisher base available as the base unit alone or can be upgraded to an auto polisher with our LSA Series or LS DIGITAL Series of Power Heads. The wheel speeds available are single speed, two speed or variable speed. We offer 8", 10", 12" and now extra large 16" and 24" models.

LS1

Wheel diameter 8" (200 mm)
Wheel Speed 300 RPM - single speed
Weight 69 lbs (31 Kg)
Dimensions 14.50" W x 19.75" D x 11.75" H
Power supply 115V/60 Hz/1 phase



LS1 / LS2

Wheel diameter 8" (200 mm)
Wheel Speed 300 RPM (Left side)
0-300 (Right side)
Weight 69 lbs (31 Kg)
Dimensions 14.50" W x 19.75" D x 11.75" H
Power supply 115V/60 Hz/1 phase

LS2

Wheel diameter 8" (200 mm)
Wheel Speed 0-300 RPM - variable speed
Weight 69 lbs (31 Kg)
Dimensions 14.50" W x 19.75" D x 11.75" H
Power supply 115V/60 Hz/1 phase



LS2 / LS2

Wheel diameter 8" (200 mm)
Wheel Speed 0-300 RPM (Left side)
0-300 RPM (Right side)
Weight 69 lbs (31 Kg)
Dimensions 14.50" W x 19.75" D x 11.75" H
Power supply 115V/60 Hz/1 phase

GRINDERS & POLISHERS

LS250

Wheel diameter 10" (250 mm)
 Wheel Speed 0-300 RPM – variable speed
 Weight 71 lbs (32 Kg)
 Dimensions 14.50" W x 19.75" D x 12.00" H
 Power supply 115V/60 Hz/1 phase



LS250 TWIN

Wheel diameter 10" (250 mm)
 Wheel Speed 0-300 RPM (Left side)
 0-300 (Right side)
 Weight 69 lbs (31 Kg)
 Dimensions 14.50" W x 19.75" D x 11.75" H
 Power supply 115V/60 Hz/1 phase

LS3

Wheel diameter 12" (300 mm)
 Wheel Speed 150/300 RPM – 2 speed
 Weight 71 lbs. (32 kg)
 Dimensions 14.50" W x 19.75" D x 12.00" H
 Power supply 115V/60 Hz/1 phase



LS3V

Wheel diameter 12" (300mm)
 Wheel Speed 0-300 RPM – variable speed
 Weight 71 lbs. (32 kg)
 Dimensions 14.50" W x 19.75" D x 12.00" H
 Power supply 115V/60 Hz/1 phase

GRINDERS & POLISHERS



LS3V TWIN

Wheel diameter 12" (300 mm)
Wheel Speed 0-300 RPM (Left side)
0-300 (Right side)
Weight 69 lbs. (31 kg)
Dimensions 14.50" W x 19.75" D x 11.75" H
Power supply 115V/60 Hz/1 phase

LS400

Wheel diameter 16" (400mm)
Wheel Speed 0-300 RPM - variable speed
Weight 92 lbs. (41 kg)
Dimensions 18.00" W x 19.75" D x 11.75" H
Power supply 115V/60 Hz/1 phase



LS600

Wheel diameter 24" (600mm)
Wheel Speed 0-300 RPM – variable speed
Weight 92 lbs. (41 kg)
Dimensions 26.00" W x 27.00" D x 12.75" H
Power supply 115V/60 Hz/1 phase



GRINDERS & POLISHERS

LSA SERIES – POWER HEADS

Our most economical, non-programmable power heads for automatic polishing. The LSA Series can be configured with Central Pressure for use with sample holders that lock in the samples and the power head rotational force is applied down to center of the sample holder towards the base unit.

The power heads can also be configured with Central Force and Individual Mount Force with six pistons applying force to anywhere from one to six mounts loosely held in an appropriate sample holder.

The power heads are available with a fixed head or with an optional swivel head that allows you to position the sample holder wherever you want in relation to the grinding/polishing wheel.

The LSA Series Power Heads can be configured on any single or dual LS Series base unit.



LSA-FOR LS2 BASE WITH 8" WHEEL

LSA-FOR LS250V BASE WITH 10" WHEEL

LSA-FOR LS3V BASE WITH 12" WHEEL

Sample pressure	29-58 PSI (2 to 4 bar)	29-58 PSI (2 to 4 bar)	29-58 PSI (2 to 4 bar)
Timer	1 to 99 minutes	1 to 99 minutes	1 to 99 minutes
Power head rotational speed	40 RPM	40 RPM	40 RPM
Power head weight	55 lbs.	55 lbs.	55 lbs.
Power head dimensions	10.50" W x 15.75" D x 17.00" H	10.50" W x 15.75" D x 17.00" H	10.50" W x 15.75" D x 17.00" H
Power supply	115V/60 Hz/1 phase (Other voltages available)	115V/60 Hz/1 phase (Other voltages available)	115V/60 Hz/1 phase (Other voltages available)

GRINDERS & POLISHERS

LS DIGITAL SERIES – POWER HEADS

The LS DIGITAL Power Heads have a touchpad control panel for storing all parameters and multiple steps of a sample preparation procedure including wheel speed, pressure, direction of sample holder, time, water, oil and the optional automatic dispensing system.

The power head can be configured with Central Pressure for use with sample holders that lock in the samples and the power head rotational force is applied down to the center of sample holder towards the base unit.

The power heads can also be configured with Central Force and Individual Mount Force with six pistons applying force to anywhere from one to six mounts loosely held in an appropriate sample holder.

The power heads are available with a fixed position head or with an optional swivel head that allows you to position the sample holder wherever you want in relation to the grinding/polishing wheel.

The LS DIGITAL Power Heads can be configured on any single or dual LS Series base unit.



	LS DIGITAL- FOR LS2 BASE WITH 8" WHEEL	LS DIGITAL- FOR LS250V BASE WITH 10" WHEEL	LS DIGITAL- FOR LS3V BASE WITH 12" WHEEL
Sample pressure	29-58 PSI (2 to 4 bar)	29-58 PSI (2 to 4 bar)	29-58 PSI (2 to 4 bar)
Timer	1 to 99 minutes	1 to 99 minutes	1 to 99 minutes
Power head rotational speed	40 RPM	40 RPM	40 RPM
Power head weight	55 lbs.	55 lbs.	55 lbs.
Power head dimensions	10.50" W x 15.75" D x 17.00" H	10.50" W x 15.75" D x 17.00" H	10.50" W x 15.75" D x 17.00" H
Power supply	115V/60 Hz/1 phase (Other voltages available)	115V/60 Hz/1 phase (Other voltages available)	115V/60 Hz/1 phase (Other voltages available)

GRINDERS & POLISHERS

COMPUMET SERIES – AUTOMATIC POLISHING SYSTEMS

The COMPUMET Auto Polishers have a touchpad control panel for storing all parameters and multiple steps for up to 60 sample preparation procedures including wheel speed, pressure, direction of sample holder, time, water, oil and the automatic dispensing system. The automatic dispensing system is standard on the 12" model and optional with the 8" and 10" models.

The power head can be configured with Central Pressure for use with sample holders that lock in the samples and the power head rotational force is applied down to the center of the sample holder towards the base unit.

The power head can also be configured with Central Force and Individual Mount Force with six pistons applying force down to anywhere from one to six mounts loosely held in an appropriate sample holder.

The COMPUMET is available with a fixed head or with an optional motorized oscillating head that moves the position the sample holder left-to-right across the polishing wheel for maximum use of the abrasive discs and polishing pads.



	COMPUMET 200 WITH 8" WHEEL	COMPUMET 250 WITH 10" WHEEL	COMPUMET 300 WITH 12" WHEEL
Storage program capacity	60 procedures with multiple steps	60 procedures with multiple steps	60 procedures with multiple steps
Wheel speed	0-300 RPM	0-300 RPM	0-300 RPM
Sample pressure	29-58 PSI (2 to 4 bar)	29-58 PSI (2 to 4 bar)	29-58 PSI (2 to 4 bar)
Timer	1 to 99 minutes	1 to 99 minutes	1 to 99 minutes
Power head rotational speed	40 RPM	40 RPM	40 RPM
Automatic dispensing system	Optional	Optional	Optional
Power head weight	147 lbs. (67 kg)	154 lbs. (70 kg)	183 lbs. (83 kg)
Power head dimensions	18.00" W x 24.75" D x 32.00" H	18.00" W x 24.75" D x 32.00" H	18.00" W x 24.75" D x 32.00" H
Power supply	115V/60 Hz/1 phase	115V/60 Hz/1 phase	115V/60 Hz/1 phase

GRINDERS & POLISHERS

PETROGRAPHIC THIN SECTION GRINDER/POLISHERS

PETROPOL 801

The PETROPOL 801 Petrographic Polisher is designed to automatically polish petrographic samples with a thinning device that attaches the glass slides by vacuum and features a micrometer to regulate sample thickness. The 8" (200mm) aluminum polishing wheel is variable speed (0-300 RPM) and includes a lapping oil dispenser to assist with precise sample preparation.



PETROPOL 806

The LAPMASTER PETROPOL 806 Petrographic Polisher is designed to automatically polish up to six petrographic samples adhered to 28mm x 48mm glass slides with pressure applied by weights. The 8" (200mm) aluminum polishing wheel is variable speed (0-300 RPM) and features a lapping oil dispenser to assist with easy and quick sample preparation.

GRINDERS & POLISHERS

PETROGRAPHIC ROCK CORE SAMPLE GRINDER/POLISHER

LS2/RCS

The LS2/RCS Rock Core Sample Grinder/Polisher can accommodate a wide variety of rock core or cylindrical samples by means of a custom-sized containment cylinder. The unit features the rock core sample holder attachment with containment cylinder and cylinder inner core guide.



LS MSP SERIES LARGE SAMPLE MECHANICAL GRINDER/POLISHERS

The LS2/RCS Rock Core Sample Grinder/Polisher can accommodate a wide variety of rock core or cylindrical samples by means of a custom-sized containment cylinder. The unit features the rock core sample holder attachment with containment cylinder and cylinder inner core guide.



LS400 MSP

Wheel diameter	16" (400mm)
Wheel Speed	0-300 RPM – variable speed
Mechanical sample fixture	Included
Weight	107 lbs. (48 kg)
Dimensions	18.00" W x 19.75" D x 24.00" H
Power supply	115V/60 Hz/1 phase

LS600 MSP

Wheel diameter	24" (600mm)
Wheel Speed	0-300 RPM – variable speed
Mechanical sample fixture	Included
Weight	165 lbs. (74kg)
Dimensions	26.00" W x 27.00" D x 24.00" H
Power supply	115V/60 Hz/1 phase



GRINDERS & POLISHERS

MINIMO PORTABLE GRINDER/POLISHER

MINIMO

The MINIMO is a portable grinder/polisher with a 1.25" (30mm) 90° rotating grinding/polishing disc. The disc head is variable speed (1,400 – 14,200 RPM). Silicon carbide abrasive discs and polishing pads are available along with all standard loose abrasives. An optional portable power station with rechargeable batteries is available.



PULITROL SERIES ELECTROLYTIC POLISHERS



PULITROL

The PULITROL provides effective electrolytic polishing and etching for all metals and alloys. The power source controls can be easily adjusted for polishing/etching tension, current and time.

PULITROL S

The PULITROL S has all of the features of the PULITROL plus a built-in database that stores up to 40 user definable polishing and etching methods for a wide variety of metals and alloys. You can polish and etch separately or automatically switch from polishing to etching if the automatic process is selected.





BTV SERIES

The BTV Series of ultrasonic cleaners are economical yet powerful, stainless steel benchtop cleaning systems. Each model has digital LCD controls for ultrasonic and heater functions, control cycle times and temperature settings up to 175° F (80° C). The ultrasonic sound waves move through the cleaning solution for rapid break-down of microscopic cleaning bubbles that can be enhanced with heat. All units come with a standard stainless steel basket for holding submerged samples and easy removal.

	BTV-020	BTV-032	BTV-065	BTV-150	BTV-300
Tank Capacity	0.50 Gallon	0.80 Gallon	1.70 Gallon	4.00 Gallon	7.90 Gallon
Ultrasonic Power	70X/140W	120W/240W	180W/360W	360W/720W	600W/2,000W
	Peak	Peak	Peak	Peak	Peak
Heater Power	50W	100W	200W	300W	500W
Tank Size	5.88"Wx5.25"D x3.88" H	9.38"Wx5.25"D x3.88" H	11.88"Wx5.88"D x5.88" H	13.00"Wx11.88"D x5.88"H	19.75"W x 11.88"D x7.88" H

METAL SUPPORT CABINET

Reinforced stand with swing door and storage area. This cabinet can support heavy equipment such as abrasive cutters and auto polishers.

Dimensions: 35.50" W x 40.50" D x 33.00" H



POKER METALLOGRAPHIC SAMPLES STORAGE CABINET

Multifunctional Wood Storage Cabinet with 10 drawers. Each drawer supplied with a plastic container tray for 100 - 1.25" (30mm) metallographic samples.

Dimensions: 18.50" W x 25.60" D x 34.30" H

POLISHING WHEELS SUPPORT STAND

This stainless steel stand can organize and support up to six polishing wheels.



MICROSCOPES

INVERTED MICROSCOPES



UNITRON VERSAMET 4

Available illumination modes	BF/DF/DIC/POL
Viewing head	45 degree trinocular head, 360 degree rotatable, inter-pupillary distance: 50~75mm, splitting ratio binocular: trinocular=100:0 or 0:100
Eyepieces	High eye-point wide field plan eyepiece PL10X/22mm, diopter adjustable, reticle attachable
Available objectives	Long working distance plan achromatic metallurgical objectives: 5X/10X/20X/50X/100X
Nosepiece	Quintuple or sextuple nosepiece with DIC slot
Illumination system	External wide voltage transformer, 100V - 240V input, 12V5A output; with light indicator, intensity adjustable, with infrared induction
Stage	240 X 250mm three-layer mechanical stage, moving range: 50 X 50mm; both way linear guide rail, right low-position adjustment



XJL-20

Available illumination modes	BF/DF/DIC/POL
Viewing head	Hinged binocular tube, with an observation angle of 45°, and a pupil distance of 53-75mm
Eyepieces	10X wide field plan eyepiece and field of view number is Φ 22mm, the eyepiece interface is Φ 30mm
Available objectives	Infinity plan achromatic objectives: 5X/10X/20X/40X/50X/60X/80X/100X
Nosepiece	Quintuple (Backward ball bearing inner locating)
Illumination system	External wide voltage transformer, 100V - 240V input, 12V5A output; with light indicator, intensity adjustable, with infrared induction
Stage	Mechanical stage overall size: 242mmX200mm and moving range: 30mmX30mm.

MICROSCOPES



MEIJI TECHNO IM7000 SERIES

Available illumination modes	BF/DF
Viewing head	Siedentopf type trinocular head – inclined at 30°, I.P. adjustment 53mm to 75mm graduated diopter on left eyetube (30mm I.D. eyetubes) with depolarizer, includes 80/20 beamsplitter
Eyepieces	SWH10X Widefield high eyepoint eyepiece
Available objectives	Plan Epi Objective ∞ Infinity Corrected: 5X/10X/20X/50X/100X
Nosepiece	Quintuple Nosepiece, side facing, with positive precision detent, click stops
Illumination system	Lamphouse for use with 12V/50W Halogen Lamp
Stage	Mechanical Stage with 240mm (X) x 184mm (Y) dimensions with 50mm (X) x 40mm (Y) movement and drop down coaxial X-Y controls



OPTIKA IM-3MET

Available illumination modes	BF/POL
Viewing head	Trinocular observation head, inclined 45°. Diopter adjustment on left eyepiece. Interpupillary adjustment 50-75 mm
Eyepieces	Wide field eyepieces EWF10X/22 with field number 22
Available objectives	Infinity corrected optical system IOS (Infinity Optical System). Plan-achromatic LWD objectives infinity corrected, made by following objectives: 5X/10X/20X//50X/100X
Nosepiece	Quintuple revolving nosepiece, rotation on ball bearings
Illumination system	Halogen bulb 12V/50W; intensity light control using a knob on the left side of the frame.
Stage	Fixed stage, dimensions 250x160 mm. Metal stage insert with hole for small dimension specimens

MICROSCOPES

UPRIGHT MICROSCOPES



OPTIKA B-1000 MET

Available illumination modes	BF/DF/DIC/POL
Viewing head	Trinocular Head 100/0 - 50/50 - 0/100 type
Eyepieces	WF10x/22mm or WF10x/24mm
Available objectives	IOS (Infinity corrected): 5X/10X/20X/50X/100X
Nosepiece	Quintuple or sextuple revolving nosepiece
Illumination system	Transmitted illumination: X-LED (8W power). Epi-illumination: special attachment with built-in 100W halogen lamp.
Stage	Standard mechanical stage (or a variety of other stage options)



MEIJI TECHNO MT7000 SERIES

Available illumination modes	BF/DF/POL
Viewing head	Trinocular head –Siedentopf type, Interpupillary adjustment 53mm to 75mm, graduated diopter in left eyetube (30.0mm I.D. eyetube) Inclined at 30 °
Eyepieces	SWH10X Widefield high eyepoint eyepiece, Field No. 22, tube O.D. 30.0 mm
Available objectives	Plan Epi Objectives: 5X/10X/20X/50X/100X
Nosepiece	Ball bearing mounted, quintuple nosepiece
Illumination system	Vertical LED BF/DF/POL Illuminator, with clear blue, clear green, ND 50, Neutral Density filter, and polarizing filters in metal mounts 100V-240V automatic sensing power supply
Stage	Ceramic coated left or right-handed, flat top stage measures 191 mm x 126mm and travels: 100mm(X) x 100mm(Y). Ergonomically positioned coaxial drop down controls

MICROSCOPES



XJL-302 SERIES

Available illumination modes

Viewing head

Eyepieces

Available objectives

Nosepiece

Illumination system

Stage

BF/DF

Trinocular Head

Widefield WF10X/22mm

Infinity Plan Achromatic:
5X/10X/20X/50X/80X

Quintuple (Backward ball bearing, inner locating)

5 watt variable LED reflected illuminator with field and aperture diaphragm

Mechanical Stage: 280mm x 270mm, moving range 204mm x 204mm



UNITRON EXAMET-5

Available illumination modes

Viewing head

Eyepieces

Available objectives

Nosepiece

Illumination system

Stage

BF

Trinocular viewing head with a 50/50 split (light distribution 100% binocular, binocular /trinocular 50%/50%), inclined 30° and rotatable 360°

High eyepoint widefield plan 10x eyepieces with a 23mm field of view

Long working distance M Infinity Plan Achromat:
5X/10X/20X/50X/100X

Reversed quintuple nosepiece

5 watt variable LED reflected illuminator with field and aperture diaphragm

Mechanical Stage: 175mm x 145mm with a 76mm (X) x 42mm (Y) movement range

MICROSCOPES

STEREO MICROSCOPES



MEIJI TECHNO RZ SERIES

Viewing head	Trinocular, Rotatable 360°, Cast Aluminum Alloy Construction
Eyepieces	Super Widefield Eyepiece 10X (pair)
Magnification range	10x – 100x
Click stops	Yes, at 12 magnification positions
Working distance	3.54" (90mm)
Stand	Pole stand (as shown)



UNITRON Z10 SERIES

Viewing head	Trinocular viewing body
Eyepieces	WF10x focusable eyepieces, 23mm field of view
Magnification range	8x – 80x magnification range
Click stops	Yes, 1x, 2x, 3x, 4x and 5x
Working distance	3.07" (78mm)
Stand	Coaxial Coarse/Fine Focus LED Stand (as shown)

MICROSCOPES



MEIJI TECHNO EMZ-13 SERIES

Viewing head	Trinocular, Rotatable 360°, Cast Aluminum Alloy Construction
Eyepieces	Super Widefield Eyepiece 10X (pair) with 25mm reticle mount
Magnification range	10x – 70x
Working distance	3.54" (90mm)
Stand	Pole stand with with 20mm pillar (as shown)



UNITRON Z650HR SERIES

Viewing head	Trinocular viewing body
Eyepieces	WF10x focusable eyepieces, 23mm field of view
Magnification range	6x – 50x magnification range
Click stops	Yes, 1x, 2x, 3x, 4x and 5x
Working distance	4.53" (115mm)
Stand	Plain Focusing Stand with tension adjustment (as shown)



OPTIKA SZN-5

Viewing head

Eyepieces

Magnification range

Working distance

Stand

Illumination

Trinocular Head 100/0 - 50/50 - 0/100 type

EWF10x/22

6.7X – 45X

3.94" (110mm)

Pillar with rack and pinion system

Transmitted: 100 mm LED disc
Incident: double arm OPTIKA X-LED3.



OPTIKA SZN-8

Viewing head

Eyepieces

Magnification range

Working distance

Stand

Trinocular Head 100/0 - 50/50 - 0/100 type

EWF10x/22

6.7X – 45X

3.94" (110mm)

Simple overhanging stand

MICROSCOPE ACCESSORIES

SPECIMEN LEVELING PRESS



SPECIMEN LEVELING PRESS
PLASTICINE CLAY 0.22 lb. (100 grams)

METSOPTYP190
METSOPTJZX0911

LED LIGHT SOURCES



MEIJI TECHNO FL-5000-US-DG
LED DUAL ARM ILLUMINATOR

DOLAN-JENNER FIBER LITE® MI-LED
DUAL ARM ILLUMINATOR



OPTIKA LED DUAL ARM ILLUMINATOR

MICROSCOPE ACCESSORIES



UNITRON QUADRANT
RING LIGHT ILLUMINATOR

MEIJI TECHNO MA964
LED RING LIGHT ILLUMINATOR



OPTIKA CL-16.1
RING LIGHT ILLUMINATOR

ML72 RING LIGHT ILLUMINATOR





UNITRON AU-600-HD EXELIS HD

The Excelis HD color microscopy camera set a new standard for excellence in high definition imaging for scientific and industrial applications. The Excelis HD is a full-featured HD camera offering 60fps in video preview with unrivaled color fidelity and on-board image capturing software.

- 1080p color camera with live video preview without any lag time or compression
- HDMI & USB 2.0 output for video and images
- Built-in mouse control software for HDMI viewing/recording without a computer
- Simultaneous live image output to an HD monitor to a computer via USB 2.0
- On-board camera software with basic image controls (PC & Mac compatible)
- CaptaVision PC Imaging Software for more advanced image control, annotation & analysis
- Exposure time of 0.001 seconds to 10 seconds, 20 scales of Gain value and incredibly efficient 3D noise reduction for fluorescence applications
- Dual FPGA processors and unique algorithms produce perfect color reproduction

Sensor/Adapter	1/2.7" / 0.5x C-mount recommended; SONY IMX236
Resolution	1920 X 1080
Frame Rate	HDMI: 60fps / USB 2.0: 30fps
Image Capture	Hi Speed SD Card (8 GB)
Video Capture	HDMI: 1080p, 30fps to SD Card / USB 2.0: 1080p, 30fps to PC or Mac
Exposure Time	0.001 sec – 10.0 sec (8 GB)
White Balance	Auto
Settings	Gain, Gamma, Saturation, Contraction
Built-In Software	Cloud 1.0 (With live image measurement)
PC Imaging Software	CaptaVision Imaging Software (for PC only; Mac OS not supported) Advanced Camera Controls: live/still image measurement and annotation, flat field correction; extended depth of focus (focus stacking); image stitching; fluorescence image settings; fluorescence multi-color channel mixer merge; HDR (High Dynamic Range) function Image Types: JPEG, BMP, TIFF, and RAW
Output Modes	Mode 1: USB 2.0 / Mode 2: HDMI
System Compatibility	Windows XP, Vista 7 and 8 (32 or 64-bit) Mac OS X (for image transfer to Mac OS X only)
System Requirements	Intel Processor (Core 2 Duo or higher); 2GB memory or more; USB 2.0 Hi-Speed port
Power Supply	CD12V/1A
Warranty	1 Year
Standard Items	Excelis HD Camera, HDMI Cable, USB 2.0 Cable, 12V Power Adapter, 8GB SD Card, USB Mouse, CaptaVision PC Imaging Software

DIGITAL CAMERAS & SOFTWARE

UNITRON AU-600-HDS EXELIS HD

This package includes the Exelis AU-600-HD Digital Camera & Software (as described on prior page) and our 11.6" HD monitor that is attached directly to the camera.

The new Exelis HDS Camera & Monitor Systems allow users to view and capture images and video directly to the supplied SD card without the need for a computer or separate monitor! The 11.6" HD display offers beautiful, crystal-clear image quality, and vibrant, true-to-life color with exceptional viewing from all angles. It can be used as a stand-alone system, or connected to a PC via USB cable where images can be displayed simultaneously on the Exelis HDS monitor and the PC.

For even more flexibility and ideal for teaching environments, the HDMI architecture allows Exelis HDS to be connected to an HDMI-enabled projector as well.



Left: *Exelis HDS* shown on a Z650HR Stereo Microscope

Above: Side View of *Exelis HDS* Camera & Monitor System

- 1080p color camera with live video preview without any lag time or compression
- HDMI & USB 2.0 output for video and images
- Built-in mouse control software for HDMI viewing/recording without a computer
- Simultaneous live image output to an HD monitor to a computer via USB 2.0
- On-board camera software with basic image controls (PC & Mac compatible)
- CaptaVision PC Imaging Software for more advanced image control, annotation & analysis
- Exposure time of 0.001 seconds to 10 seconds, 20 scales of Gain value and incredibly efficient 3D noise reduction for fluorescence applications
- Dual FPGA processors and unique algorithms produce perfect color reproduction

Monitor	Mountable 11.6" HD Display (mounting hardware included)
Contrast	1000:1
Dot Pitch	0.1338mm
Input Modes	AC power, HDMI
Warranty	1 Year
Standard Items	Exelis HD Camera, 11.6" HD Monitor with mounting brackets/hardware, HDMI Adapter, Y Power Splitter, HDMI cable, USB 2.0 Cable, 12V Power Adapter, 8 GB SD Card, USB Mouse, CaptaVision PC Imaging Software



MEIJI TECHNO HD1500 MET

The HD1500MET is our full featured 6 MP camera with a 1/3" CMOS chip. A 0.3X C" mount adapter (MA151/35/03) is needed to attach it to any standard Meiji Techno America Trinocular Microscope. The HD1500MET features a full HD (1080x1920) resolution, which provides high fidelity images with a refresh rate of 60fps- frames per second when connected via HDMI, so there is absolutely no lag in the live video feed when moving your specimen or part. Included with the 11.8" High Definition display is a mounting kit that allows the display to be mounted directly in front of the HD1500MET.

The HD1500MET provides extremely powerful measurement functionality including: freehand lines, rectangles, polygons, circles, bicircles, angles, point-line distance and much more. In addition to the ability to measure point-line distance, angles, the length of curves and lines, the camera can measure the perimeter & area of enclosed features such as: rectangles, polygons, and circles. The unique calibration and magnification functions coupled with the ability to export the results to Excel or text files, make the measurements more convenient and simple.

Sensor	1/2.8" CMOS
C-mount	0.3X
Megapixels	2 - 6 MP
Resolution	3264 x 1840 Static, 1920 x 1080 Dynamic
Frame Rate	60fps by HDMI, 30fps by USB 2.0
Image Capture	Hi Speed SD Card (8GB)
Video Capture	HDMI: 1080p, 30fps to SD Card / USB 2.0: 1080p, 30fps to PC or Mac
System Compatibility	Windows XP, Vista 7 and 8 (32 or 64-bit) Mac OS X (for image transfer to Mac OS X only)
System Requirements	Intel Processor (Core 2 Duo or higher); 2GB memory or more; USB 2.0 Hi-Speed port
Warranty	1 Year
Standard Items	HD1500MET Camera, 11.8in HDMI Monitor, HDMI Cable, USB Cable, 12V AC/DC Power adapter, SD Card, Mouse , Application Metrics Software ISCapture



MEIJI TECHNO HD1500MET-M

This package includes the HD1500MET Digital Camera & Software (as described on prior page) along with a 11.8" HD monitor that is attached directly to the camera.

Included with the 11.8" High Definition display is a mounting kit that allows the display to be mounted directly in front of the HD1500MET-M.

The 11.8" High Definition display is used with the provided USB 2.0 mouse, with this the user can access menus that provide all the features of the camera such as exposure, white balance, color control (red or blue), gamma, brightness, sharpness, saturation, denoise, color temperature plus allows the user to save images and videos directly on the full SD card due to the onboard operating system.

You can flip the image horizontally, vertically, do a split screen where-in one side of the monitor is a live image and the other half is the captured image. You can also digitally increase/decrease the zoom if needed if your stereo system has reached it's magnification potential, this will give you the added digital magnification needed.

Superimpose a cross-line reticle directly on your live image, first click gives you a red line second click gives you a green line, and the third click omits the crossline. The live video and still shots can be saved directly on the removable full SD card for subsequent image capture. All this is achieved without the need for a PC. You may also connect directly to any monitor or TV with a HDMI port for a wider view if necessary. All USB 2.0, HDMI, SD card, power supply is all supplied.

Monitor	Mountable 11.8" HD Display (mounting hardware included)
Contrast	1000:1
Dot Pitch	0.1338mm
Input Modes	AC power, HDMI
Warranty	1 Year
Standard Items	HD1500MET-M Camera, 11.8in HDMI Monitor, HDMI Cable, USB Cable, 12V AC/DC Power adapter, SD Card, Retina Screen, Mouse, "L" Bracket Adapter for Monitor to Camera connectivity, Application Metrics Software ISCapture

DIGITAL INSPECTION SYSTEMS



UNITRON INSPEX HD 1080P

The Inspex HD 1080p is a modular digital inspection system offering 1080p images at 60fps. With an integrated LED light, removable USB image capture, and a wide variety of mounting and stand options, the Inspex HD 1080p is a best-in-class solution.

Inspex HD 1080p has a simple to use on-screen menu that enables many of the camera features. An optional external controller enables the use of three memory pre-sets, infrared mode, real time dimensioning grids, exposure and focus control.

An ideal instrument for production areas, micro-assembly work, electronics, inspection, gross imaging, quality control, presentation and training applications.

(Inspex HD 1080p shown with optional monitor)

Maximum Field of View	11.02" (280mm) x 6.46" (164mm)
Camera Resolution	HD 1080p (1920 x 1080)
Connections	HDMI out, USB for image capture
Focus	Auto / Manual
Illumination	Adjustable LED illumination
Response Time	5 ms
Input/Output Modes	HDMI Output; USB 2.0 x4 RJ45 Ethernet network connector General purpose IO port x3; DC 24v power jack
Recommended Monitor	16:9 DVI & HDMI Response time: 5ms Signal: Full HD 1080p— monitor not included
Standard Items	Auto / Manual Focus, Image Capture, Brightness Adjustment, Magnification Adjustment, Snapshot, Overview, High Contrast Mode, Height Adjustable



UNITRON OMNI 1080P

The OMNI Digital Imaging System is an integrated full HD (1080p) digital microscope and measurement system that operates without a PC. The custom platform incorporates a highly configurable and upgradeable set of inspection and measurement applications such as focus stacking, 2D measurement, side by side and overlay image comparison, custom on-screen reticle, and lens distortion correction.

The OMNI's platform has a powerful image processing and control engine that delivers superb full HD live video image quality at 60 frames per second enabling it to be used as a solution in a broad range of quality control, testing, rework, assembly, inspection and documentation tasks.

The GUI (Graphical User Interface) is a custom designed mouse-controlled interface delivering intuitive and efficient operation and control of the full application suite.

Its unique ability to stay in calibration over the entire zoom range is one of many features that differentiates this system from other digital inspection systems.

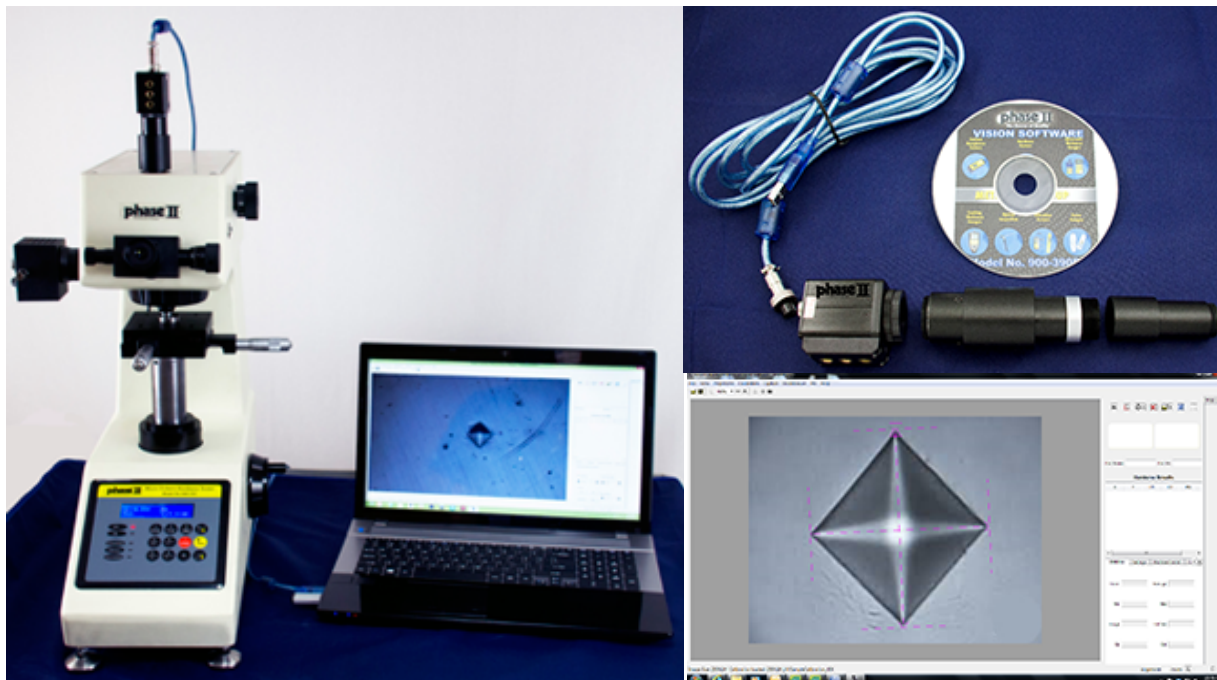
Camera control functions (auto/manual focus, exposure, gain, brightness, white balance) ensure ultra-sharp, high contrast imaging.

The OMNI's quick response, cable-free interchangeable illumination modules with intensity and quadrant control, ensure shadow-free illumination and glare reduction.

Maximum Field of View	9.10" (231mm) x 5.35" (136mm)
Camera Resolution	HD 1080p (1920 x 1080); 60fps; 30x optical / 2x digital
Zoom	5D lens; 2.5x-122x (24" screen)
Basic Functions	Auto / Manual focus, brightness adjustment, magnification adjustment, snapshot, overview, high contrast mode, height adjustable
Response Time	5 ms
Input/Output Modes	HDMI Output; USB 2.0 x4 RJ45 Ethernet network connector General purpose IO port x3; DC 24v power jack
Monitor Format	HD ready or Full HD16:9 (recommended) – monitor not included

HARDNESS TESTERS

MICROHARDNESS TESTERS



900-391D SINGLE INDENTER

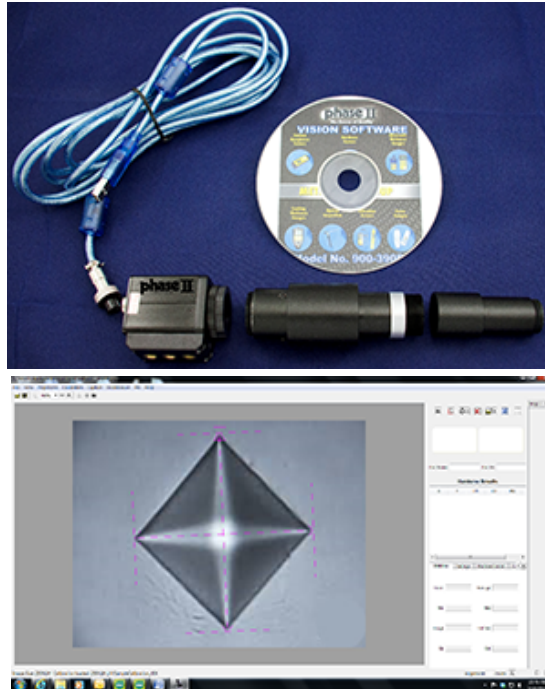
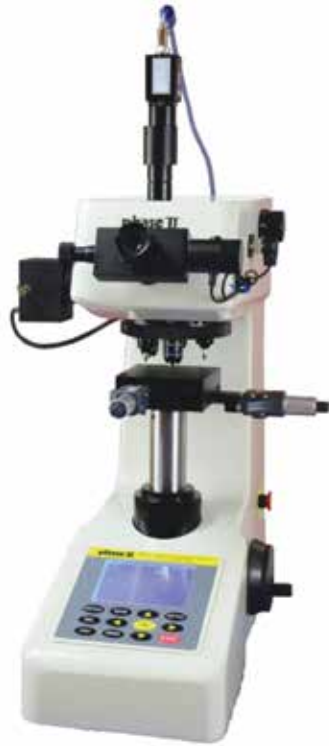
Includes single indenter (Vickers or Knoop) microhardness tester, 2 objectives (10X & 40X), X-Y stage with digital micrometers, automatic turret control, video camera, camera adapter and USB software for manual and automatic on-screen measurements. This advanced microhardness tester is a state-of-the-art, precise system suitable for microhardness analysis of metallic specimens in laboratories or

production environments.

This system is versatile and user-friendly; designed for accurate hardness testing of small precision parts, thin materials, coatings, wires and case depth determinations.

All of our hardness testers come with a 5 year warranty and free lifetime technical support.

Testing Range	1HV~2967HV
Test Forces	0.098N(10g), 0.246N(25g), 0.49N(50g), 0.98N(100g), 1.96N(200g), 2.94N(300g), 4.90N(500g), 9.80N(1000g)
Max Height of the Specimen	70mm
Carriage Control	Automatic (loading/holding-up of the load/unloading)
Magnification of the microscope	100X & 400X
Dwell Time of the Test Force	0-90 seconds (5 second increments)
Dimension of the X-Y Table	100 ×100mm
Movement Field of the XY Table	25×25mm
Light Source/Power Supply	115V/60 Hz/1 phase (other voltages available)
Net Weight	77.16 lbs. (35kg)
Tester Dimensions	12.01" W x 19.49" D" x 21.65" H
Items Included	Base Machine w/Auto-Turret, X-Y Stage w/ Micrometer, Mini Thin Part Holding Fixture, Mini Drill Chuck Fixture, Mini Vise fixture, Video Cam w/Adapter, Measurement Software, USB Cable



900-392D DUAL INDENTER

Includes dual indenter (Knoop and Vickers) microhardness tester, 3 objectives (10X, 20X & 40X), X-Y stage with digital micrometers, automatic turret control, video camera, camera adapter and USB software for manual and automatic on-screen measurements.

This advanced microhardness tester is a state-of-the-art, precise system suitable for microhardness analysis of metallic specimens in laboratories or production environments.

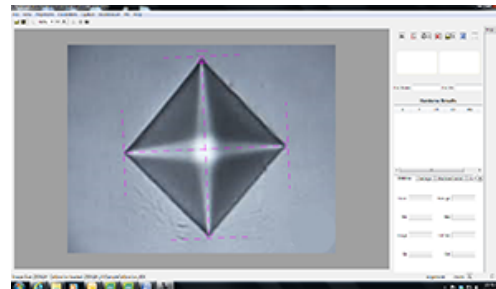
This system is versatile and user-friendly; designed for accurate hardness testing of small precision parts, thin materials, coatings, wires and case depth determinations. The dual indenters allow switching back-and-forth automatically from performing Vickers indents to Knoop indents. The 3 objectives provide greater magnification flexibility.

All of our hardness testers come with a 5 year warranty and free lifetime technical support.

Testing Range	1HV~2967HV
Test Forces	0.098N(10g), 0.246N(25g), 0.49N(50g), 0.98N(100g), 1.96N(200g), 2.94N(300g), 4.90N(500g), 9.80N(1000g)
Max Height of the Specimen	90mm
Carriage Control	Automatic (loading/holding-up of the load/unloading)
Magnification of the microscope	100X, 200X & 400X
Dwell Time of the Test Force	0-90 seconds (5 second increments)
Dimension of the X-Y Table	100 ×100mm
Movement Field of the XY Table	25×25mm
Light Source/Power Supply	115V/60 Hz/1 phase (other voltages available)
Net Weight	72.75 lbs. (33kg)
Tester Dimensions	12.01" W x 19.49" D" x 21.65" H

HARDNESS TESTERS

MACRO VICKERS HARDNESS TESTERS



900-398B MACRO VICKERS

This Macro Vickers hardness tester features a load cell, closed circuit system and software for manual and automatic on-screen measurements.. Designed for the accurate hardness testing of small precision parts, thin materials, case hardened layers and all sorts of steel components. This unit covers a load range from 1kg to 50kg, with digital technology. Conforming to ASTM E-384/92 Vickers hardness testing standards, this unit is offered with a 5 year warranty and free lifetime technical support.

The large LCD shows the measuring methods, the testing force, the indentation length, hardness value, the dwell time of the testing force as well as the number of the measurement on its screen. All information such as diagonal lines length of indentation, hardness values, data statistics and hardness conversions can be displayed on the LCD as well as your laptop or PC.

Testing Range	1HV~2967HV
Test Forces	9.807x 19.61x 24.52x 29.42x 49.03x 98.07x 196.1x 249.2x 490.3 N 1x 2x 2.5x 3x 5x10x 20x 30x 50 kgf
Max Height of the Specimen	170mm
Carriage Control	Automatic (loading/holding-up of the load/unloading)
Magnification of the microscope	100X, 200X
Dwell Time of the Test Force	0-60 seconds
Min.Graduation Value of the Testing Drum Wheel	0.125um
Light Source/Power Supply	115V/60 Hz/1 phase (other voltages available)
Package Dimensions	8.86" W x 21.06" D x 22.84" H
Items Included	Base Machine, Video Cam w/ Adapter, Measurement Software, Large test table, "V" Shape test table, 10X Digital Micro Lens, Bullseye Level, Adjustable Screw, Vickers Hardness Block, RS232 Interface Line

HARDNESS TESTERS

ROCKWELL/SUPERFICIAL HARDNESS TESTERS

900-388 DIGITAL-LOAD CELL- MOTORIZED-ROCKWELL/SUPERFICIAL WITH AUTOMATED Z-AXIS

Automated Z-Axis. Just press START key once, entire test process will be finished automatically. Regardless of the size of the sample, the position of the sample, the distance between the indenter and sample surface. The sample will be auto-lifted to approach the indenter and finish hardness testing automatically.

Extended dolphin nose allows vertical hardness test height of 11.8" and throat depth of 8.6".

Built-in micro-printer.

Horizontal dolphin nose Indenter is suitable also for internal and external hardness testing.

Rockwell Hardness Testing on Surfaces difficult to reach. Hardness Testing internal surface of rings and tubes.

The tester meets the following standards: ISO 6508-2, ASTM E18.



Minor Load	29.4N _E 3kgf _E , 98.1N (10kgf)
Major Load	147.1N(15kgf), 294.3N(30kgf), 441.3N(45kgf), 588.4N (60kgf), 980.7N (100kgf), 1471N (150kgf)
Test Force Application	Load Cell Closed Loop
Test Force Control	Motorized
Results Display	Hi Def LCD Readout
Resolution	0.1HR
Vertical Capacity	7.80"
Throat Depth	5.90"
Dimensions	23.62" W x 9.84" D x 27.56" H
Weight	190 lbs.
Power Supply	115V/60 HZ/1 phase
Items Included	C/N scale Diamond Indenter 1/16" Ball Indenter 120° cone diamond indenter 2- HRC test Blocks 1- HRB Test Block 2- HRN Test Block 1- HRT Test Block Test Table 5.87" (150mm) Flat Anvil 2.5" (63mm) Std. V- Anvil Dust Cover Accessory Case

HARDNESS TESTERS

900-387 DIGITAL-LOAD CELL- MOTORIZED-ROCKWELL/SUPERFICIAL

This digital Rockwell/Superficial Rockwell hardness tester with fully automated load/unload procedures affords highly sensitive and accurate readings. Micro computer controlled Touch Screen with USB output to PC. The 900-387 digital Rockwell hardness tester offers programmable scale conversions, dwell times, statistical capabilities and test counter. Capable of testing in all of the regular Rockwell hardness scales

Direct Loading Method With Load-Cell Instead of Dead Weight System. High Speed Test Cycle and Extremely Accurate Loading Control

Automatic conversions to HB, HV, Other Rockwell Scales

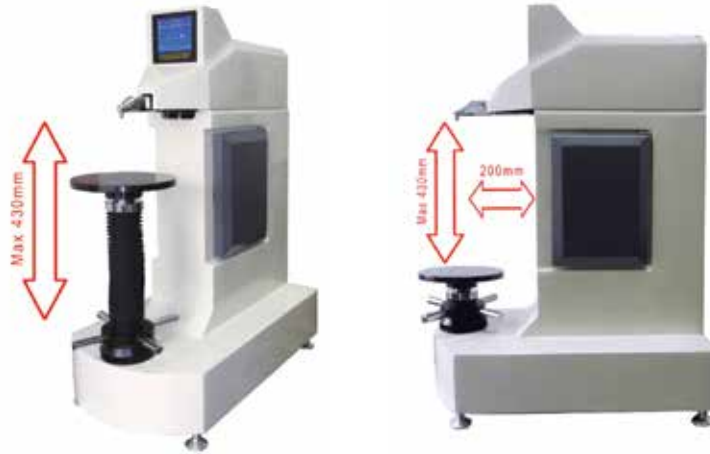
Touch Screen selectable system

Upper/Lower Limit Settings



Minor Load	29.4N \approx 3kgf, 98.1N (10kgf)
Major Load	147.1N(15kgf), 294.3N(30kgf), 441.3N(45kgf), 588.4N (60kgf), 980.7N (100kgf), 1471N (150kgf)
Test Force Application	Load Cell Closed Loop
Test Force Control	Motorized
Results Display	Hi Def LCD Readout
Resolution	0.1HR
Vertical Capacity	7.80"
Throat Depth	5.90"
Dimensions	23.62" W x 9.84" D x 27.56" H
Weight	220 lbs.
Power Supply	115V/60 HZ/1 phase
Items Included	C/N scale Diamond Indenter 1/16" Ball Indenter 2- HRC test Blocks 1- HRB Test Block 2- HRN Test Block 1- HRT Test Block Test Table 5.87" (150mm) Flat Anvil 2.5" (63mm) Std. V- Anvil Dust Cover Accessory Case

HARDNESS TESTERS



900-386 DIGITAL DEAD WEIGHT-MOTORIZED-ROCKWELL/SUPERFICIAL WITH TALL FRAME

This unit can measure Rockwell and superficial Rockwell hardness and change those values of Rockwell hardness into HB, HV, HLD, HK and σ_b values. Loaded with features such as ultra precise measurements, wide measuring range, automatic main test force loading/unloading, digitally displayed results, etc. The unit is suitable for hardness testing on carbon steel, alloy steel, cast iron, non ferrous metal and engineering plastics

The protruding indenter design is ideal for testing inside diameters and recesses, often impossible with more traditional hardness testers. Inside diameters as small as 1-1/2-inches can be tested with the standard indenter. Operators can test close to vertical surfaces, to within 1/4-inch with the standard indenter. Testing is fast, accurate and there are fewer broken diamonds due to an outstanding viewing area.

Minor Load	29.4N 3kgf, 98.1N (10kgf)
Major Load	147.1N(15kgf), 294.3N(30kgf), 441.3N(45kgf), 588.4N (60kgf), 980.7N (100kgf), 1471N (150kgf)
Test Force Application	Dead Weight
Test Force Control	Motorized
Results Display	Hi Def LCD Readout
Vertical Capacity	16.90"
Throat Depth	7.80"
Dimensions	15.75" W x 28.74" D x 39.37" H
Weight	285 lbs.
Power Supply	115V/60 HZ/1 phase
Hardness Scales	HRA, HRB, HRC, HRD, HRE, HRF, HRG, HRH, HRK, HRL, HRM, HRP, HRR, HRS, HRV, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T, HR15W, HR30W, HR45W, HR15X, HR30X, HR45X, HR15Y, HR30Y and HR45Y
Items Included	C/N scale Diamond Indenter 1/16" Ball Indenter 2- HRC test Blocks 1- HRB Test Block 2- HRN Test Block 1- HRT Test Block Test Table 5.87" (150mm) Flat Anvil 2.5" (63mm) Std. V- Anvil Dust Cover Accessory Case

HARDNESS TESTERS

900-375 ANALOG DEAD WEIGHT-MANUAL-ROCKWELL/SUPERFICIAL

This analog Rockwell Hardness Tester tests both Rockwell hardness and Superficial Rockwell hardness in one unit, with state of the art design and dynamic precision. This unit is ruggedly engineered to obtain highly sensitive and accurate readings.

Conforming to ASTM E-18 Rockwell hardness standards, it will offer unmatched repeatability in all Rockwell hardness scales. A perfect performer suited for any environment including heat treatment facilities, tool rooms, workshops, laboratories and inspection labs.

All of our hardness testers come with a 5-year warranty and lifetime technical support



Minor Load	29.4N(3kgf), 98.1N (10kgf)
Major Load	147.1N(15kgf), 294.3N(30kgf), 441.3N(45kgf), 588.4N (60kgf), 980.7N (100kgf), 1471N (150kgf)
Test Force Application	Dead Weight
Test Force Control	Manual
Results Display	Dual Scale Dial
Vertical Capacity	6.00"
Throat Depth	5.50"
Dimensions	18.20" W x 9.40" D x 26.00" H
Weight	250 lbs.
Power Supply	115V/60 HZ/1 phase
Hardness Scales	HRA B,C,D,E,F,G,H,K , L, M (superficial) HR15N, HR15T, HR30N, HR30T, HR45N, HR45T
Items Included	C/N scale Diamond Indenter 1/16" Ball Indenter 2- HRC test Blocks 1- HRB Test Block 2- HRN Test Block 1- HRT Test Block Test Table 5.87" (150mm) Flat Anvil 2.5" (63mm) Std. V- Anvil Dust Cover Accessory Case

HARDNESS TESTERS

ROCKWELL HARDNESS TESTERS

900-367 DIGITAL-LOAD CELL-MOTORIZED-ROCKWELL

This digital Rockwell hardness tester with fully automated load/unload procedures affords highly sensitive and accurate readings. Micro computer controlled Touch Screen with USB output to PC. The 900-367 digital Rockwell hardness tester offers programmable scale conversions, dwell times, statistical capabilities and test counter. Capable of testing in all of the regular Rockwell hardness scales

Entire Rockwell Hardness Test Cycle Performed Automatically.

Direct Loading Method With Load-Cell Instead Of Dead Weight System. High Speed Test Cycle and Extremely Accurate Loading Control

- Automatic conversions to HB, HV, Superficial Rockwell Scales
- Touch Screen selectable system
- Upper/Lower Limit Settings

Minor Load	98.1N (10kgf)
Major Load	60 Kgf, 100 Kgf, 150 Kgf
Test Force Application	Load Cell Closed Loop
Test Force Control	Motorized
Results Display	Hi Def LCD Readout
Resolution	0.01HR
Vertical Capacity	7.80"
Throat Depth	5.90"
Dimensions	9.84" W x 23.60" D x 27.50" H
Weight	220 lbs.
Power Supply	115V/60 HZ/1 phase
Items Included	C scale Diamond Indenter 1/16" Ball Indenter 3- HRC Test Blocks 1- HRB Test Block 1- HRA Test Block Test Table 5.87" (150mm) Flat Anvil 2.5" (63mm) Std. V- Anvil Dust Cover Accessory Case



HARDNESS TESTERS

900-415 DIGITAL-LOAD CELL-MOTORIZED-ROCKWELL WITH CAST IRON BODY

This digital Rockwell hardness tester with fully automated load/unload procedures affords highly sensitive and accurate readings. Micro computer controlled Touch Screen with USB output to flash drive. The 900-415 digital Rockwell hardness tester offers programmable scale conversions, dwell times, statistical capabilities and test counter. Capable of testing in all of the regular Rockwell hardness scales.

Direct Loading Method With Load-Cell Instead Of Dead Weight System. High Speed Test Cycle and Extremely Accurate Loading Control

Automatic conversions to HB, HV, Superficial

Rockwell Scales

Touch Screen selectable system

Upper/Lower Limit Settings

Minor Load	98.1N (10kgf)
Major Load	588.4N (60kgf), 980.7N (100kgf), 1471N (150kgf)
Test Force Application	Load Cell Closed Loop
Test Force Control	Motorized
Results Display	Hi Def LCD Readout
Resolution	0.01HR
Vertical Capacity	8.00"
Throat Depth	7.80"
Dimensions	8.00" W x 31.00" D x 22.00" H
Weight	175 lbs.
Power Supply	115V/60 HZ/1 phase
Items Included	C scale Diamond Indenter 1/16" Ball Indenter 3- HRC Test Blocks 1- HRB Test Block 1- HRA Test Block 1- HRT Test Block Test Table 5.87" (150mm) Flat Anvil 2.5" (63mm) Std. V- Anvil Dust Cover Accessory Case



HARDNESS TESTERS

900-410 DIGITAL-DEAD WEIGHTS- MANUAL-ROCKWELL WITH CAST IRON BODY

The 900-410 Digital Rockwell Hardness Tester can be used directly to measure the most popular regular Rockwell hardness scales and it can quickly convert that hardness value into HB, HV, HLD, HK and many other scales. Loaded with many useful features such as ultra precise results, wide measuring range, scale and test force selectable, automatic main test force loading/unloading, high resolution digital display and USB data storage. The 900-410 is suitable for testing hardness of carbon steel, alloy steel, cast iron, non-ferrous metals and engineering plastics. The tester meets the following standard: ASTM E18, ISO 6508-2, and BS EN ISO6508-2.



Minor Load	98.1N (10kgf)
Major Load	60 Kgf, 100 Kgf, 150 Kgf
Test Force Application	Dead Weights
Test Force Control	Manual
Load Dwell Duration	2 - 50 seconds
Results Display	Hi definition backlight LCD
Resolution	0.1HR
Vertical Capacity	8.00"
Throat Depth	7.87"
Dimensions	8.07" W x 31.49" D x 22.04" H
Weight	175 lbs.
Power Supply	115V/60 HZ/1 phase
Items Included	Large Anvil Small Diameter Anvil V-shaped Anvil Five Test Blocks One each, HRA 70-85 One each, HRB 75-95 One each, HRC 25-35 One each, HRC 40-50 One each, HRC 55-65 120 deg. Diamond Indentor 1/16" Carbide Ball indentor Storage Box

HARDNESS TESTERS

900-331 ANALOG-DEAD WEIGHTS-MANUAL-ROCKWELL

The 900-331 Rockwell scale hardness tester is easy to operate, yet engineered to obtain highly sensitive and accurate readings. Conforming to ASTM E-18 Rockwell Hardness standards, the 900-331 tester will offer unmatched repeatability in all standard Rockwell Hardness scales (table shown below). A perfect, rugged performer suited for any environment including heat treat facilities, tool rooms, workshops, laboratories and inspection labs. Lifetime technical support is included.

FEATURES

- Direct analog dial reading
- Advanced design, easy to operate
- Engineered to obtain highly sensitive and accurate readings
- Conforms to ASTM E-18
- Perfect for laboratories, workshops, tool rooms, inspection labs, etc.



Minor Load	98.1N (10kgf)
Major Load	60 Kgf, 100 Kgf, 150 Kgf
Test Force Application	Dead Weights
Test Force Control	Hydraulic Dashpot System
Load Dwell Duration	2 - 50 seconds
Results Display	Analog Dial Gage
Vertical Capacity	6.70"
Throat Depth	6.67"
Dimensions	8.50" W x 20.00" D x 30.00" H
Weight	242 lbs.
Power Supply	115V/60 HZ/1 phase
Items Included	C-scale Diamond Indentor 1/16" Ball Indentor 3- HRC Test Blocks 1- HRB Test Block 1-HRA Test Block Test Table 5.87" (150mm) Flat Anvil 2.5" (63mm) Std. Vee Anvil Accessory Case Dust Cover

HARDNESS TESTERS

900-366 DIGITAL-DEAD WEIGHTS- MOTORIZED-ROCKWELL WITH TALL FRAME

This digital Rockwell hardness tester with fully automated load/unload procedures affords highly sensitive and accurate readings. Micro computer controlled with USB output to built-in mini printer or PC. The 900-366 digital Rockwell hardness tester offers programmable scale conversions, dwell times, statistical capabilities and test counter. Capable of testing in all of the regular Rockwell® scales.

Automatic conversions to: HRN, HRT, HB, HV, HLD and σ_b .

FEATURES

- Easily obtain Average, Min/Max, S, R
- Menu selectable system
- Upper/Lower Limit Settings
- Memory of 500 test results
- Curved Surface Auto Correction



Minor Load	98.1N (10kgf)
Major Load	588.4N (60kgf), 980.7N (100kgf), 1471N (150kgf)
Test Force Application	Dead Weights
Test Force Control	Motorized
Results Display	Hi Def LCD Readout
Resolution	0.1HR
Vertical Capacity	16.50"
Throat Depth	6.50"
Dimensions	7.87" W x 21.60" D x 28.34" H
Power Supply	115V/60 HZ/1 phase
Items Included	C scale Diamond Indenter 1/16" Ball Indenter Built-in mini printer 3- HRC Test Blocks 1- HRB Test Block 1- HRA Test Block Test Table 5.87" (150mm) Flat Anvil 2.5" (63mm) Std. V- Anvil Dust Cover Accessory Case

HARDNESS TESTERS

SUPERFICIAL HARDNESS TESTERS

900-346 DIGITAL LOAD-CELL-MOTORIZED-SUPERFICIAL WITH ONE TOUCH TESTING

This digital Superficial Rockwell hardness tester with fully automated load/unload procedures affords highly sensitive and accurate readings. Micro computer controlled Touch Screen with USB output to PC. The 900-346 digital Superficial Rockwell hardness tester offers programmable scale conversions, dwell times, statistical capabilities and test counter. Capable of testing in all of the regular Rockwell hardness scales

Direct Loading Method With Load-Cell Instead Of Dead Weight System. High Speed Test Cycle and Extremely Accurate Loading Control

Automatic conversions to HB, HV, Regular Rockwell Scales
Touch Screen selectable system
Upper/Lower Limit Settings



Minor Load	29.4N 3kgf
Major Load	147.1N(15kgf), 294.3N(30kgf), 441.3N(45kgf)
Test Force Application	Load Cell Closed Loop
Test Force Control	Motorized
Results Display	Hi Def LCD Readout
Resolution	0.01HR
Vertical Capacity	7.80"
Throat Depth	5.90"
Dimensions	9.84" W x 23.62" D x 27.56" H
Weight	220 lbs.
Power Supply	115V/60 HZ/1 phase
Items Included	N-scale Diamond Indenter 1/16" Ball Indenter 2- HRN Test Blocks 3- HRT Test Block Test Table 5.87" (150mm) Flat Anvil 2.5" (63mm) Std. V- Anvil Dust Cover Accessory Case

HARDNESS TESTERS

900-345 ANALOG-DEAD WEIGHTS-MANUAL-SUPERFICIAL

Used for testing thin and soft material in the Superficial Rockwell Hardness scales, this hardness tester is ruggedly engineered to obtain highly sensitive and accurate readings. Conforming to ASTM E-18 Superficial Rockwell Hardness standards, this hardness tester will offer unmatched repeatability in all Superficial Rockwell Hardness scales (table shown below). A perfect performer suited for any environment including heat treat facilities, tool rooms, workshops, laboratories and inspection labs. Lifetime technical support is also included.

FEATURES

Direct analog dial reading

Engineered to obtain highly sensitive and accurate readings

Conforms to ASTM E-18

Perfect for laboratories, workshops, tool rooms, inspection labs, etc.

For testing thin, soft material in the Superficial Rockwell scales (900-345)



Minor Load	29.4N 3kgf
Major Load	147.1N(15kgf), 294.3N(30kgf), 441.3N(45kgf)
Test Force Application	Dead Weights
Test Force Control	Manual
Results Display	Analog Dial Gage
Resolution	0.01HR
Vertical Capacity	6.70"
Throat Depth	6.60"
Dimensions	8.90" W x 19.60" D x 28.00" H
Weight	190 lbs.
Power Supply	115V/60 HZ/1 phase
Items Included	N-scale Diamond Indenter 1/16" Ball Indenter 3- HRN Test Blocks 3- HRT Test Block Test Table 5.87" (150mm) Flat Anvil 2.5" (63mm) Std. V- Anvil Dust Cover Accessory Case

HARDNESS TESTERS

BRINELL HARDNESS TESTERS

900-357 DIGITAL-LOAD CELL-MOTORIZED-BRINELL

This advanced model has 3 indentors and 2 objectives which covers all common Brinell scales and all loads from 62.5kgf to 3000kgf. The touch screen monitor shows instant Brinell readings and no manual scope is needed.

The test load is applied via a closed-loop control unit with a load cell, a DC motor and an electronic measurement and control unit. The result is highly accurate Brinell hardness tester measurements at all test loads up to 0.5%. The common load overshoot or undershoot as known from traditional dead weight, or open-loop, systems is eliminated. The absence of mechanical weights not only eliminates friction problems but also makes the equipment less sensitive to misalignments caused by vibrations.

The unit combines a touch screen computer and brinell hardness tester in one complete Brinell hardness testing package. All the required parameters can be selected on the panel computer. It's clear display and touch screen make it easy to use and eliminates user error. The clear video screen using it's CCD interface will directly display the dynamic indentation image, lock the image and automatically measure the Brinell hardness. The operator can choose the selectable conversion values among the hardness scales, save the results of each measurement and generate the image report. The load of test forces is accomplished using state of the art load cell system combined with precision mechanical drive.



Test Force (kgf)	62.5kgf, 100kgf, 125kgf, 187.5kgf, 250kgf, 500kgf, 750kgf, 1000kgf, 1500kgf, 3000kgf
Test Force (N)	612.9N, 980.7N, 1226N, 1839N, 2452N, 4903N, 7355N, 9807N, 14710N, 29420N
Test Range	3.18 – 653HBW
Loading Method	Automatic (LoadingDwell/Unloading)
Hardness Reading	Indentation Displaying and Automatic Measuring on Touch Screen
Computer	CPU: Intel I3, Memory: 2G, SSD: 32G
Conversion Scale	HV, HK, HRA, HRB, HRC, HRD, HRE, HRF, HRG, HRK, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T, HS, HBS, HBW
Data Output	USB Port, VGA Interface, Network Interface
Turret Control	Automatic Recognition and Shifting (Three Indenters, Two Objectives)
Objectives	1X, 2X
Total Magnification	20X, 40X
Dwell Time	0-95 seconds
Max. Height of Sample	10.24" (260mm)
Throat	5.91" (150mm)
Standards	ISO 6506 ASTM E10-12 JIS Z2243 GB/T 231.2
Dimensions	12.99" W x 23.62" D x 46.06" H
Weight	331 lbs.

HARDNESS TESTERS

900-355 DIGITAL-LOAD CELL-MOTORIZED-BRINELL

Innovative closed-loop technology. The Brinell hardness tester incorporates the latest load cell technology. The test load is applied via a closed-loop control unit with a load cell, a DC motor and an electronic measurement and control unit. The result is highly accurate Brinell hardness measurements at all test loads up to 0.5%. The common load overshoot or undershoot as known from traditional dead weight, or open-loop, systems is eliminated. The absence of mechanical weights not only eliminates friction problems but also makes the equipment less sensitive to misalignments caused by vibrations.

The whole weight of the tester is 50% less than the traditional dead weights type tester.

Test load selection by keyboard and LCD screen.

Fully automatic test cycles. The Brinell Hardness Tester features a fully automatic test cycle, load application, holding, unloading, is performed fully automatically. This greatly improves reproducibility of test results since operator influence is eliminated.

Selectable dwell times by screen. The indenter, load, and other test information are shown clearly on the large LCD screen.

The directions for 0.102F/D² ratios selecting according to the materials and hardness range can be showing on the screen.

Equipped with a 20X optical microscope to measure the diameter of Brinell indentation.

Brinell Hardness Calculator (BHC) make the hardness value calculation easier and convenient.



Test Loads	3000kgf (29400N), 1500Kgf (14700N), 1000Kgf (9800N), 750Kgf (7355N), 500Kgf (4900N), 250Kgf (2452N), 187.5Kgf (1839N), 125Kgf (1226N), 100Kgf (980N), 62.5Kgf (612.9N)
Test Range	8 – 650HBW
Loading Method	Automatic (LoadingDwell/Unloading)
Hardness Reading	Indentation Displaying and Automatic Measuring on Touch Screen
Computer	CPU: Intel I3, Memory: 2G, SSD: 32G
Conversion Scale	HV, HK, HRA, HRB, HRC, HRD, HRE, HRF, HRG, HRK, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T, HS, HBS, HBW
Data Output	USB Port, VGA Interface, Network Interface
Turret Control	Automatic Recognition and Shifting (Three Indenters, Two Objectives)
Total Magnification	20X
Dwell Time	2-99 seconds
Max. Height of Sample	9.06" (230mm)
Throat	5.51" (140mm)
Dimensions	10.24" W x 20.87" D x 29.53" H
Weight	243lbs.

HARDNESS TESTERS

900-356 DIGITAL-LOAD CELL- MOTORIZED-BRINELL WITH TALL FRAME

Innovative closed-loop technology. The tester incorporates the latest load cell technology. The test load is applied via a closed-loop control unit with a load cell, a DC motor and an electronic measurement and control unit. The result is highly accurate Brinell hardness measurements at all test loads up to 0.5%. The common load overshoot or undershoot as known from traditional dead weight, or open-loop, systems is eliminated. The absence of mechanical weights not only eliminates friction problems but also makes the equipment less sensitive to misalignments caused by vibrations.

The gross weight of the tester is 50% less than the traditional dead weights type testers.

Test load selection by keypad and shown on the LCD screen.

Fully automatic test cycles. The Brinell hardness Tester features a fully automatic test cycle, load application, dwell, unloading, is performed fully automatically. This greatly improves reproducibility of test results since operator influence is eliminated.

Selectable dwell times by screen. The indenter, load, and other test information are shown clearly on the large LCD screen.

The directions for 0.102F/D2 ratios selecting according to the materials and hardness range can be showing on the screen.

Equipped with a 20X optical microscope to measure the diameter of Brinell indentation.

Brinell Hardness Calculator (BHC) makes the hardness value calculation easy and convenient.



Test Loads	3000kgf (29400N), 1500Kgf (14700N), 1000Kgf (9800N), 750Kgf (7355N), 500Kgf (4900N), 250Kgf (2452N), 187.5Kgf (1839N), 125Kgf (1226N), 100Kgf (980N), 62.5Kgf(612.9N)
Test Range	3.18 – 658HBW
Loading Method	Automatic (LoadingDwell/Unloading)
Hardness Reading	Indentation Displaying and Automatic Measuring on Touch Screen
Computer	CPU: Intel I3, Memory: 2G, SSD: 32G
Conversion Scale	HV, HK, HRA, HRB, HRC, HRD, HRE, HRF, HRG, HRK, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T, HS, HBS, HBW
Total Magnification	20X
Dwell Time	2-99 seconds
Max. Height of Sample	16.92" (430mm)
Dimensions	11.81" W x 23.62" D x 39.37" H
Weight	364lbs.

HARDNESS TESTERS

OPTICAL BRINELL READER



PHT-5000 OPTICAL BRINELL HARDNESS VIDEO MEASUREMENT SYSTEM

Friendly User Interface: Automatic measurement with a key stroke or a click of a button. Test results can be manually generated or corrected with a single mouse drag move

High reliability: Advanced image processing and analysis technologies in automatic measurement. Field proven under severe sample surface conditions;

Single camera with four magnifications: 1.3M pixel CMOS USB camera with two camera tubes with each tube height having two magnifications.

Full measurement range is covered with four magnifications for better measurement accuracy. Specifically, tube 1 magnification #1 is suitable for indentation diameters 3-6mm, magnification #2 for 0.8-1.6mm, while tube 2 magnification #3 for 2-4mm, and magnification #4 for 1-2mm.

Includes the basic functions of an imaging system such as image capture, camera calibration, image processing, geometric measurement, document labeling, and album management; automatically or manually measures the indentation diameter and calculates the Brinell hardness (HB) value; HB2 (DIN 1605 standard) automatic measurement:

Automatically or manually measures the indentation diameters on the calibration sample and the test sample, and automatically interpolates the Brinell hardness (HB) value for the test sample; Converts Brinell (HB) to other hardness scales—Validates the test results with sample dimensions; automatically updates the statistical values such as average, min and max, standard deviation, Cp and Cpk;

Auto-alarm: Automatically marks the out of spec measurements; **Test report:** Automatically generates customizable WORD or EXCEL report.

PORTABLE HARDNESS TESTERS

MEASURING METHODS: UCI & LEEB

There are two basic methods of portable hardness testing that is accepted in the field today.

“Ultrasonic Contact Impedance” is based on a 136 degree diamond at the end of a vibrating rod being depressed into the test surface at a fixed load. The difference in Ultrasonic vibration frequency is then calculated into a hardness value. The UCI test procedure is slower than the Dynamic Impact style, however the “UCI” method of hardness testing is portable, easy and accurate. It also has its own advantages when utilized for certain testing applications. UCI testers are not restricted to large mass items like dynamic type testers. These units can test metals as thin as 1mm and at a hardness value as low as 20HRC (75HB).

They also excel at performing hardness tests on larger, harder metals as well. Another reason for the rise in popularity is due to the fact that the UCI method is categorized as “Non-Destructive”. That translates into less scrap parts/ lower manufacturing costs due to necessary inspections.

“Dynamic Impact” is based on the Leeb principle of hardness, developed by Dietmar Leeb in the 1970’s. A spring loaded impact body is thrust to the test surface, effecting rebound. The speed of both the initial thrust and the rebound is measured in a non-contact mode. This is calculated as a Leeb hardness value and then automatically converted to Rockwell C, B, Brinell, Vickers and Shore Values. It has effectually brought easy, fast and accurate results to portable hardness testing.

PHT-6000 SERIES FOR UCI (ULTRASONIC CONTACT IMPEDANCE) & DYNAMIC IMPACT (LEEB) HARDNESS TESTING

UCI PORTABLE HARDNESS TESTER W/MANUAL PROBE

PHT-6001 UCI HARDNESS TESTER

w/1kgf Probe

For use on polished surfaces. Below Ra 125µin

PHT-6002 UCI HARDNESS TESTER

w/2kgf Probe

For use on smooth surfaces. Below Ra 200µin

PHT-6005 UCI HARDNESS TESTER

w/5kgf Probe

For use on machined surfaces. Below Ra 400µin

PHT-6010 UCI HARDNESS TESTER

w/10kgf Probe

For use on rough surfaces. Below Ra 600µin





UCI PORTABLE HARDNESS TESTER W/MOTORIZED PROBE

PHT-6030 UCI HARDNESS TESTER w/.30kgf Probe

Best for checking coating layer hardness; Finished thin parts

PHT-6080 UCI HARDNESS TESTER w/.80kgf Probe

Best for smooth bearing type surfaces

PHT-6100 UCI HARDNESS TESTER w/1kgf Probe

Best for machined surfaces

FEATURES

- Non-Destructive hand held hardness tester
- Combines UCI and Leeb hardness testing in one state of the art device
- Test steel with min thickness of .08" and unlimited max thickness
- Blazing fast test results
- Rockwell, Brinell Vickers conversions shown on display
- Large Memory w/USB Output
- Choice of manual UCI probes; 1kg, 2kg, 5kg & 10kg
- Optional Motorized Probes: .30kg, .80kg, & 1kgf
- Available Impact Devices(Leeb) D, DC, D+15, G & DL

SPECIFICATIONS

- Hardness Range: HRC: 20.3- 68; HRB: 61-85.6 ; HV: 80-1599; HB: 76-618
- Scale Selection: Rockwell C (HRC); Rockwell B (HRB); Rockwell A (HRA); Brinell (HB); Vickers (HV); Leeb (HLD)
- Tolerance: +/- 3.0% deviation of average from the reference value of the test block with a minimum of 5 tests
- Display Type: LCD Color Screen w/Backlight, adjustable brightness
- Language Selection: English, German, Chinese, Spanish, etc.
- Data Logger: Letters, Numerals
- Data Memory: 2000 groups of measured data ; 20 groups of calibration data
- Statistical Software Supplied-can be saved in Word or Excel
- Data Output: USB – cable supplied
- Power Supply Rechargeable Lithium Battery: Voltage-4.2V, 4800mAh
- Auto Power Off: 5 minutes
- Recharging Time: Approx. 8 hours
- Battery Usage: Approx. 6 hours (no backlight)
- Net Weight(base unit): 2lbs (w/probe)
- Unit Dimensions: 7.00" H x 3.10" W x 1.10" D

PORTABLE HARDNESS TESTERS

PHT-3500

State of the art, digital tester is designed to test the hardness of large hard metal parts. Loaded with useful functions and a built in mini-printer the PHT-3500 is clearly the industry leader for fast accurate hardness testing with advanced USB output and thermal printing capabilities. The PHT-3500 can perform tests that easily convert to the most popular hardness scales, including Rockwell, Brinell, Vickers, Shore, etc. Designed to test large hard parts. Example: Tool steel should be close to 1" thick of solid material.

SPECIFICATIONS

Accuracy: +/- 0.5% (referred to L=800,

Repeatability accuracy: +/- 4L units) L=Leeb

Measuring range: 200-960 HL

Materials: steel & cast steel, alloy tool steel, stainless steel, grey cast iron, spheroidal iron, cast aluminum, brass, bronze, wrought copper alloy.

Battery type: AA alkaline (4)

Operating temperature: 5-104 degrees F

Dimensions: 150 x 74 x 32mm

Weight: 245 grams



PHT-2100

Our new Rugged all metal frame portable hardness tester is suited for rough environments such as mining facilities, pipeline, bridge and tower inspections, etc. and is packed with features typically found on high end models only. This new leeb hardness tester is designed to test the hardness of large hard metal parts. Loaded with useful functions only found on high priced models the PHT-2100 is clearly setting a new industry standard by being the most accurate, economically priced hardness tester on the market today. Fast test speeds coupled with memory and output, this unit is a hand's down winner whether you are out in the field or in the QC shop. The PHT-2100 can perform tests that easily convert to the most popular hardness scales, including Rockwell, Brinell, Vickers, Shore, etc. Designed to test large hard parts. Example: Tool steel should be close to 1" thick of solid material.



SPECIFICATIONS

Accuracy: +/- 0.5% (referred to L=800,

Repeatability accuracy: +/- 4L units) L=Leeb

Measuring range: 200-960 HL

Materials: steel & cast steel, alloy tool steel, stainless steel, grey cast iron, spheroidal iron, cast aluminum, brass, bronze, wrought copper alloy.

Battery type: AA alkaline (2)

Operating temperature: 5-104 degrees F

Dimensions: 150 x 74 x 32mm

Weight: 245 grams

PORTABLE HARDNESS TESTERS

PHT-1900 SERIES

State of the art, digital portable hardness tester is designed to test the hardness of large hard metal parts. Clean crisp display shows the incredible functions that can only be found on this new portable hardness tester such as auto-probe detection, auto direction detector, single and multi-point calibration make the new 1900 the most versatile portable hardness tester in the industry. Blazing fast test speeds coupled with memory and output, this unit is a must have for virtually any work shop. The PHT-1900 portable hardness tester can perform tests that easily convert to the most popular hardness scales, including Rockwell, Brinell, Vickers, Shore, etc. Designed to test large hard parts:

Example: Tool steel should be close to 1" thick of solid Material

SPECIFICATIONS

Accuracy: +/- 0.5% (referred to L=800,

Repeatability accuracy: +/- 4L units) L=Leeb

Measuring range: 200-960 HL

Materials: steel & cast steel, alloy tool steel, stainless steel, grey cast iron, spheroidal iron, cast aluminum, brass, bronze, wrought copper alloy.

Battery type: AA alkaline (4)

Operating temperature: 5-104 degrees F

Dimensions: 150 x 74 x 32mm

Weight: 245 grams



PHT-1800 SERIES

State of the art, digital portable hardness tester is designed to test the hardness of large hard metal parts. Loaded with useful functions only found on high priced models the PHT-1800 portable hardness tester is clearly setting a new industry standard by being the most accurate, economically priced portable hardness tester on the market today. Fast test speeds coupled with memory and output, this unit is a hand's down winner whether you are out in the field or in the QC shop. The PHT-1800 portable hardness tester can perform tests that easily convert to the most popular hardness scales, including Rockwell, Brinell, Vickers, Shore, etc.

SPECIFICATIONS

Accuracy: +/- 0.5% (referred to L=800,

Repeatability accuracy: +/- 4L units) L=Leeb

Measuring range: 200-960 HL

Materials: steel & cast steel, alloy tool steel, stainless steel, grey cast iron, spheroidal iron, cast aluminum, brass, bronze, wrought copper alloy.

Battery type: AA alkaline (2)

Operating temperature: 5-104 degrees F

Dimensions: 150 x 74 x 32mm

Weight: 245 grams



PORTABLE HARDNESS TESTERS

PHT-1700 SERIES

Loaded with features, this economically priced portable hardness tester is capable of measuring the surface hardness of a broad variety of metals on flat and round surfaces. This instrument comes complete with the universal D impact device, calibrated test block and rugged carry case. Designed to test large hard parts. Example: Tool steel should be close to 1" thick of solid material

SPECIFICATIONS

Accuracy: +/- 0.5% (referred to L=800,

Repeatability accuracy: +/- 4L units) L=Leeb

Measuring range: 200-960 HL

Materials: steel & cast steel, alloy tool steel, stainless steel, grey cast iron, spheroidal iron, cast aluminum, brass, bronze, wrought copper alloy.

Battery type: AAA alkaline (2)

Operating temperature: 5-104 degrees F

Dimensions: 108 x 62 x 25mm

Weight: 230 grams



ACCESSORIES FOR PORTABLE HARDNESS TESTERS

D-PROBE: METSHPHT1800-100

Universal standard unit. Will handle the majority of hardness testing applications. Weight: 75g

D+15 -PROBE: METSHPHT1800-110

Very narrow contact area with a set back measurement coil. This device is used to measure hardness in grooves and recessed surfaces. Weight: 80g

DL -PROBE: METSHPHT1800-115

This model features a needle front section with a diameter of 4mm and a length of 50mm. It is suitable for testing in extremely confined spaces, the base of grooves and on special components such as gear wheels. For use on steel and cast steel only!

DC-PROBE: METSHPHT1800-120

Very short impact device for those confined areas, i.e. inside bores for internal measurements. Conforms to the D measuring range. Weight: 50g

G-PROBE: METSHPHT1800-125

This device has an enlarged test tip, and an increased impact energy range (approx. 9 times the D, 72 ft-lb.). Can be used on lower quality finishes for measuring hardness in the Brinell range only (max. 650 HB). Designed to be used with heavy components such as heavy castings and forgings. Weight: 250g

C-PROBE: METSHPHT1800-130

A reduced impact energy impact device (approximately 1/4 of the D Type 2 ft-lb.) for measuring the hardness of surface hardened components, coatings, thin wall or impact sensitive components. Applies a small superficial indentation. Weight: 75g

PORTABLE HARDNESS TESTERS

TECHNICAL DATA FOR PORTABLE HARDNESS TESTER IMPACT DEVICES



IMPACT DEVICES	D/DC/DL	D + 15	C	G
Impact Energy	11Nmm	11Nmm	3Nmm	90Nmm
Mass of the impact body	5.5g	7.8g	3.0g	20g
TEST TIP				
Hardness	1600HV	1600HV	1600HV	1600HV
Diameter	3mm	3mm	3mm	5mm
Material		Tungsten carbide	Tungsten carbide	
IMPACT DEVICE				
Diameter	20mm	20mm	20mm	30mm
Length	147/86mm	162mm	141mm	254mm
Weight	75/50g	80g	75g	250g
MAX. HARDNESS OF SAMPLE				
	940HV	940HV	1000HV	650HB
PREPARATION OF SURFACE				
Roughness class ISO	N7	N7	N5	N9
Max. roughness depth Rt	10 μ m	10 μ m	2.5 μ m	30 μ m
Average roughness Ra	2 μ m	2 μ m	0.4 μ m	7 μ m
MIN. WEIGHT OF SAMPLE				
Of compact shape	5kg	5kg	1.5kg	15kg
On solid support	2kg	2kg	0.5kg	5kg
Coupled on plate	0.1kg	0.1kg	0.02kg	0.5kg
MIN. THICKNESS OF SAMPLE				
Coupled	3mm	3mm	1mm	10mm
Min. thickness of layers	0.8mm	0.8mm	0.2mm	
INDENTATION OF TEST TIP				
WITH 300HV				
Diameter	0.54mm	0.54mm	0.38mm	1.03mm
Depth	24 μ m	24 μ m	12 μ m	53 μ m
WITH 600HV				
Diameter	0.45mm	0.45mm	0.32mm	90mm
Depth	17 μ m	17 μ m	8 μ m	41 μ m
WITH 800HV				
Diameter	0.35mm	0.35mm	0.30mm	
Depth	10 μ m	10 μ m	7 μ m	



**Abrasive
Cut-Off Wheels**

Abrasive cutting has proven to be one of the most effective methods for sectioning materials for Metallographic sample preparation. The key to achieving quality sections is to select the proper abrasive Cut-Off Wheel for your application. Choosing the correct wheel not only ensures ease of cutting, but also reduces the amount of damage introduced to the sample in the sectioning process. This greatly reduces time spent in subsequent grinding and polishing steps.

Lapmaster offers a wide variety of abrasive Cut-Off Wheels engineered for a variety of materials and applications; however, by combining different abrasive types, sizes and bonds Lapmaster Cut-Off Wheels can be developed for virtually any application.

To further assist you in choosing the Lapmaster Cut-Off Wheel for your application please contact your Lapmaster representative.

ABRASIVE CUT-OFF WHEELS

DESCRIPTION	BOND	PART#	PRICE
With 1.25" (32mm) Arbor Hole RR = Rubber resin bond Rub = Rubber bond Res = Resin bond			
4"x.025"x.5" S:C - Medium Non-Ferrous (Pack of 10)	RR	METSACUT004MNFT	70.00
5"x.025"x.5" AlOx - Medium Ferrous (Pack of 10)	RR	METSACUT005MS45	77.00
5"x.025"x.5" S:C - Medium Non-Ferrous (Pack of 10)	RR	METSACUT005MNFT	77.00
6"x.020"x.5" AlOx Cutoff Wheel For Soft Steel RC30 (Pack Of 10)	RR	METSACUT006SS30	85.00
6"x.020"x.5" AlOx Cutoff Wheel For Med Steel RC45 (Pack Of 10)	RR	METSACUT006MS45	85.00
6"x.020"x.5" AlOx Cutoff Wheel For Hard Steel RC60 (Pack Of 10)	RR	METSACUT006HS60	85.00
6"x.020"x.5" SiC Cutoff Wheel For Soft Non-Ferrous RC30 (Pack Of 10)	RR	METSACUT006SNFT	85.00
6"x.020"x.5" SiC Cutoff Wheel For Medium Non-Ferrous RC45 (Pack Of 10)	RR	METSACUT006MNFT	85.00
6"x.020"x.5" SiC Cutoff Wheel For Hard Non-Ferrous RC60 (Pack Of 10)	RR	METSACUT006HNFT	85.00
7"x.030"x.5" AlOx Cutoff Wheel For Soft Steel RC30 (Pack Of 10)	RR	METSACUT007SS30	99.00
7"x.030"x.5" AlOx Cutoff Wheel For Medium Steel RC45 (Pack Of 10)	RR	METSACUT007MS45	99.00
7"x.030"x.5" AlOx Cutoff Wheel For Hard Steel RC60 (Pack Of 10)	RR	METSACUT007HS60	99.00
7"x.025"x.5" SiC Cutoff Wheel For Soft Non-Ferrous RC30 (Pack Of 10)	RR	METSACUT007SNFT	99.00
7"x.025"x.5" SiC Cutoff Wheel For Medium Non-Ferrous RC45 (Pack Of 10)	RR	METSACUT007MNFT	99.00
7"x.035"x.5" SiC Cutoff Wheel For Hard Non-Ferrous RC60 (Pack Of 10)	RR	METSACUT007HNFT	99.00
7"x.040"x1.25" AlOx - Medium Steel RC45 (10 Pack)	RR	METSACUT007THIN	99.00
8"x.032"x1.25 Reinforced Aluminum Oxide - (10 Pack)	Res	METSACUT008REIN	116.00
9"x.062"x1.25" AlOx - Hard Steel RC60 (Pack of 10)	RR	METSACUT009HS60	127.00
9"x.062"x1.25" AlOx - Medium Steel RC45 (Pack of 10)	RR	METSACUT009MS45	127.00
9"x.062"x1.25" AlOx - Soft Steel RC30 (Pack of 10)	RR	METSACUT009SS30	127.00
9"x.045"x1.25" AlOx - General Purpose (Pack of 25)	RR	METSACUT009RB45	279.00
9"x.032"x1.25" AlOx - Thin Wheel Applications (Pack of 10)	RR	METSACUT009THIN	127.00
9"x.062"x1.25" S:C - Hard Non-Ferrous (Pack of 10)	RR	METSACUT009HNFT	127.00
9"x.062"x1.25" S:C - Medium Non-Ferrous (Pack of 10)	RR	METSACUT009MNFT	127.00
9"x.062"x1.25" S:C - Soft Non-Ferrous (Pack of 10)	RR	METSACUT009SNFT	127.00
9"x.032"x1.25" S:C - Soft Non-Ferrous (Pack of 10)	RR	METSACUTSC9THIN	127.00
9"x.032"x1.25" S:C - Medium Non-Ferrous (Pack of 10)	RR	METSACUT009MNTH	127.00
9"x.032"x1.25" S:C - Hard Non-Ferrous (Pack of 10)	RR	METSACUT009HNTH	127.00
9"x.062"x1.25" SiC/AlOx - For Cast Iron (Pack of 10)	Res	METSACUT009CAST	132.00
10"x.062"x1.25" AlOx - Hard Steel RC60 (Pack of 10)	RR	METSACUT010HS60	140.00
10"x.062"x1.25" AlOx - Medium Steel RC45 (Pack of 10)	RR	METSACUT010MS45	140.00
10"x.062"x1.25" AlOx - Soft Steel RC30 (Pack of 10)	RR	METSACUT010SS30	140.00
10"x.045"x1.25" AlOx - General Purpose (Pack of 10)	Res	METSACUT010RB45	140.00
10"x.094"x.625" Reinforced AlOx General Purpose - (10 pack)	Res	METSACUT010REIN	140.00
10"x.062"x1.25" AlOx - Medium Hard Steel (10 pack)	Res	METSACUTR10HS60	140.00
10"x.062"x1.25" S:C - Hard Non-Ferrous (Pack of 10)	RR	METSACUT010HNFT	140.00
10"x.062"x1.25" S:C - Medium Non-Ferrous (Pack of 10)	RR	METSACUT010MNFT	140.00
10"x.062"x1.25" S:C - Soft Non-Ferrous (Pack of 10)	RR	METSACUT010SNFT	140.00
10"x.032"x1.25" Thin S:C - Med. Non-Ferrous (Pack Of 10)	RR	METSACUTS10THIN	140.00
10"x.062"x1.25" SiC/AlOx - For Cast Iron (Pack of 10)	Res	METSACUT010CAST	148.00
12"x.062"x1.25" AlOx - Hard Steel RC60 (Pack of 10)	RR	METSACUT012HS60	161.00
12"x.100"x1.25" AlOx - Medium Steel RC45 (Pack of 10)	RR	METSACUT012MS45	161.00
12"x.100"x1.25" AlOx - Soft Steel RC30 (Pack of 10)	RR	METSACUT012SS30	161.00
12"x.094"x1.00" Reinforced AlOx - (10 Pack)	Res	METSACUT012REIN	281.00
12"x.045"x1.25" AlOx - General Purpose (Pack of 25)	Res	METSACUT012RB45	281.00
12"x.064"x1.25" AlOx - Hard Steel RC60 (Pack of 10)	Rub	METSACUT012RB60	161.00

Additional sizes available upon request.



Abrasive
Cut-Off Wheels

ABRASIVE CUT-OFF WHEELS

DESCRIPTION	BOND	PART#	PRICE
With 1.25" (32mm) Arbor Hole RR = Rubber resin bond Rub = Rubber bond Res = Resin bond			
12"x.062"x1.25" S:C - Hard Non-Ferrous (Pack of 10)	RR	METSACUT012HNFT	161.00
12"x.062"x1.25" S:C - Medium Non-Ferrous (Pack of 10)	RR	METSACUT012MNFT	161.00
12"x.045"x1.25" Thin S:C - Medium Non-Ferrous (Pack of 10)	RR	METSACUTT12MN45	161.00
12"x.062"x1.25" S:C - Soft Non-Ferrous (Pack of 10)	RR	METSACUT012SNFT	161.00
14"x.085"x1.25" AlOx - Hard Steel RC60 (Pack of 10)	RR	METSACUT014HS60	184.00
14"x.085"x1.25" AlOx - Medium Steel RC45 (Pack of 10)	RR	METSACUT014MS45	184.00
14"x.115"x1.25" AlOx - Soft Steel RC30 (Pack of 10)	RR	METSACUT014SS30	184.00
14"x.080"x1.25" S:C - Hard Non-Ferrous (Pack of 10)	RR	METSACUT014HNFT	184.00
14"x.090"x1.25" S:C - Medium Non-Ferrous (Pack of 10)	RR	METSACUT014MNFT	184.00
14"x.080"x1.25" S:C - Soft Non-Ferrous/Alum (Pack of 10)	RR	METSACUT014SNFT	184.00
14"x.125"x1.25" Reinforced AlOx - General Purpose	R	METSACUT014REIN	242.00
16"x.100"x1.25 AlOx - Hard Steel RC60 (Pack of 10)	RR	METSACUT016HS60	224.00
16"x.100"x1.25 AlOx - Medium Steel RC45 (Pack of 10)	RR	METSACUT016MS45	224.00
16"x.100"x1.25 AlOx - Soft Steel RC30 (Pack of 10)	RR	METSACUT016SS30	224.00
16"x.100"x1.25 S:C - Hard Non-Ferrous (Pack of 10)	RR	METSACUT016HNFT	224.00
16"x.100"x1.25 S:C - Medium Non-Ferrous (Pack of 10)	RR	METSACUT016MNFT	224.00
16"x.100"x1.25 S:C - Soft Non-Ferrous (Pack of 10)	RR	METSACUT016SNFT	224.00
20"x.125x1.25" - AlOx - Hard Steel RC60 (Pack of 10)	RR	METSACUT020HS60	540.00
20"x.125x1.25" - AlOx - Hard Steel RC45 (Pack of 10)	RR	METSACUT020MS45	540.00
20"x.125x1.25" - AlOx - Hard Steel RC30 (Pack of 10)	RR	METSACUT020SS30	540.00
20"x.125x1.25" - S:C - Hard Non-Ferrous (Pack of 10)	RR	METSACUT020HNFT	540.00
20"x.125x1.25" - S:C - Medium Non-Ferrous (Pack of 10)	RR	METSACUT020MNFT	540.00
20"x.125x1.25" - S:C - Soft Non-Ferrous (Pack of 10)	RR	METSACUT020SNFT	540.00
24"x.125x1.25" - AlOx - Hard Steel RC60 (Pack of 10)	RR	METSACUT024HS60	720.00
24"x.125x1.25" - AlOx - Hard Steel RC45 (Pack of 10)	RR	METSACUT024MS45	720.00
24"x.125x1.25" - AlOx - Hard Steel RC30 (Pack of 10)	RR	METSACUT024SS30	720.00
24"x.125x1.25" - S:C - Hard Non-Ferrous (Pack of 10)	RR	METSACUT024HNFT	720.00
24"x.125x1.25" - S:C - Medium Non-Ferrous (Pack of 10)	RR	METSACUT024MNFT	720.00
24"x.125x1.25" - S:C - Soft Non-Ferrous (Pack of 10)	RR	METSACUT024SNFT	720.00

Additional sizes available upon request.

SECTIONING



Diamond Wafering Blades

For applications which require greater precision and thin sectioning capability, Lapmaster recommends Diamond Wafering Blades. Diamond Wafering Blades should be used with a precision low speed wafering saw.

Low concentration blades are suggested for hard brittle materials and ceramics, while high concentration blades are used with metallics.

To further assist you in choosing the Lapmaster Wafering Blade for your application please contact your Lapmaster representative.

DIAMOND WAFERING BLADES

DESCRIPTION		PART NUMBER	PRICE
3"x.006"x.5" High Concentration Wafering Blade	Ferrous Material	METSDCUTW03H006	218.00
3"x.006"x.5" Low Concentration Wafering Blade	Non-Ferrous Material	METSDCUTW03L006	218.00
4"x.012"x.5" High Concentration Wafering Blade	Ferrous Material	METSDCUTW04H012	234.00
4"x.012"x.5" Low Concentration Wafering Blade	Non-Ferrous Material	METSDCUTW04L012	234.00
4"x.015"x.5" High Concentration Wafering Blade	Ferrous Material	METSDCUTW04H015	234.00
4"x.015"x.5" Low Concentration Wafering Blade	Non-Ferrous Material	METSDCUTW04L015	234.00
5"x.015"x.5" High Concentration Wafering Blade	Ferrous Material	METSDCUTW05H015	285.00
5"x.015"x.5" Low Concentration Wafering Blade	Non-Ferrous Material	METSDCUTW05L015	285.00
6"x.020"x.5" High Concentration Wafering Blade	Ferrous Material	METSDCUTW06H020	333.00
6"x.020"x.5" Low Concentration Wafering Blade	Non-Ferrous Material	METSDCUTW06L020	333.00
7"x.025"x.5" High Concentration Wafering Blade	Ferrous Material	METSDCUTW07H025	435.00
7"x.025"x.5" Low Concentration Wafering Blade	Non-Ferrous Material	METSDCUTW07L025	435.00
8"x.035"x.5" High Concentration Wafering Blade	Ferrous Material	METSDCUTW08H035	502.00
8"x.035"x.5" Low Concentration Wafering Blade	Non-Ferrous Material	METSDCUTW08L035	502.00

DIAMOND BLADES FOR CARBIDE & CERAMICS

DESCRIPTION	PART NUMBER	PRICE
8" x .050 x 1.25" Resin Bond Diamond Blade	METSDCUTRES0008	350.00
10" x .050 x 1.25" Resin Bond Diamond Blade	METSDCUTRES0010	400.00
12" x .050 x 1.25" Resin Bond Diamond Blade	METSDCUTRES0012	450.00
12" x .060 x 1.25" Resin Bond Diamond Blade	METSDCUTRES6012	450.00

CBN BLADES RESIN BONDED FOR HARD FERROUS MATERIAL

DESCRIPTION	PART NUMBER	PRICE
5" x.030" x 1.25" (32mm) CBN Cutoff Blade for Hard Steel	METSDCBNW050220	265.00
6" x.050" x 1.25" (32mm) CBN Cutoff Blade for Hard Steel	METSDCBN006HS60	295.00
7" x .050" x 1.25" (32mm) CBN Cutoff Blade for Hard Steel	METSDCBN007HS60	325.00
8" x .050" x 1.25" (32mm) CBN Cutoff Blade for Hard Steel	METSDCBN008HS60	350.00
10" x .050" x 1.25" (32mm) CBN Cutoff Blade for Hard Steel	METSDCBN010HS60	400.00
12" x .060" x 1.25" (32mm) CBN Cutoff Blade for Hard Steel	METSDCBN012HS60	450.00



Sectioning Accessories

SECTIONING ACCESSORIES

DESCRIPTION	PART NUMBER	PRICE
Water Soluble Cutting Fluid Gold Formula - Gallon (20:1 mix ratio)	METSACUTGFLGALL	45.00
Blue Soluble Cutting Fluid - Gallon (20:1 mix ratio)	METSACUTBFLGALL	54.00
Cool Cut Lubricating Fluid for Slow Speed Saws - 1 Quart (30:1 mix ratio)	METSCOOLCUT0032	37.00
Dressing Stick For Wafering Blade (1 each)	METSDRESSTK0001	10.00



Compression Mounting

Mounting of specimens is generally required for providing a convenient way to hold a specimen while it is being ground and polished, or for preserving and edge for examination. Mounting materials fall into one of two categories:

1. Compression Mounting Materials
2. Cold Mount Mounting Materials

Compression mounting requires the use of heat and pressure in a mounting press to prepare a mounted specimen. Cold mounting is performed at room temperature using a two part castable system.

COMPRESSION MOUNTING

PHENOLICS

Lapmaster offers phenolic material in three different colors: black, green and red. Phenolic material is economical, easy to use and cures quickly. Packaged in convenient 5 Lbs. Containers, phenolic materials may also be purchased in larger bulk containers as well.

ULTRA FINE EPOXY MOUNTING POWDER

A fine epoxy mounting powder that offers superior flow characteristics, high hardness and excellent edge retention. Color: Black

EPOXY MOUNTING COMPOUND

Epoxy mounting powder that offers high hardness with excellent edge retention. Color: Black

DIALLYL PHTHALATE

Another high hardness, minimum edge separation compression mounting material. Lapmaster's product is glass filled. Color: Blue

LUCITE

Lucite is a transparent compression mount material which allows viewing into the specimen. Lucite is packaged in 5 Lbs. Containers.

DESCRIPTION	PART NUMBER	PRICE
Red Phenolic - 5 lb. Container	METSBAKERED0005	29.00
Black Phenolic - 5 lb. Container	METSBAKEBLK0005	20.00
Green Phenolic - 5 lb. Container	METSBAKEGRN0005	29.00
Red Phenolic - 25 lb. Container	METSBAKERED0025	108.00
Black Phenolic - 25 lb. Container	METSBAKEBLK0025	77.00
Green Phenolic - 25 lb. Container	METSBAKEGRN0025	108.00
Ultra Fine Epoxy Mounting Powder- Glass Filled - 5 lb Container	METSFINEPOW0005	75.00
Epoxy Mounting Compound, 4 pounds	METSEDEGEMNT0004	64.00
Epoxy Mounting Compound, 25 pounds	METSEDEGEMNT0025	372.00
Diallyl Phthalate - Glass Filled - 5 lb. Container	METSDIALPOW0005	80.00
Diallyl Phthalate - Glass Filled - 25 lb. Container	METSDIALPOW0025	383.00
Lucite - 5 lb. Container	METSLUCE0000005	64.00
Lucite - 25 lb. Container	METSLUCE0000025	284.00
Conductive Mount (graphite flakes) - 1 lb Container	METSCONDMNTGF01	37.00
Conductive Mount (graphite powder) - 1 lb Container	METSCONDMNTGP01	37.00
Conductive Mount (copper) - 1 lb Container	METSCONDMNTCM01	54.00

NEW

PHENOLIC PREMOLDS (PACKAGES OF 100)

Green 1.00"	METSPREMGRN0001	56.00
Green 1.25"	METSPREMGRN11/4	72.00
Green 1.50"	METSPREMGRN11/2	105.00
Red 1.00"	METSPREMRED0001	56.00
Red 1.25"	METSPREMRED11/4	72.00
Red 1.50"	METSPREMRED11/2	105.00
Black 1.00"	METSPREMBLK0001	34.00
Black 1.25"	METSPREMBLK11/4	50.00
Black 1.50"	METSPREMBLK11/2	61.00



Cold Mounting

COLD MOUNTING

SLOW CURE EPOXY

2 Part "low" viscosity epoxy system offering a hard, low shrinkage mount. The low viscosity of this product offers superior flow properties. Cure time is 8 hours.

FAST CURE EPOXY

Lapmaster features an epoxy mounting system which offers excellent edge retention, good abrasion resistance, and fast cure time – approximately 30 minutes.

HEAT CURE EPOXY

Ultra low viscosity for excellent penetration of small parts, voids, cracks and other fine features. Extremely hard with low shrinkage and excellent edge retention. 90min cure time in oven at 131F (55C). Can mix large amounts in one batch and pour over a 4 hour time period (if left at room temp).

FAST CURE ACRYLIC

A two part acrylic mounting system which cures in approximately 15 minutes. It has good flow characteristics and good penetration into holes and recess.

DESCRIPTION	PART NUMBER	PRICE
Slow Cure Epoxy (8 hour) - Resin - 32 oz.	METSEPOXRESS032	77.00
Slow Cure Epoxy (8 hour) - Resin - Gallon	METSEPOXRESS128	195.00
Slow Cure Epoxy (8 hour) - Hardener - 16 oz.	METSEPOXHARS016	44.00
Slow Cure Epoxy (8 hour) - Hardener - 32 oz.	METSEPOXHARS032	86.00
Fast Cure Epoxy (30 min Cure)- Resin - 32 oz.	METSEPOXRES0032	78.00
Fast Cure Epoxy (30 min Cure)- Resin - Gallon.	METSEPOXRES0128	195.00
Fast Cure Epoxy (30 min Cure)- Hardener - 16 oz.	METSEPOXHAR0016	53.00
Fast Cure Epoxy (30 min Cure)- Hardener - 32 oz.	METSEPOXHAR0032	87.00
Heat Cure Epoxy (90 min Cure) - Resin 32oz	METSEPOXRESHC32	99.00
Heat Cure Epoxy (90 min Cure) - Hardener 16oz	METSEPOXHARHC16	79.00
Fast Cure Acrylic Liquid (15min Cure)- 12 oz.	METSACRYLIQ0012	18.00
Fast Cure Acrylic Liquid (15min Cure)- 64 oz.	METSACRYLIQ0064	61.00
Fast Cure Acrylic Liquid (15min Cure)- 2-1/2 gal.	METSACRYLIQ0320	268.00
Fast Cure Acrylic Powder (15min Cure)- 1 lb.	METSACRYPOW0001	49.00
Fast Cure Acrylic Powder (15min Cure)- 5 lb.	METSACRYPOW0005	181.00
Fast Cure Acrylic Powder (15min Cure)- 25 lb	METSACRYPOW0025	758.00



Petrographic Mounting

PETROGRAPHIC MOUNTING — THIN SECTIONS TO GLASS SLIDES

DESCRIPTION	PART NUMBER	PRICE
INPLEX Resin for cold embedding (1 kg resin, 20ml hardener)	METSPETRRIT002	55.00
Epoxy Resin for cold impregnation (1 kg resin, 0.8 kg hardener)	METSPETRRIM002	56.00
Epoxy Resin for cold gluing (1 kg resin, 0.2 kg hardener)	METSPETRRIN002	365.00
Epoxy Resin for cold gluing by UV (1 kg resin)	METSPETRRFT001	269.00
Epoxy Resin for gluing, double syringe, 3-6 minute cure time (50ml)	METSPETRACR007	62.00
Flourescent Dye for dissolving into epoxy resin (20g)	METSPETRRIM003	39.00
Colored Blue Dye for cold resins (100g)	METSPETRACR003	119.00
Lakeside Bars 70c, removable glue, 140° C melting point - 12 pieces	METSPETRACR011	281.00
Lakeside Bars 30L, removable glue, 60° C melting point - 2 pieces	METSPETRACR027	70.00
Canada Balsam (25 ml)	METSPETRACR004	40.00
Eukitt (500 ml)	METSPETRACR005	334.00
Paraffina Wax Drops (1 Kg)	METSPETRACR006	22.00
Red Wax (25 ml)	METSPETRNCACR	53.00



Mounting Accessories

MOUNTING ACCESSORIES

MOLD CUPS

Designed for casting mounts with cold mounting materials from 1" - 1.5" diameters.

SPECIMEN CLIPS

Specimen clips are used to support specimens while the mounting material cures. Lapmaster offers both plastic and stainless steel support clips which are packaged in 100 piece containers.

MOLD RELEASE

Mold release is used to help eject the specimen from either the mounting press or mold. Lapmaster offers mold release for hot and cold mounting applications. It is available in aerosol spray, alcohol based liquid or a Non-Hazmat silicone liquid form.

DESCRIPTION	PART NUMBER	PRICE
1.00" Disposable Mold Cups (Pack of 50)	METSMOLDCUP1.00	28.00
1.25" Disposable Mold Cups (Pack of 50)	METSMOLDCUP1.25	31.00
1.5" Disposable Mold Cups (Pack of 50)	METSMOLDCUP1.50	36.00
2 Part Reusable Plastic Mounting Cup, 1.00", Box of 12	METSPLASCUP1.00	65.00
2 Part Reusable Plastic Mounting Cup, 1.25", Box of 12	METSPLASCUP1.25	72.00
2 Part Reusable Plastic Mounting Cup, 1.50", Box of 12	METSPLASCUP1.50	82.00
Rubber Mounting Cup, 1.00", Box of 5	METSRUBBCUP1.00	103.00
Rubber Mounting Cup, 1.25", Box of 5	METSRUBBCUP1.25	109.00
Rubber Mounting Cup, 1.50", Box of 5	METSRUBBCUP1.50	135.00
Phenolic Ring Forms, 1.00" OD. Box of 10	METSFORM0101.00	14.00
Phenolic Ring Forms, 1.25" OD. Box of 11	METSFORM0101.25	15.00
Phenolic Ring Forms, 1.50" OD. Box of 12	METSFORM0101.50	17.00
Wooden Stirring Sticks, Box of 1000	METSSTIRSTK1000	34.00
Graduated Paper Mixing Cups, Box of 100	METSCLIPMIX0100	24.00
Stainless Steel Support Clips (Pack of 100)	METSCLIP100METL	29.00
Plastic Support Clips (Pack of 100)	METSCLIP100PLAS	29.00
Dry Powder Mold Release Spray - 15oz Aerosol Spray	METSMOLDRELOHOT	26.00
Alcohol Based Liquid Mold Release 2oz (Non Aerosol)	METSMOLDRELLIQ2	16.00
Silicone Liquid Mold Release NON-HAZ 2oz (Non Aerosol)	METSMOLDRESSIL2	16.00



Grinding Wheels

GRINDING WHEELS

DESCRIPTION	PART NUMBER	PRICE
Grinding Wheel, Aluminum Oxide, 8" X 1.75" X 1.5", 150 Grit	METSGRNDAL80150	157.00
Grinding Wheel, Aluminum Oxide, 14" X 1.75" X 1.5", 150 Grit	METSGRNDALX0150	380.00
Grinding Wheel, Silicon Carbide, 14" X 1.75" X 1.5", 150 Grit	METSGRNDNSIC0150	418.00



Abrasive Rolls

Our Abrasive Rolls are manufactured using the same high quality material as the Abrasive Discs. Our Abrasive Rolls are also available in a variety of sizes and grits.

ABRASIVE ROLLS

DESCRIPTION	PART NUMBER	PRICE
3" x 75' Silicon Carbide Roll - 120 grit	METSROLL3750120	43.00
3" x 75' Silicon Carbide Roll - 240 grit	METSROLL3750240	38.00
3" x 75' Silicon Carbide Roll - 320 grit	METSROLL3750320	38.00
3" x 75' Silicon Carbide Roll - 400 grit	METSROLL3750400	38.00
3" x 75' Silicon Carbide Roll - 600 grit	METSROLL3750600	38.00
3 - 7/16" X 60' Silicon Carbide Roll - 240 grit	METSROLL7600240	43.00
3 - 7/16" X 60' Silicon Carbide Roll - 320 grit	METSROLL7600320	43.00
3 - 7/16" X 60' Silicon Carbide Roll - 400 grit	METSROLL7600400	43.00
3 - 7/16" X 60' Silicon Carbide Roll - 600 grit	METSROLL7600600	43.00
3 - 7/16" x 60' Silicone Carbide Roll - 800 grit	METSROLL7600800	50.00
3 - 7/16" x 60' Silicone Carbide Roll - 1200 grit	METSROLL7601200	50.00

GRINDING & POLISHING



Abrasive Belts

Our Abrasive Belts feature premium graded silicon carbide abrasive bonded to an "X" weight cotton backing. These Belts can be used both in wet or dry applications and are available in a variety of sizes and grits.

ABRASIVE BELTS

SILICON CARBIDE BELTS SOLD IN PACKS OF 10

DESCRIPTION	PART NUMBER	PRICE
4" x 36" Silicon Carbide Belt - 50 Grit (Pack of 10)	METSBELT4360050	72.00
4" x 36" Silicon Carbide Belt - 60 Grit (Pack of 10)	METSBELT4360060	72.00
4" x 36" Silicon Carbide Belt - 80 Grit (Pack of 10)	METSBELT4360080	67.00
4" x 36" Silicon Carbide Belt - 120 Grit (Pack of 10)	METSBELT4360120	63.00
4" x 36" Silicon Carbide Belt - 180 Grit (Pack of 10)	METSBELT4360180	63.00
4" x 36" Silicon Carbide Belt - 240 Grit (Pack of 10)	METSBELT4360240	63.00
4" x 36" Silicon Carbide Belt - 320 Grit (Pack of 10)	METSBELT4360320	63.00
4" x 36" Silicon Carbide Belt - 400 Grit (Pack of 10)	METSBELT4360400	63.00
4" x 36" Silicon Carbide Belt - 600 Grit (Pack of 10)	METSBELT4360600	63.00



Abrasive Belts

Our Abrasive Belts are also available in Aluminum Oxide (ALOX) and Zirconia Alumina (ZA) for additional applications.

ALUMINUM OXIDE BELTS SOLD IN PACKS OF 10

DESCRIPTION	PART NUMBER	PRICE
4" x 36" Aluminum Oxide Belt - 60 Grit (Pack of 10)	METSBELT436AL60	78.00
4" x 36" Aluminum Oxide Belt - 80 Grit (Pack of 10)	METSBELT436AL80	60.00
4" x 36" Aluminum Oxide Belt - 100 Grit (Pack of 10)	METSBELT436A100	60.00
4" x 36" Aluminum Oxide Belt - 120 Grit (Pack of 10)	METSBELT436A120	60.00
4" x 36" Aluminum Oxide Belt - 180 Grit (Pack of 10)	METSBELT436A180	60.00
4" x 36" Aluminum Oxide Belt - 240 Grit (Pack of 10)	METSBELT436A240	60.00
6" x 48" Aluminum Oxide Belt - 50 Grit (Pack of 10)	METSBELT648AL50	98.00
6" x 48" Aluminum Oxide Belt - 60 Grit (Pack of 10)	METSBELT648EC60	93.00
6" x 48" Aluminum Oxide Belt - 80 Grit (Pack of 10)	METSBELT648AL80	89.00
6" x 48" Aluminum Oxide Belt - 100 Grit (Pack of 10)	METSBELT648A100	87.00
6" x 48" Aluminum Oxide Belt - 120 Grit (Pack of 10)	METSBELT648A120	87.00
6" x 48" Aluminum Oxide Belt - 180 Grit (Pack of 10)	METSBELT648A180	87.00
6" x 48" Aluminum Oxide Belt - 240 Grit (Pack of 10)	METSBELT648A240	87.00

ZIRCONIA ALUMINA BELTS SOLD IN PACKS OF 10

DESCRIPTION	PART NUMBER	PRICE
4" x 36" Zirconia Alumina Belt - 60 Grit (Pack of 10)	METSBELT436ZA60	92.00
4" x 36" Zirconia Alumina Belt - 80 Grit (Pack of 10)	METSBELT436ZA80	92.00
4" x 36" Zirconia Alumina Belt - 100 Grit (Pack of 10)	METSBELT436Z100	92.00
4" x 36" Zirconia Alumina Belt - 120 Grit (Pack of 10)	METSBELT43SZ120	80.00
6" x 48" Zirconia Alumina Belt - 60 Grit (Pack of 10)	METSBELT648ZA60	115.00
6" x 48" Zirconia Alumina Belt - 80 Grit (Pack of 10)	METSBELT648ZA80	113.00
6" x 48" Zirconia Alumina Belt - 100 Grit (Pack of 10)	METSBELT648Z100	109.00
6" x 48" Zirconia Alumina Belt - 120 Grit (Pack of 10)	METSBELT648Z120	109.00

Additional sizes and grits are available upon request.

GRINDING & POLISHING



Abrasive Discs

Lapmaster offers a complete line of Abrasive Discs for your Metallographic sample preparation needs. These products are excellent for coarse and fine grinding of Metallographic specimens.

Our Discs feature premium graded silicon carbide bonded to a sturdy "C" weight backing. The premium graded silicon carbide allows high cutting rates, yet produces consistent and uniform finishes. The high performance resin bonding system permits wet or dry operation allowing for longer paper life.

These Discs are available in Plain Back and Water Resistant pressure-sensitive adhesive backings.

Our Abrasive discs are also available in Aluminum Oxide (ALOX) and Zirconia Alumina (ZA) for additional applications.

ABRASIVE DISCS

SILICON CARBIDE ABRASIVE PAPER DISCS

SOLD IN 100 DISC PACKS

DESCRIPTION	PART NUMBER	PRICE
1" PSA Backed Silicon Carbide Abrasive Paper Discs - 180 Grit	METSPAPRA010180	22.00
1" PSA Backed Silicon Carbide Abrasive Paper Discs - 240 Grit	METSPAPRA010240	22.00
1" PSA Backed Silicon Carbide Abrasive Paper Discs - 320 Grit	METSPAPRA010320	22.00
1" PSA Backed Silicon Carbide Abrasive Paper Discs - 400 Grit	METSPAPRA010400	22.00
1" PSA Backed Silicon Carbide Abrasive Paper Discs - 600 Grit	METSPAPRA010600	22.00
2-7/8" PSA Backed Silicon Carbide Abrasive Paper Discs - 180 Grit	METSPAPR2780180	49.00
2-7/8" PSA Backed Silicon Carbide Abrasive Paper Discs - 240 Grit	METSPAPR2780240	49.00
2-7/8" PSA Backed Silicon Carbide Abrasive Paper Discs - 320 Grit	METSPAPR2780320	49.00
2-7/8" PSA Backed Silicon Carbide Abrasive Paper Discs - 400 Grit	METSPAPR2780400	49.00
2-7/8" PSA Backed Silicon Carbide Abrasive Paper Discs - 600 Grit	METSPAPR2780600	49.00
8" Plain Backed Silicon Carbide Abrasive Paper Discs - 60 Grit	METSPAPRP080060	79.00
8" Plain Backed Silicon Carbide Abrasive Paper Discs - 80 Grit	METSPAPRP080080	72.00
8" Plain Backed Silicon Carbide Abrasive Paper Discs - 120 Grit	METSPAPRP080120	65.00
8" Plain Backed Silicon Carbide Abrasive Paper Discs - 180 Grit	METSPAPRP080180	58.00
8" Plain Backed Silicon Carbide Abrasive Paper Discs - 240 Grit	METSPAPRP080240	58.00
8" Plain Backed Silicon Carbide Abrasive Paper Discs - 320 Grit	METSPAPRP080320	58.00
8" Plain Backed Silicon Carbide Abrasive Paper Discs - 400 Grit	METSPAPRP080400	58.00
8" Plain Backed Silicon Carbide Abrasive Paper Discs - 600 Grit	METSPAPRP080600	58.00
8" Plain Backed Silicon Carbide Abrasive Paper Discs - 800 Grit	METSPAPRP080800	120.00
8" Plain Backed Silicon Carbide Abrasive Paper Discs - 1200 Grit	METSPAPRP081200	120.00
8" Plain Backed Silicon Carbide Abrasive Paper Discs-1/2" hole-60 Grit	METSPAPRC/20060	79.00
8" Plain Backed Silicon Carbide Abrasive Paper Discs-1/2" hole-80 Grit	METSPAPRC/20080	72.00
8" Plain Backed Silicon Carbide Abrasive Paper Discs-1/2" hole-120 Grit	METSPAPRC/20120	65.00
8" Plain Backed Silicon Carbide Abrasive Paper Discs-1/2" hole-180 Grit	METSPAPRC/20180	58.00
8" Plain Backed Silicon Carbide Abrasive Paper Discs-1/2" hole-240 Grit	METSPAPRC/20240	58.00
8" Plain Backed Silicon Carbide Abrasive Paper Discs-1/2" hole-320 Grit	METSPAPRC/20320	58.00
8" Plain Backed Silicon Carbide Abrasive Paper Discs-1/2" hole-400 Grit	METSPAPRC/20400	58.00
8" Plain Backed Silicon Carbide Abrasive Paper Discs-1/2" hole-600 Grit	METSPAPRC/20600	58.00
8" Plain Backed Silicon Carbide Abrasive Paper Discs-1/2" hole-800 Grit	METSPAPRC/20800	120.00
8" Plain Backed Silicon Carbide Abrasive Paper Discs-1/2" hole-1200 Grit	METSPAPRC/21200	120.00
8" PSA Backed Silicon Carbide Abrasive Paper Discs - 60 Grit	METSPAPRA080060	142.00
8" PSA Backed Silicon Carbide Abrasive Paper Discs - 80 Grit	METSPAPRA080080	117.00
8" PSA Backed Silicon Carbide Abrasive Paper Discs - 120 Grit	METSPAPRA080120	125.00
8" PSA Backed Silicon Carbide Abrasive Paper Discs - 180 Grit	METSPAPRA080180	109.00
8" PSA Backed Silicon Carbide Abrasive Paper Discs - 240 Grit	METSPAPRA080240	109.00
8" PSA Backed Silicon Carbide Abrasive Paper Discs - 320 Grit	METSPAPRA080320	109.00
8" PSA Backed Silicon Carbide Abrasive Paper Discs - 400 Grit	METSPAPRA080400	109.00
8" PSA Backed Silicon Carbide Abrasive Paper Discs - 600 Grit	METSPAPRA080600	109.00
8" PSA Backed Silicon Carbide Abrasive Paper Discs - 800 Grit	METSPAPRA080800	190.00
8" PSA Backed Silicon Carbide Abrasive Paper Discs - 1000 Grit	METSPAPRA081000	190.00
8" PSA Backed Silicon Carbide Abrasive Paper Discs - 1200 Grit	METSPAPRA081200	190.00

Additional sizes and grits are available upon request.

TO ORDER, CALL 877.352.8637 OR EMAIL sales@lapmaster.com

GRINDING & POLISHING



Abrasive Discs

ABRASIVE DISCS

SILICON CARBIDE ABRASIVE PAPER DISCS

SOLD IN 100 DISC PACKS

DESCRIPTION	PART NUMBER	PRICE
200mm Plain Backed Silicon Carbide Abrasive Paper Discs - 60 Grit	METSPAPR2000060	79.00
200mm Plain Backed Silicon Carbide Abrasive Paper Discs - 80 Grit	METSPAPR2000080	72.00
200mm Plain Backed Silicon Carbide Abrasive Paper Discs - 120 Grit	METSPAPR2000120	65.00
200mm Plain Backed Silicon Carbide Abrasive Paper Discs - 180 Grit	METSPAPR2000180	58.00
200mm Plain Backed Silicon Carbide Abrasive Paper Discs - 240 Grit	METSPAPR2000240	58.00
200mm Plain Backed Silicon Carbide Abrasive Paper Discs - 320 Grit	METSPAPR2000320	58.00
200mm Plain Backed Silicon Carbide Abrasive Paper Discs - 400 Grit	METSPAPR2000400	58.00
200mm Plain Backed Silicon Carbide Abrasive Paper Discs - 600 Grit	METSPAPR2000600	58.00
200mm Plain Backed Silicon Carbide Abrasive Paper Discs - 800 Grit	METSPAPR2000800	120.00
200mm Plain Backed Silicon Carbide Abrasive Paper Discs - 1200 Grit	METSPAPR2001200	120.00
10" Plain Backed Silicon Carbide Abrasive Paper Discs - 60 Grit	METSPAPRP100060	134.00
10" Plain Backed Silicon Carbide Abrasive Paper Discs - 80 Grit	METSPAPRP100080	121.00
10" Plain Backed Silicon Carbide Abrasive Paper Discs - 120 Grit	METSPAPRP100120	95.00
10" Plain Backed Silicon Carbide Abrasive Paper Discs - 180 Grit	METSPAPRP100180	93.00
10" Plain Backed Silicon Carbide Abrasive Paper Discs - 240 Grit	METSPAPRP100240	93.00
10" Plain Backed Silicon Carbide Abrasive Paper Discs - 320 Grit	METSPAPRP100320	93.00
10" Plain Backed Silicon Carbide Abrasive Paper Discs - 400 Grit	METSPAPRP100400	93.00
10" Plain Backed Silicon Carbide Abrasive Paper Discs - 600 Grit	METSPAPRP100600	93.00
10" Plain Backed Silicon Carbide Abrasive Paper Discs - 800 Grit	METSPAPRP100800	152.00
10" Plain Backed Silicon Carbide Abrasive Paper Discs - 1200 Grit	METSPAPRP101200	152.00
10" PSA Backed Silicon Carbide Abrasive Paper Discs - 60 Grit	METSPAPRA100060	197.00
10" PSA Backed Silicon Carbide Abrasive Paper Discs - 80 Grit	METSPAPRA100080	178.00
10" PSA Backed Silicon Carbide Abrasive Paper Discs - 120 Grit	METSPAPRA100120	164.00
10" PSA Backed Silicon Carbide Abrasive Paper Discs - 180 Grit	METSPAPRA100180	162.00
10" PSA Backed Silicon Carbide Abrasive Paper Discs - 240 Grit	METSPAPRA100240	162.00
10" PSA Backed Silicon Carbide Abrasive Paper Discs - 320 Grit	METSPAPRA100320	162.00
10" PSA Backed Silicon Carbide Abrasive Paper Discs - 400 Grit	METSPAPRA100400	162.00
10" PSA Backed Silicon Carbide Abrasive Paper Discs - 600 Grit	METSPAPRA100600	162.00
10" PSA Backed Silicon Carbide Abrasive Paper Discs - 800 Grit	METSPAPRA100800	238.00
10" PSA Backed Silicon Carbide Abrasive Paper Discs - 1200 Grit	METSPAPRA101200	238.00
250mm Plain Backed Silicon Carbide Abrasive Paper Discs - 60 Grit	METSPAPR2500060	134.00
250mm Plain Backed Silicon Carbide Abrasive Paper Discs - 80 Grit	METSPAPR2500080	121.00
250mm Plain Backed Silicon Carbide Abrasive Paper Discs - 120 Grit	METSPAPR2500120	95.00
250mm Plain Backed Silicon Carbide Abrasive Paper Discs - 180 Grit	METSPAPR2500180	93.00
250mm Plain Backed Silicon Carbide Abrasive Paper Discs - 240 Grit	METSPAPR2500240	93.00
250mm Plain Backed Silicon Carbide Abrasive Paper Discs - 320 Grit	METSPAPR2500320	93.00
250mm Plain Backed Silicon Carbide Abrasive Paper Discs - 400 Grit	METSPAPR2500400	93.00
250mm Plain Backed Silicon Carbide Abrasive Paper Discs - 600 Grit	METSPAPR2500600	93.00
250mm Plain Backed Silicon Carbide Abrasive Paper Discs - 800 Grit	METSPAPR2500800	152.00
250mm Plain Backed Silicon Carbide Abrasive Paper Discs - 1200 Grit	METSPAPR2501200	152.00

Additional sizes and grits are available upon request.



Abrasive Discs

ABRASIVE DISCS

SILICON CARBIDE ABRASIVE PAPER DISCS

SOLD IN 100 DISC PACKS

DESCRIPTION	PART NUMBER	PRICE
12" Plain Backed Silicon Carbide Abrasive Paper Discs - 60 Grit	METSPAPRP120060	186.00
12" Plain Backed Silicon Carbide Abrasive Paper Discs - 80 Grit	METSPAPRP120080	189.00
12" Plain Backed Silicon Carbide Abrasive Paper Discs - 120 Grit	METSPAPRP120120	148.00
12" Plain Backed Silicon Carbide Abrasive Paper Discs - 180 Grit	METSPAPRP120180	117.00
12" Plain Backed Silicon Carbide Abrasive Paper Discs - 240 Grit	METSPAPRP120240	117.00
12" Plain Backed Silicon Carbide Abrasive Paper Discs - 320 Grit	METSPAPRP120320	117.00
12" Plain Backed Silicon Carbide Abrasive Paper Discs - 400 Grit	METSPAPRP120400	117.00
12" Plain Backed Silicon Carbide Abrasive Paper Discs - 600 Grit	METSPAPRP120600	117.00
12" Plain Backed Silicon Carbide Abrasive Paper Discs - 800 Grit	METSPAPRP120800	183.00
12" Plain Backed Silicon Carbide Abrasive Paper Discs - 1200 Grit	METSPAPRP121200	183.00
12" PSA Backed Silicon Carbide Abrasive Paper Discs - 60 Grit	METSPAPRA120060	299.00
12" PSA Backed Silicon Carbide Abrasive Paper Discs - 80 Grit	METSPAPRA120080	269.00
12" PSA Backed Silicon Carbide Abrasive Paper Discs - 120 Grit	METSPAPRA120120	238.00
12" PSA Backed Silicon Carbide Abrasive Paper Discs - 180 Grit	METSPAPRA120180	217.00
12" PSA Backed Silicon Carbide Abrasive Paper Discs - 240 Grit	METSPAPRA120240	217.00
12" PSA Backed Silicon Carbide Abrasive Paper Discs - 320 Grit	METSPAPRA120320	217.00
12" PSA Backed Silicon Carbide Abrasive Paper Discs - 400 Grit	METSPAPRA120400	217.00
12" PSA Backed Silicon Carbide Abrasive Paper Discs - 600 Grit	METSPAPRA120600	217.00
12" PSA Backed Silicon Carbide Abrasive Paper Discs - 800 Grit	METSPAPRA120800	320.00
12" PSA Backed Silicon Carbide Abrasive Paper Discs - 1200 Grit	METSPAPRA121200	320.00
300mm Plain Backed Silicon Carbide Abrasive Paper Discs - 60 Grit	METSPAPR3000060	186.00
300mm Plain Backed Silicon Carbide Abrasive Paper Discs - 80 Grit	METSPAPR3000080	189.00
300mm Plain Backed Silicon Carbide Abrasive Paper Discs - 120 Grit	METSPAPR3000120	148.00
300mm Plain Backed Silicon Carbide Abrasive Paper Discs - 180 Grit	METSPAPR3000180	117.00
300mm Plain Backed Silicon Carbide Abrasive Paper Discs - 240 Grit	METSPAPR3000240	117.00
300mm Plain Backed Silicon Carbide Abrasive Paper Discs - 320 Grit	METSPAPR3000320	117.00
300mm Plain Backed Silicon Carbide Abrasive Paper Discs - 400 Grit	METSPAPR3000400	117.00
300mm Plain Backed Silicon Carbide Abrasive Paper Discs - 600 Grit	METSPAPR3000600	117.00
300mm Plain Backed Silicon Carbide Abrasive Paper Discs - 800 Grit	METSPAPR3000800	183.00
300mm Plain Backed Silicon Carbide Abrasive Paper Discs - 1200 Grit	METSPAPR3001200	183.00
15" Plain Backed Silicon Carbide Abrasive Paper Discs - 60 Grit	METSPAPRP150060	242.00
15" Plain Backed Silicon Carbide Abrasive Paper Discs - 80 Grit	METSPAPRP150080	217.00
15" Plain Backed Silicon Carbide Abrasive Paper Discs - 120 Grit	METSPAPRP150120	191.00
15" Plain Backed Silicon Carbide Abrasive Paper Discs - 180 Grit	METSPAPRP150180	174.00
15" Plain Backed Silicon Carbide Abrasive Paper Discs - 240 Grit	METSPAPRP150240	174.00
15" Plain Backed Silicon Carbide Abrasive Paper Discs - 320 Grit	METSPAPRP150320	174.00
15" Plain Backed Silicon Carbide Abrasive Paper Discs - 400 Grit	METSPAPRP150400	174.00
15" Plain Backed Silicon Carbide Abrasive Paper Discs - 600 Grit	METSPAPRP150600	174.00
15" Plain Backed Silicon Carbide Abrasive Paper Discs - 800 Grit	METSPAPRP150800	246.00
15" Plain Backed Silicon Carbide Abrasive Paper Discs - 1200 Grit	METSPAPRP151200	246.00

Additional sizes and grits are available upon request.

GRINDING & POLISHING



Abrasive Discs

ABRASIVE DISCS

SILICON CARBIDE ABRASIVE PAPER DISCS

SOLD IN 100 DISC PACKS

DESCRIPTION	PART NUMBER	PRICE
15" PSA Backed Silicon Carbide Abrasive Paper Discs - 60 Grit	METSPAPRA150060	483.00
15" PSA Backed Silicon Carbide Abrasive Paper Discs - 80 Grit	METSPAPRA150080	433.00
15" PSA Backed Silicon Carbide Abrasive Paper Discs - 120 Grit	METSPAPRA150120	415.00
15" PSA Backed Silicon Carbide Abrasive Paper Discs - 180 Grit	METSPAPRA150180	348.00
15" PSA Backed Silicon Carbide Abrasive Paper Discs - 240 Grit	METSPAPRA150240	358.00
15" PSA Backed Silicon Carbide Abrasive Paper Discs - 320 Grit	METSPAPRA150320	358.00
15" PSA Backed Silicon Carbide Abrasive Paper Discs - 400 Grit	METSPAPRA150400	358.00
15" PSA Backed Silicon Carbide Abrasive Paper Discs - 600 Grit	METSPAPRA150600	358.00
15" PSA Backed Silicon Carbide Abrasive Paper Discs - 800 Grit	METSPAPRA150800	445.00
15" PSA Backed Silicon Carbide Abrasive Paper Discs - 1200 Grit	METSPAPRA151200	445.00

ALUMINUM OXIDE ABRASIVE DISCS-PSA BACKED

DESCRIPTION	PART NUMBER	PRICE
12" Aluminum Oxide Abrasive Cloth Disc - 60 Grit Pack of 25	METSPAPRA12AL60	144.00
12" Aluminum Oxide Abrasive Cloth Disc - 80 Grit Pack of 50	METSPAPRA12AL80	211.00
12" Aluminum Oxide Abrasive Cloth Disc - 100 Grit Pack of 50	METSPAPRA12A100	201.00
12" Aluminum Oxide Abrasive Cloth Disc - 120 Grit Pack of 50	METSPAPRA12A120	201.00
12" Aluminum Oxide Abrasive Cloth Disc - 180 Grit Pack of 50	METSPAPRA12A180	201.00
12" Aluminum Oxide Abrasive Cloth Disc - 220 Grit Pack of 50	METSPAPRA12A220	201.00
12" Aluminum Oxide Abrasive Cloth Disc - 240 Grit Pack of 50	METSPAPRA12A240	201.00

ZIRCONIA ALUMINA ABRASIVE DISCS-PSA BACKED

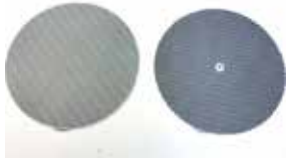
SOLD IN PACKS OF 25

DESCRIPTION	PART NUMBER	PRICE
8" Zirconia Alumina Abrasive Cloth Disc - 60 Grit	METSPAPRA08ZA60	155.00
12" Zirconia Alumina Abrasive Cloth Disc - 60 Grit	METSPAPRA12ZA60	205.00
12" Zirconia Alumina Abrasive Cloth Disc - 120 Grit	METSPAPRA12Z120	196.00
12" Zirconia Alumina Abrasive Cloth Disc - 180 Grit	METSPAPRA12Z180	196.00
12" Zirconia Alumina Abrasive Cloth Disc - 220 Grit	METSPAPRA12Z220	196.00

Additional sizes and grits are available upon request.

GRINDING & POLISHING

DIAMOND GRINDING DISCS



"LMDG" Diamond Discs

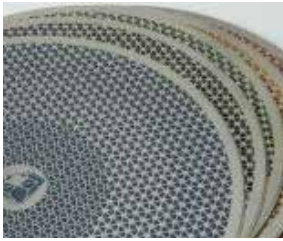
The LAPMASTER "LMDG" is an innovative diamond grinding disc that extends fine grinding to single-micron grit sizes! It replaces conventional polishing processes, achieving superior results in terms of material removal rate, surface quality, planarity of the sample and life of the consumable. Lapmaster "LMDG" provides for an easy, clean and efficient fine grinding process.

Uses only water for lubrication (NO SLURRY OR OIL)

Metal backing for use with a magnetic system.

LAPMASTER "LMDG" FIXED DIAMOND FINE GRINDING/POLISHING DISCS

DESCRIPTION	PART NUMBER	PRICE
8", (200mm), 125 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0080125	228.00
8", (200mm), 75 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0080075	190.00
8", (200mm), 60 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0080060	190.00
8", (200mm), 54 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0080054	190.00
8", (200mm), 30 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0080030	190.00
8", (200mm), 18 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0080018	190.00
8", (200mm), 15 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0080015	190.00
8", (200mm), 9 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0080009	190.00
8", (200mm), 6 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0080006	190.00
8", (200mm), 3 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0080003	190.00
8", (200mm), 2 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0080002	190.00
8", (200mm), 1 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0080001	190.00
10", (250mm), 125 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0100125	275.00
10", (250mm), 75 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0100075	229.00
10", (250mm), 60 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0100060	229.00
10", (250mm), 54 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0100054	229.00
10", (250mm), 30 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0100030	229.00
10", (250mm), 18 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0100018	229.00
10", (250mm), 15 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0100015	229.00
10", (250mm), 9 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0100009	229.00
10", (250mm), 6 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0100006	229.00
10", (250mm), 3 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0100003	229.00
10", (250mm), 2 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0100002	229.00
10", (250mm), 1 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0100001	229.00
12", (300mm), 125 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0120125	322.00
12", (300mm), 75 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0120075	266.00
12", (300mm), 60 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0120060	266.00
12", (300mm), 54 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0120054	266.00
12", (300mm), 30 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0120030	266.00
12", (300mm), 18 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0120018	266.00
12", (300mm), 15 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0120015	266.00
12", (300mm), 9 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0120009	266.00
12", (300mm), 6 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0120006	266.00
12", (300mm), 3 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0120003	266.00
12", (300mm), 2 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0120002	266.00
12", (300mm), 1 micron Lapmaster "LMDG" Diamond Disc	METSLMDG0120001	266.00



A special resin bonded diamond grinding disc which offers significant improvements over other disc systems on the market today. These diamond discs are designed to replace over 200 sheets of the equivalent SiC grinding discs. With a more evenly distributed abrasive grain size you will achieve a uniform grind and perfect edge retention on a wide range of materials. With a steel backing to be used with a magnetic system.

DIAMOND GRINDING DISCS

PIATTO DIAMOND GRINDING DISCS

DESCRIPTION	PART NUMBER	PRICE
8" (200mm) PIATTO Diamond Grinding Disc, 80 grit	METSPIAT0080080	161.00
8" (200mm) PIATTO Diamond Grinding Disc, 120 grit	METSPIAT0080120	131.00
8" (200mm) PIATTO Diamond Grinding Disc, 240 grit (220P)	METSPIAT0080220	117.00
8" (200mm) PIATTO Diamond Grinding Disc, 360 grit (600P)	METSPIAT0080600	117.00
8" (200mm) PIATTO Diamond Grinding Disc, 600 grit (1200P)	METSPIAT0081200	117.00
10" (250mm) PIATTO Diamond Grinding Disc, 80 grit	METSPIAT0100080	177.00
10" (250mm) PIATTO Diamond Grinding Disc, 120 grit	METSPIAT0100120	151.00
10" (250mm) PIATTO Diamond Grinding Disc, 240 grit (220P)	METSPIAT0100220	134.00
10" (250mm) PIATTO Diamond Grinding Disc, 360 grit (600P)	METSPIAT0100600	134.00
10" (250mm) PIATTO Diamond Grinding Disc, 600 grit (1200P)	METSPIAT0101200	134.00
12" (300mm) PIATTO Diamond Grinding Disc, 80 grit	METSPIAT0120080	276.00
12" (300mm) PIATTO Diamond Grinding Disc, 120 grit	METSPIAT0120120	220.00
12" (300mm) PIATTO Diamond Grinding Disc, 240 grit (220P)	METSPIAT0120220	196.00
12" (300mm) PIATTO Diamond Grinding Disc, 360 grit (600P)	METSPIAT0120600	196.00
12" (300mm) PIATTO Diamond Grinding Disc, 600 grit (1200P)	METSPIAT0121200	196.00
14" (350mm) PIATTO Diamond Grinding Disc, 80 grit	METSPIAT0140080	395.00
14" (350mm) PIATTO Diamond Grinding Disc, 120 grit	METSPIAT0140120	320.00
14" (350mm) PIATTO Diamond Grinding Disc, 240 grit (220P)	METSPIAT0140220	275.00
14" (350mm) PIATTO Diamond Grinding Disc, 360 grit (600P)	METSPIAT0140600	275.00
14" (350mm) PIATTO Diamond Grinding Disc, 600 grit (1200P)	METSPIAT0141200	275.00



Rough polishing discs are designed to be used with diamond suspensions (1 μ m thru 15 μ m) for the rough polishing step of ferrous materials such as steels and iron. Use a final polishing cloth after this step for finer polishing. These metal backed discs and metal backed polishing cloths work directly on a magnetic system.

ALLEGRAN ROUGH POLISHING DIAMOND DISCS - FOR FERROUS MATERIALS

DESCRIPTION	PART NUMBER	PRICE
8" (200mm) ALLEGRAN #1 Diamond Polishing Disc, for up to 1 μ m	METSALEG0080001	84.00
8" (200mm) ALLEGRAN #3 Diamond Polishing Disc, for 3 μ m to 6 μ m	METSALEG0080003	84.00
8" (200mm) ALLEGRAN #9 Diamond Polishing Disc, for 6 μ m to 15 μ m	METSALEG0080009	84.00
10" (200mm) ALLEGRAN #1 Diamond Polishing Disc, for up to 1 μ m	METSALEG0100001	90.00
10" (200mm) ALLEGRAN #3 Diamond Polishing Disc, for 3 μ m to 6 μ m	METSALEG0100003	90.00
10" (200mm) ALLEGRAN #9 Diamond Polishing Disc, for 6 μ m to 15 μ m	METSALEG0100009	90.00
12" (200mm) ALLEGRAN #1 Diamond Polishing Disc, for up to 1 μ m	METSALEG0120001	102.00
12" (200mm) ALLEGRAN #3 Diamond Polishing Disc, for 3 μ m to 6 μ m	METSALEG0120003	102.00
12" (200mm) ALLEGRAN #9 Diamond Polishing Disc, for 6 μ m to 15 μ m	METSALEG0120009	102.00
14" (200mm) ALLEGRAN #1 Diamond Polishing Disc, for up to 1 μ m	METSALEG0140001	145.00
14" (200mm) ALLEGRAN #3 Diamond Polishing Disc, for 3 μ m to 6 μ m	METSALEG0140003	145.00
14" (200mm) ALLEGRAN #9 Diamond Polishing Disc, for 6 μ m to 15 μ m	METSALEG0140009	145.00



Rough polishing discs are designed to be used with diamond suspensions (1 μm thru 15 μm) for the rough polishing step of non-ferrous materials such as aluminum and soft alloys. Use a final polishing cloth after this step for finer polishing. These metal backed discs and metal backed polishing cloths work directly on a magnetic system.

LARGAN ROUGH POLISHING DIAMOND DISCS – FOR NON-FERROUS MATERIALS

DESCRIPTION	PART NUMBER	PRICE
8" (200mm) LARGAN Diamond Polishing Disc	METSLARG0080009	84.00
10" (250mm) LARGAN Diamond Polishing Disc	METSLARG0100009	90.00
12" (300mm) LARGAN Diamond Polishing Disc	METSLARG0120009	102.00
14" (350mm) LARGAN Diamond Polishing Disc	METSLARG0140009	145.00
Dressing Stick For Diamond Discs	METSDRESSTK0001	9.00



Lapping Films

DIAMOND FILMS

Diamond films consist of a 3 mil polyester backing coated with a layer of precision graded diamond. These films are ideal for applications where flatness, and edge retention are critical such as electronic components or with samples composed of multiple materials of various hardness. Available in micron sizes ranging from 0.25 to 30 microns.

LAPPING FILMS

DIAMOND LAPPING FILM

DESCRIPTION	PART NUMBER	PRICE
4" PSA Diamond Lapping Film 1/2 Micron 10 Per Pack	METSFILMA0401/2	Upon Request
4" PSA Diamond Lapping Film - 1 Micron 10 Per Pack	METSFILMA040001	Upon Request
4" PSA Diamond Lapping Film - 3 Micron 10 Per Pack	METSFILMA040003	Upon Request
4" PSA Diamond Lapping Film - 6 Micron 10 Per Pack	METSFILMA040006	Upon Request
4" PSA Diamond Lapping Film - 9 Micron 10 Per Pack	METSFILMA040009	Upon Request
4" PSA Diamond Lapping Film - 15 Micron 10 Per Pack	METSFILMA040015	Upon Request
4" PSA Diamond Lapping Film - 30 Micron 10 Per Pack	METSFILMA040030	Upon Request
8" Plain Backed Diamond Lapping Film - 1/2 Micron	METSFILMP0801/2	27.00
8" Plain Backed Diamond Lapping Film - 1 Micron	METSFILMP080001	27.00
8" Plain Backed Diamond Lapping Film - 3 Micron	METSFILMP080003	27.00
8" Plain Backed Diamond Lapping Film - 6 Micron	METSFILMP080006	27.00
8" Plain Backed Diamond Lapping Film - 9 Micron	METSFILMP080009	27.00
8" Plain Backed Diamond Lapping Film - 15 Micron	METSFILMP080015	27.00
8" Plain Backed Diamond Lapping Film - 30 Micron	METSFILMP080030	35.00
8" PSA Backed Diamond Lapping Film - 1/2 Micron	METSFILMA0801/2	33.00
8" PSA Backed Diamond Lapping Film - 1 Micron	METSFILMA080001	33.00
8" PSA Backed Diamond Lapping Film - 3 Micron	METSFILMA080003	33.00
8" PSA Backed Diamond Lapping Film - 6 Micron	METSFILMA080006	33.00
8" PSA Backed Diamond Lapping Film - 9 Micron	METSFILMA080009	33.00
8" PSA Backed Diamond Lapping Film - 15 Micron	METSFILMA080015	33.00
8" PSA Backed Diamond Lapping Film - 30 Micron	METSFILMA080030	39.00
12" Plain Backed Diamond Lapping Film - 1/2 Micron	METSFILMP1201/2	62.00
12" Plain Backed Diamond Lapping Film - 1 Micron	METSFILMP120001	62.00
12" Plain Backed Diamond Lapping Film - 3 Micron	METSFILMP120003	62.00
12" Plain Backed Diamond Lapping Film - 6 Micron	METSFILMP120006	62.00
12" Plain Backed Diamond Lapping Film - 9 Micron	METSFILMP120009	62.00
12" Plain Backed Diamond Lapping Film - 15 Micron	METSFILMP120015	62.00
12" Plain Backed Diamond Lapping Film - 30 Micron	METSFILMP120030	68.00
12" PSA Backed Diamond Lapping Film - 1/2 Micron	METSFILMA1201/2	68.00
12" PSA Backed Diamond Lapping Film - 1 Micron	METSFILMA120001	68.00
12" PSA Backed Diamond Lapping Film - 3 Micron	METSFILMA120003	68.00
12" PSA Backed Diamond Lapping Film - 6 Micron	METSFILMA120006	68.00
12" PSA Backed Diamond Lapping Film - 9 Micron	METSFILMA120009	68.00
12" PSA Backed Diamond Lapping Film - 15 Micron	METSFILMA120015	68.00
12" PSA Backed Diamond Lapping Film - 30 Micron	METSFILMA120030	75.00

GRINDING & POLISHING

LMB SERIES POLISHING CLOTHS & PADS WITH STAINLESS STEEL METAL BACKING, FOR MAGNETIC SYSTEMS

MADE IN THE USA WITH THE HIGHEST QUALITY MATERIALS!

Available in all popular pad types and sizes for easy conversion to the LAPMASTER LMB Ssystem!



LMB-HGN Hard woven cloth pad used to replace some rough grinding steps when used with polycrystalline diamond. Use with diamond 6 micron and up. Most effective with 15 micron and up.



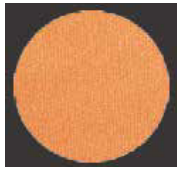
LMB-PLUS Synthetic nap polishing cloth specifically designed for sintered carbides and steels. For use with all micron sizes.



LMB-PANW Napless, non-woven textile. Excellent for flatness and edge retention on a wide range of materials; ferrous and non-ferrous metals, ceramics, PCB, minerals among others. Use with diamond 15 - 1 micron.



LMB-FWL A special woven 100% wool polishing pad. Used to polish ferrous metals, non-ferrous metals and polymers. Use with diamond 9 - 1 micron.



LMB-GLD Woven acetate polishing pad. Used for fine grinding and polishing of ferrous metals, non-ferrous metals, plastics and coatings. Used with diamond 9 - 3 micron.



LMB-FNL A final polishing cloth with a medium rayon nap. Excellent for final polishing on all materials with diamond or alumina. Use with diamond or alumina 5 - 0.02 micron.



LMB-ASFL Silk style polishing cloth used to produce mirror surfaces on ferrous and non-ferrous, and microelectronics. Best results obtained with 3-micron diamond and finer. Use diamond 9 - 1 micron.



LMB-DBN A final polishing cloth with a short synthetic nap. Excellent for final polishing on all materials with diamond or alumina. Use with diamond or alumina 5 - 0.02 micron.



LMB-RED Woven wool felt polishing pad. For polishing ferrous metals with aluminas less than 9 micron particle size.



LMB-SUPREME A long life, chemical resistant (CHEM), polyurethane polishing pad. Excellent for final polishing with alumina or colloidal silica. Most effective during chemicalmechanical polishing of soft non-ferrous materials. Use with alumina or colloidal silica, 1 - 0.02 micron.

GRINDING & POLISHING

POLISHING CLOTHS & PADS FOR MAGNETIC SYSTEMS

DESCRIPTION	PART NUMBER	PRICE
8" LMB-HGN SS Metal Backed Polishing Pad - 5 Pack	METSPADSHGNM008	60.00
10" LMB-HGN SS Metal Backed Polishing Pad - 5 Pack	METSPADSHGNM010	96.00
12" LMB-HGN SS Metal Backed Polishing Pad - 5 Pack	METSPADSHGNM012	120.00
8" LMB-PANW SS Metal Backed Polishing Pad - 5 Pack	METSPADSPANM008	60.00
10" LMB-PANW SS Metal Backed Polishing Pad - 5 Pack	METSPADSPANM010	96.00
12" LMB-PANW SS Metal Backed Polishing Pad - 5 Pack	METSPADSPANM012	109.00
8" LMB-GLD SS Metal Backed Polishing Pad - 5 Pack	METSPADSGLDM008	60.00
10" LMB-GLD SS Metal Backed Polishing Pad - 5 Pack	METSPADSGLDM010	96.00
12" LMB-GLD SS Metal Backed Polishing Pad - 5 Pack	METSPADSGLDM012	120.00
8" LMB-ASFL SS Metal Backed Polishing Pad - 5 Pack	METSPADSBLSM008	58.00
10" LMB-ASFL SS Metal Backed Polishing Pad - 5 Pack	METSPADSBLSM010	78.00
12" LMB-ASFL SS Metal Backed Polishing Pad - 5 Pack	METSPADSBLSM012	88.00
8" LMB-RED SS Metal Backed Polishing Pad - 5 Pack	METSPADSREDM008	70.00
10" LMB-RED SS Metal Backed Polishing Pad - 5 Pack	METSPADSREDM010	112.00
12" LMB-RED SS Metal Backed Polishing Pad - 5 Pack	METSPADSREDM012	140.00
8" LMB-PLUS SS Metal Backed Polishing Pad - 5 Pack	METSPADSPLSM008	60.00
10" LMB-PLUS SS Metal Backed Polishing Pad - 5 Pack	METSPADSPLSM010	96.00
12" LMB-PLUS SS Metal Backed Polishing Pad - 5 Pack	METSPADSPLSM012	120.00
8" LMB-FWL SS Metal Backed Polishing Pad - 5 Pack	METSPADSFWLM008	64.00
10" LMB-FWL SS Metal Backed Polishing Pad - 5 Pack	METSPADSFWLM010	96.00
12" LMB-FWL SS Metal Backed Polishing Pad - 5 Pack	METSPADSFWLM012	128.00
8" LMB-FNL SS Metal Backed Polishing Pad - 5 Pack	METSPADSFNLM008	60.00
10" LMB-FNL SS Metal Backed Polishing Pad - 5 Pack	METSPADSFNLM010	96.00
12" LMB-FNL SS Metal Backed Polishing Pad - 5 Pack	METSPADSFNLM012	110.00
8" LMB-DBN SS Metal Backed Polishing Pad - 5 Pack	METSPADSDBNM008	60.00
10" LMB-DBN SS Metal Backed Polishing Pad - 5 Pack	METSPADSDBNM010	96.00
12" LMB-DBN SS Metal Backed Polishing Pad - 5 Pack	METSPADSDBNM012	120.00
8" LMB-SUPREME SS Metal Backed Polishing Pad, Chem. Resistant - 5 Pack	METSPADSSUPM008	142.00
10" LMB-SUPREME SS Metal Backed Polishing Pad, Chem. Resistant - 5 Pack	METSPADSSUPM010	195.00
12" LMB-SUPREME SS Metal Backed Polishing Pad, Chem. Resistant - 5 Pack	METSPADSSUPM012	255.00

GRINDING & POLISHING

LMR SERIES POLISHING CLOTHS & PADS WITH METALIZED RUBBER BACKING, FOR MAGNETIC SYSTEMS

MADE IN THE USA WITH THE HIGHEST QUALITY MATERIALS!

This is a more cost effective option than stainless steel metal backing

The metal impregnated rubber backing works equally as well at a lower cost to manufacture.

Available in all popular pad types and sizes for easy conversion to the LAPMASTER LMR Ssystem!



LMR-HGN Hard woven cloth pad used to replace some rough grinding steps when used with polycrystalline diamond. Use with diamond 6 micron and up. Most effective with 15 micron and up.



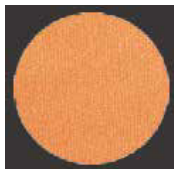
LMR-PLUS Synthetic nap polishing cloth specifically designed for sintered carbides and steels. For use with all micron sizes.



LMR-PANW Napless, non-woven textile. Excellent for flatness and edge retention on a wide range of materials; ferrous and non-ferrous metals, ceramics, PCB, minerals among others. Use with diamond 15 - 1 micron.



LMR-FWL A special woven 100% wool polishing pad. Used to polish ferrous metals, non-ferrous metals and polymers. Use with diamond 9 - 1 micron.



LMR-GLD Woven acetate polishing pad. Used for fine grinding and polishing of ferrous metals, non-ferrous metals, plastics and coatings. Used with diamond 9 - 3 micron.



LMR-FNL A final polishing cloth with a medium rayon nap. Excellent for final polishing on all materials with diamond or alumina. Use with diamond or alumina 5 - 0.02 micron.



LMR-ASFL Silk style polishing cloth used to produce mirror surfaces on ferrous and non-ferrous, and microelectronics. Best results obtained with 3-micron diamond and finer. Use diamond 9 - 1 micron.



LMR-DBN A final polishing cloth with a short synthetic nap. Excellent for final polishing on all materials with diamond or alumina. Use with diamond or alumina 5 - 0.02 micron.



LMR-RED Woven wool felt polishing pad. For polishing ferrous metals with aluminas less than 9 micron particle size.



LMR-SUPREME A long life, chemical resistant (CHEM), polyurethane polishing pad. Excellent for final polishing with alumina or colloidal silica. Most effective during chemicalmechanical polishing of soft non-ferrous materials. Use with alumina or colloidal silica ,1 - 0.02 micron.

GRINDING & POLISHING

POLISHING CLOTHS & PADS FOR MAGNETIC SYSTEMS

DESCRIPTION	PART NUMBER	PRICE
8" LMR-HGN Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSHGNMR08	33.00
10" LMR-HGN Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSHGNMR10	54.00
12" LMR-HGN Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSHGNMR12	70.00
8" LMR-PANW Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSPANMR08	33.00
10" LMR-PANW Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSPANMR10	54.00
12" LMR-PANW Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSPANMR12	70.00
8" LMR-GLD Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSGLDMR08	33.00
10" LMR-GLD Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSGLDMR10	54.00
12" LMR-GLD Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSGLDMR12	70.00
8" LMR-ASFL Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSASLMR08	33.00
10" LMR-ASFL Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSASLMR10	54.00
12" LMR-ASFL Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSASLMR12	70.00
8" LMR-RED Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSREDMR08	43.00
10" LMR-RED Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSREDMR10	70.00
12" LMR-RED Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSREDMR12	92.00
8" LMR-PLUS Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSPLSMR08	33.00
10" LMR-PLUS Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSPLSMR10	54.00
12" LMR-PLUS Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSPLSMR12	70.00
8" LMR-FWL Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSFWLMR08	37.00
10" LMR-FWL Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSFWLMR10	60.00
12" LMR-FWL Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSFWLMR12	79.00
8" LMR-FNL Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSFNLMR08	29.00
10" LMR-FNL Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSFNLMR10	47.00
12" LMR-FNL Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSFNLMR12	61.00
8" LMR-DBN Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSDBNMR08	33.00
10" LMR-DBN Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSDBNMR10	54.00
12" LMR-DBN Metalized Rubber Backed Polishing Pad - 5 Pack	METSPADSDBNMR12	70.00
8" LMR-SUPREME Metalized Rubber Backed Polishing Pad, Chem. Resistant-5 Pack	METSPADSSUPMR08	123.00
10" LMR-SUPREME Metalized Rubber Backed Polishing Pad, Chem. Resistant-5 Pack	METSPADSSUPMR10	215.00
12" LMR-SUPREME Metalized Rubber Backed Polishing Pad, Chem. Resistant-5 Pack	METSPADSSUPMR12	245.00

GRINDING & POLISHING

LMA SERIES POLISHING CLOTHS & PADS WITH PSA BACKING

MADE IN THE USA WITH THE HIGHEST QUALITY MATERIALS!

Made with the same pad materials as the LMB & LMR series pads, but with PSA backing.

Available in all popular pad types and sizes for easy conversion to the LAPMASTER LMA Ssystem!



LMA-HGN Hard woven cloth pad used to replace some rough grinding steps when used with polycrystalline diamond.
Use with diamond 6 micron and up.
Most effective with 15 micron and up.



LMA-PLUS Synthetic nap polishing cloth specifically designed for sintered carbides and steels. For use with all micron sizes.



LMA-PANW Napless, non-woven textile. Excellent for flatness and edge retention on a wide range of materials; ferrous and non-ferrous metals, ceramics, PCB, minerals among others.
Use with diamond 15 - 1 micron.



LMA-FWL A special woven 100% wool polishing pad. Used to polish ferrous metals, non-ferrous metals and polymers.
Use with diamond 9 - 1 micron.



LMA-GLD Woven acetate polishing pad. Used for fine grinding and polishing of ferrous metals, non-ferrous metals, plastics and coatings.
Used with diamond 9 - 3 micron.



LMA-FNL A final polishing cloth with a medium rayon nap. Excellent for final polishing on all materials with diamond or alumina.
Use with diamond or alumina 5 - 0.02 micron.



LMA-ASFL Silk style polishing cloth used to produce mirror surfaces on ferrous and non-ferrous, and microelectronics. Best results obtained with 3-micron diamond and finer.
Use diamond 9 - 1 micron.



LMA-DBN A final polishing cloth with a short synthetic nap. Excellent for final polishing on all materials with diamond or alumina.
Use with diamond or alumina 5 - 0.02 micron.



LMA-RED Woven wool felt polishing pad. For polishing ferrous metals with aluminas less than 9 micron particle size.



LMA-SUPREME A long life, chemical resistant (CHEM), polyurethane polishing pad. Excellent for final polishing with alumina or colloidal silica. Most effective during chemicalmechanical polishing of soft non-ferrous materials.
Use with alumina or colloidal silica ,1 - 0.02 micron.

GRINDING & POLISHING

POLISHING CLOTHS & PADS WITH PSA BACKING

DESCRIPTION	PART NUMBER	PRICE
8" LMA-HGN PSA Backed Polishing Pad - 10 Pack	METSPADSHNYA008	69.00
10" LMA-HGN PSA Backed Polishing Pad - 10 Pack	METSPADSHNYA010	93.00
12" LMA-HGN PSA Backed Polishing Pad - 10 Pack	METSPADSHNYA012	115.00
8" LMA-PANW PSA Backed Polishing Pad - 10 Pack	METSPADSPANAA008	45.00
10" LMA-PANW PSA Backed Polishing Pad - 10 Pack	METSPADSPANAA010	66.00
12" LMA-PANW PSA Backed Polishing Pad - 10 Pack	METSPADSPANAA012	79.00
8" LMA-GLD PSA Backed Polishing Pad - 10 Pack	METSPADSGLDA008	59.00
10" LMA-GLD PSA Backed Polishing Pad - 10 Pack	METSPADSGLDA010	84.00
12" LMA-GLD PSA Backed Polishing Pad - 10 Pack	METSPADSGLDA012	101.00
8" LMA-ASFL PSA Backed Polishing Pad - 10 Pack	METSPADSASLA008	79.00
10" LMA-ASFL PSA Backed Polishing Pad - 10 Pack	METSPADSASLA010	110.00
12" LMA-ASFL PSA Backed Polishing Pad - 10 Pack	METSPADSASLA012	159.00
8" LMA-RED PSA Backed Polishing Pad - 10 Pack	METSPADSBILRA08	45.00
10" LMA-RED PSA Backed Polishing Pad - 10 Pack	METSPADSBILRA10	75.00
12" LMA-RED PSA Backed Polishing Pad - 10 Pack	METSPADSBILRA12	105.00
8" LMA-PLUS PSA Backed Polishing Pad - 10 Pack	METSPADSPLSA008	45.00
10" LMA-PLUS PSA Backed Polishing Pad - 10 Pack	METSPADSPLSA010	75.00
12" LMA-PLUS PSA Backed Polishing Pad - 10 Pack	METSPADSPLSA012	100.00
8" LMA-FWL PSA Backed Polishing Pad - 10 Pack	METSPADSFWLA008	84.00
10" LMA-FWL PSA Backed Polishing Pad - 10 Pack	METSPADSFWLA010	126.00
12" LMA-FWL PSA Backed Polishing Pad - 10 Pack	METSPADSFWLA012	174.00
8" LMA-FNL PSA Backed Polishing Pad - 10 Pack	METSPADSBRNA008	39.00
10" LMA-FNL PSA Backed Polishing Pad - 10 Pack	METSPADSBRNA010	62.00
12" LMA-FNL PSA Backed Polishing Pad - 10 Pack	METSPADSBRNA012	83.00
8" LMA-DBN PSA Backed Polishing Pad - 10 Pack	METSPADSDBNA008	45.00
10" LMA-DBN PSA Backed Polishing Pad - 10 Pack	METSPADSDBNA010	75.00
12" LMA-DBN PSA Backed Polishing Pad - 10 Pack	METSPADSDBNA012	100.00
8" LMA-SUPREME PSA Backed Polishing Pad, Chem. Resistant - 10 Pack	METSPADSCHMA008	140.00
10" LMA-SUPREME PSA Backed Polishing Pad, Chem. Resistant- 10 Pack	METSPADSCHMA010	206.00
12" LMA-SUPREME PSA Backed Polishing Pad, Chem. Resistant- 10 Pack	METSPADSCHMA012	318.00

GRINDING & POLISHING

POLISHING CLOTHS & PADS

Lapmaster Polishing Pads are offered in a wide range of sizes and are made from different types of materials to accommodate any polishing application, including Metallographic, petrographic, fiber optics, and many more.



SILK Recommended for rough polishing with diamond. Excellent for friable materials such as coal and petrographic samples. Available with plain backing only.



NTR A soft napped final polishing cloth best used with 6-micron diamond and finer. Available with PSA backing only.



LAPMASTER SUPREME A long life, chemical resistant, polyurethane polishing pad. Excellent for final polishing with alumina or colloidal silica. Available with PSA backing only.



MICRO LP 100% pure wool. Recommended for intermediate and final polishing stages with diamond or alumina. Available with PSA backing only.



ASR Synthetic silk mounted on a rigid backing. Best results obtained with diamond. Available with PSA backing only.



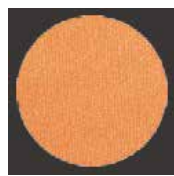
NYLON Napless nylon weave provides excellent finish on most materials. Excellent for flatness and edge retention. Available with plain and PSA backing.



PAN-W Napless, non-woven textile. Excellent for flatness and edge retention. Available with PSA backing only.



ASFL Silk style polishing cloth used to produce mirror surfaces. Best results obtained with 3-micron diamond and finer. Available with PSA backing only.



GOLD CLOTH Extremely durable, uniquely woven nylon, for use with diamond, 15-3 micron. Produces excellent flatness and provides a very high material removal rate on a wide variety of materials.



VELPOL A short nap synthetic velvet. Recommended for final polishing with diamond, alumina or colloidal silica. Available with PSA backing only.



ASF Similar to ASFL, but with a thicker, softer backing. Available with PSA backing only.



COTTON Recommended for rough polishing with diamond compound. Available with plain backing only.



FINAL POLISHING CLOTH A medium nap rayon cloth. Excellent for final polishing with diamond or alumina. Available with plain and PSA backing



SELVYT Medium nap cotton cloth. Excellent for intermediate or final polishing with diamond. Available with plain backing only.

GRINDING & POLISHING

POLISHING CLOTHS & PADS



DURA WOOL 100% black wool for general rough polishing with aluminum oxide powders & suspensions for steels and other ferrous based materials.



NYLON FINAL A Fine, short napped high density synthetic cloth. Excellent for final polishing with diamond and colloidal silica.



RED FELT 100% wool. Used on a wide variety of materials. Recommended for intermediate or final polishing with diamond.



IMPERIAL Final polish cloth recommended for softer materials. Excellent with colloidal silica and aluminas.



HEAVY NYLON Hard woven cloth pad used to replace some rough grinding steps when used with polycrystalline diamond.



FINE WOOL 100% wool cloth. Finer weave for final polishing with diamond.



SATIN Durable, synthetic silk style cloth used with diamond for intermediate and final polishing.



BROWN FINAL Durable, short nap synthetic used for final polishing with diamond or alumina.



STAINLESS STEEL DISC Re-usable Stainless metallic plate used with magnet discs or magnetic platens for convenient application and removal any PSA grinding or polishing consumable.



PSA MAGNET DISC Flexible, long lasting magnet disc with PSA backing to adhere to conventional platens.

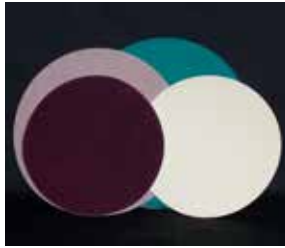
PSA Grinding/Polishing Pad

Re-usable Steel Plate

Flexible PSA Magnet

Polisher Platen

GRINDING & POLISHING



Polishing Pads

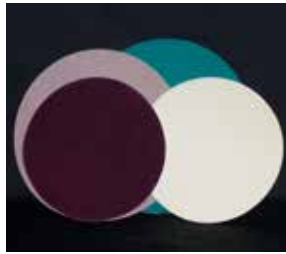
POLISHING CLOTHS & PADS

DESCRIPTION	PART NUMBER	PRICE
POLISHING CLOTHS SOLD IN PACKS OF 10 (EXCEPT FOR 1" & 2 7/8")		
1" PAN-W PSA Backed Polishing Cloths - 100 Pack	METSPADSPANA001	39.00
2-7/8" PAN-W PSA Backed Polishing Cloths - 100 Pack	METSPADSPANA278	127.00
8" PAN-W PSA Backed Polishing Cloths	METSPADSPANA008	45.00
10" PAN-W PSA Backed Polishing Cloths	METSPADSPANA010	66.00
12" PAN-W PSA Backed Polishing Cloths	METSPADSPANA012	79.00
15" PAN-W PSA Backed Polishing Cloths	METSPADSPANA015	161.00
16" PAN-W PSA Backed Polishing Cloths	METSPADSPANA016	169.00
12" PAN-W Plain Backed Polishing Cloths	METSPADSPANP012	77.00
1" VELPOL PSA Backed Polishing Cloths - 100 Pack	METSPADSVELA001	43.00
2-7/8" VELPOL PSA Backed Polishing Cloths - 100 Pack	METSPADSVELA278	148.00
8" VELPOL PSA Backed Polishing Cloths	METSPADSVELA008	47.00
10" VELPOL PSA Backed Polishing Cloths	METSPADSVELA010	67.00
12" VELPOL PSA Backed Polishing Cloths	METSPADSVELA012	83.00
15" VELPOL PSA Backed Polishing Cloths	METSPADSVELA015	180.00
16" VELPOL PSA Backed Polishing Cloths	METSPADSVELA016	187.00
8" ASR PSA Backed Polishing Cloths	METSPADSASRA008	199.00
10" ASR PSA Backed Polishing Cloths	METSPADSASRA010	263.00
12" ASR PSA Backed Polishing Cloths	METSPADSASRA012	305.00
8" ASFL PSA Backed Polishing Cloths	METSPADSASLA008	79.00
10" ASFL PSA Backed Polishing Cloths	METSPADSASLA010	110.00
12" ASFL PSA Backed Polishing Cloths	METSPADSASLA012	159.00
15" ASFL PSA Backed Polishing Cloths	METSPADSASLA015	214.00
8" ASF PSA Backed Polishing Cloths	METSPADSASFA008	134.00
12" ASF PSA Backed Polishing Cloths	METSPADSASFA012	258.00
15" ASF PSA Backed Polishing Cloths	METSPADSASFA015	323.00
8" NTR PSA Backed Polishing Cloths	METSPADSNTRA008	71.00
10" NTR PSA Backed Polishing Cloths	METSPADSNTRA010	95.00
12" NTR PSA Backed Polishing Cloths	METSPADSNTRA012	133.00
15" NTR PSA Backed Polishing Cloths	METSPADSNTRA015	253.00
10" Silk Plain Backed Polishing Cloths - For an 8" polisher	METSPADSSLKP010	60.00
12" Silk Plain Backed Polishing Cloths - For a 10" Polisher	METSPADSSLKP012	83.00
14" Silk Plain Backed Polishing Cloths - For a 12" Polisher	METSPADSSLKP014	108.00
8" Satin PSA Backed Polishing Cloths	METSPADSSATA008	54.00
10" Satin PSA Backed Polishing Cloths	METSPADSSATA010	86.00
12" Satin PSA Backed Polishing Cloths	METSPADSSATA012	101.00
2-7/8" Nylon PSA Backed Polishing Cloths - 100 Pack	METSPADSNYLA278	87.00
8" Nylon PSA Backed Polishing Cloths	METSPADSNYLA008	57.00
10" Nylon PSA Backed Polishing Cloths	METSPADSNYLA010	82.00
12" Nylon PSA Backed Polishing Cloths	METSPADSNYLA012	127.00
15" Nylon PSA Backed Polishing Cloths	METSPADSNYLA015	168.00
16" Nylon PSA Backed Polishing Cloths	METSPADSNYLA016	186.00
10" Nylon Plain Backed Polishing Cloths	METSPADSNYLP010	59.00
14" Nylon Plain Backed Polishing Cloths	METSPADSNYLP014	100.00

Additional sizes and materials are available upon request.

TO ORDER, CALL 877.352.8637 OR EMAIL sales@lapmaster.com

GRINDING & POLISHING



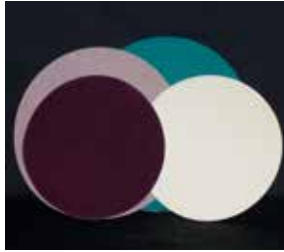
Polishing Pads

POLISHING CLOTHS & PADS

POLISHING CLOTHS SOLD IN PACKS OF 10

DESCRIPTION	PART NUMBER	PRICE
8" Heavy Nylon PSA Backed Polishing Cloths	METSPADSHNYA008	71.00
10" Heavy Nylon PSA Backed Polishing Cloths	METSPADSHNYA010	95.00
12" Heavy Nylon PSA Backed Polishing Cloths	METSPADSHNYA012	118.00
8" Gold Cloth PSA Backed Polishing Cloths	METSPADSGLDA008	59.00
10" Gold Cloth PSA Backed Polishing Cloths	METSPADSGLDA010	84.00
12" Gold Cloth PSA Backed Polishing Cloths	METSPADSGLDA012	101.00
1" Final Polish Cloth Medium Nap Rayon PSA Backed - 100 Pack	METSPADSFNLA001	39.00
2-7/8" Final Polish Cloth Medium Nap Rayon PSA Backed - 100 Pack	METSPADSFNLA278	141.00
8" Final Polish Cloth Medium Nap Rayon PSA Backed - 10 Pack	METSPADSFNLA008	43.00
10" Final Polish Cloth Medium Nap Rayon PSA Backed - 10 Pack	METSPADSFNLA010	65.00
12" Final Polish Cloth Medium Nap Rayon PSA Backed - 10 Pack	METSPADSFNLA012	98.00
15" Final Polish Cloth Medium Nap Rayon PSA Backed - 10 Pack	METSPADSFNLA015	149.00
16" Final Polish Cloth Medium Nap Rayon PSA Backed - 10 Pack	METSPADSFNLA016	160.00
10" Final Polish Cloth Medium Nap Rayon Plain Backed - 10 Pack	METSPADSFNLP010	49.00
14" Final Polish Cloth Medium Nap Rayon Plain Backed - 10 Pack	METSPADSFNLP014	81.00
8" Brown Final Polish Cloth Short Nap Rayon PSA Backed - 10 Pack	METSPADSBRNA008	39.00
10" Brown Final Polish Cloth Short Nap Rayon PSA Backed - 10 Pack	METSPADSBRNA010	62.00
12" Brown Final Polish Cloth Short Nap Rayon PSA Backed - 10 Pack	METSPADSBRNA012	83.00
15" Brown Final Polish Cloth Short Nap Rayon PSA Backed - 10 Pack	METSPADSBRNA015	145.00
10" Brown Final Polish Cloth Short Nap Rayon Plain Backed - 10 Pack	METSPADSBRNP010	49.00
14" Brown Final Polish Cloth Short Nap Rayon PSA Backed - 10 Pack	METSPADSBRNP014	81.00
8" Nylon Fiber Final Polish PSA Polishing Cloths	METSPADSBLUA008	49.00
10" Nylon Fiber Final Polish PSA Polishing Cloths	METSPADSBLUA010	69.00
12" Nylon Fiber Final Polish PSA Polishing Cloths	METSPADSBLUA012	97.00
8" Red Felt PSA Polishing Cloths	METSPADSREDA008	127.00
10" Red Felt PSA Polishing Cloths	METSPADSREDA010	172.00
12" Red Felt PSA Polishing Cloths	METSPADSREDA012	243.00
10" Red Felt Plain Backed Polishing Cloths	METSPADSREDP010	144.00
14" Red Felt Plain Backed Polishing Cloths	METSPADSREDP014	243.00
10" Selvyt Plain Backed Polishing Cloths	METSPADSSELP010	64.00
14" Selvyt Plain Backed Polishing Cloths	METSPADSSELP014	122.00
8" Lapmaster Supreme PSA Backed Polishing Cloths- Chemical Resistant	METSPADSSUPA008	140.00
10" Lapmaster Supreme PSA Backed Polishing Cloths- Chemical Resistant	METSPADSSUPA010	206.00
12" Lapmaster Supreme PSA Backed Polishing Cloths- Chemical Resistant	METSPADSSUPA012	318.00
15" Lapmaster Supreme PSA Backed Polishing Cloths- Chemical Resistant	METSPADSSUPA015	Upon Request
10" Cotton Plain Backed Polishing Cloths	METSPADSCOTP010	62.00
14" Cotton Plain Backed Polishing Cloths	METSPADSCOTP014	118.00
8" Dura Wool PSA Backed Polishing Cloths	METSPADSDWLA0008	68.00
10" Dura Wool PSA Backed Polishing Cloths	METSPADSDWLA0010	107.00
12" Dura Wool PSA Backed Polishing Cloths	METSPADSDWLA0012	166.00
15" Dura Wool PSA Backed Polishing Cloths	METSPADSDWLA0015	275.00

Additional sizes and materials are available upon request.



Polishing Pads

POLISHING CLOTHS & PADS

POLISHING CLOTHS SOLD IN PACKS OF 10

DESCRIPTION	PART NUMBER	PRICE
10" Billiard Plain Backed Polishing Cloths	METSPADSBILP010	73.00
14" Billiard Plain Backed Polishing Cloths	METSPADSBILP014	125.00
8" Micro LP PSA Backed Polishing Cloths	METSPADSMICA008	57.00
12" Micro LP PSA Backed Polishing Cloths	METSPADSMICA012	146.00
15" Micro LP PSA Backed Polishing Cloths	METSPADSMICA015	219.00
8" Imperial PSA Backed Polishing Cloths	METSPADSIMPA008	41.00
10" Imperial PSA Backed Polishing Cloths	METSPADSIMPA010	58.00
12" Imperial PSA Backed Polishing Cloths	METSPADSIMPA012	79.00
10" Imperial Plain Backed Polishing Cloths	METSPADSIMPP010	48.00
8" Fine Wool PSA Backed Polishing Cloths	METSPADSFWLA008	86.00
10" Fine Wool PSA Backed Polishing Cloths	METSPADSFWLA010	129.00
12" Fine Wool PSA Backed Polishing Cloths	METSPADSFWLA012	178.00
15" Fine Wool PSA Backed Polishing Cloths	METSPADSFWLA015	295.00
10" Fine Wool Plain Backed Polishing Cloths	METSPADSFWLP010	91.00
14" Fine Wool Plain Backed Polishing Cloths	METSPADSFWLP014	171.00

Additional sizes and materials are available upon request.

GRINDING & POLISHING



Magnetic Mounting

STAINLESS STEEL DISC

A stainless, metallic plate for use with our magnetic discs or a magnetic platen for quick and convenient application and removal of any PSA consumable.

FLEXIBLE MAGNETIC

DISCS

These flexible, long lasting magnet discs have a PSA backing and are used to convert a conventional platen to a magnetic platen for use with our stainless steel disc.

GRIT GRABBERS

Grit Grabbers are a reusable PSA backing used to affix plain backed Abrasive Discs and Polishing Cloths to our magnetic mounting system or your existing platen.

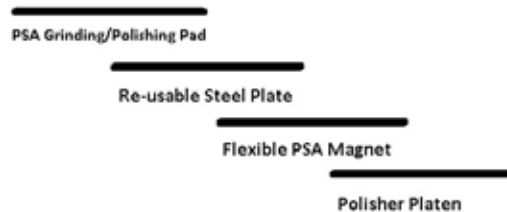
MAGNETIC MOUNTING SYSTEMS

DESCRIPTION	PART NUMBER	PRICE
8" PSA Magnetic Disc To Covert A Standard Polishing Plate To Magnetic	METSMAGSA080000	28.00
10" PSA Magnetic Disc To Covert A Standard Polishing Plate To Magnetic	METSMAGSA100000	41.00
12" PSA Magnetic Disc To Covert A Standard Polishing Plate To Magnetic	METSMAGSA120000	52.00
8" SS Disc for Mounting Polishing Cloths & Abrasive Discs	METSSTSTMAG0008	59.00
10" SS Disc for Mounting Polishing Cloths & Abrasive Discs	METSSTSTMAG0010	65.00
12" SS Disc for Mounting Polishing Cloths & Abrasive Discs	METSSTSTMAG0012	72.00
8" Teflon Coated SS Disc for Mounting Polishing Cloths & Abrasive Discs	METSSTSTTEF0008	80.00
10" Teflon Coated SS Disc for Mounting Polishing Cloths & Abrasive Discs	METSSTSTTEF0010	90.00
12" Teflon Coated SS Disc for Mounting Polishing Cloths & Abrasive Discs	METSSTSTTEF0012	100.00

GRIT GRABBERS (REUSABLE PSA BACKING)

SOLD IN PACKS OF 10

DESCRIPTION	PART NUMBER	PRICE
8" Double Sided PSA Disc For Attaching Plain Back Abrasive Discs	METSGRAB0080000	40.00
10" Double Sided PSA Disc For Attaching Plain Back Abrasive Discs	METSGRAB0100000	68.00
12" Double Sided PSA Disc For Attaching Plain Back Abrasive Discs	METSGRAB0120000	80.00





Diamond Pastes

Lapmaster's diamond compounds are formulated from the highest quality diamond. The tight tolerance particle size distribution guarantees consistent results. The water/oil soluble paste not only cleans easily, but also works well with most lubricants. Packaged in easy to use 18 gram syringes.

DIAMOND COMPOUNDS

MONOCRYSTALLINE DIAMOND COMPOUND

DESCRIPTION	PART NUMBER	PRICE
18 Gram Syringe - 1/10 Micron Diamond Compound	METSDIAPS18K/10	35.00
18 Gram Syringe - 1/4 Micron Diamond Compound	METSDIAPS18K1/4	37.00
18 Gram Syringe - 1/2 Micron Diamond Compound	METSDIAPS18K1/2	45.00
18 Gram Syringe - 1 Micron Diamond Compound	METSDIAPS18K001	23.00
18 Gram Syringe - 3 Micron Diamond Compound	METSDIAPS18K003	62.00
18 Gram Syringe - 6 Micron Diamond Compound	METSDIAPS18K006	68.00
18 Gram Syringe - 9 Micron Diamond Compound	METSDIAPS18K009	78.00
18 Gram Syringe - 15 Micron Diamond Compound	METSDIAPS18K015	75.00
18 Gram Syringe - 30 Micron Diamond Compound	METSDIAPS18K030	77.00
18 Gram Syringe - 45 Micron Diamond Compound	METSDIAPS18K045	77.00

POLYCRYSTALLINE DIAMOND COMPOUND

DESCRIPTION	PART NUMBER	PRICE
18 Gram Syringe - 1 Micron Diamond Compound	METSDPCDS18KD01	74.00
18 Gram Syringe - 3 Micron Diamond Compound	METSDPCDS18KD03	126.00
18 Gram Syringe - 6 Micron Diamond Compound	METSDPCDS18KD06	130.00
18 Gram Syringe - 9 Micron Diamond Compound	METSDPCDS18KD09	158.00
18 Gram Syringe - 15 Micron Diamond Compound	METSDPCDS18KD15	158.00

GRINDING & POLISHING



Diamond Lubricants

DIAMOND LUBRICANTS & EXTENDERS

BLUE LUBE

Low viscosity, alcohol based diamond lubricant. Used to accommodate diamond to cut aggressively and when water based products cannot be used. Popular with our Diamond Aerosol Sprays. Packaged in pint and gallon containers.

RED LUBE

High viscosity, glycol based diamond lubricant. The high viscosity will reduce the aggressiveness of the diamond cutting to accommodate more delicate materials. Packaged in pint and gallon containers.

WATER BASED LUBRICANT

Clear, low viscosity, glycol based diamond lubricant. Aggressive diamond cutting and easy cleaning. Packaged in quart and gallon containers.

OIL BASED LUBRICANT

Purple, medium viscosity, petroleum and glycol based diamond lubricant. A product of our Lapping/Polishing production machine division. Offers a more reflective finish when used with diamond. Packaged in 500ml, 2.5 liter and 5 liter containers.

DESCRIPTION	PART NUMBER	PRICE
Blue Lube - 16 oz. (alcohol-based)	METSLUBEFLUPINT	16.00
Blue Lube - 1 gallon (alcohol-based)	METSLUBEFLUGALL	47.00
Red Lube - 16 oz. (Glycol-based)	METSLUBEREDPINT	16.00
Red Lube - 1 gallon (Glycol-based)	METSLUBEREDGALL	47.00
Water Based lubricant - 32 oz.	METSLUBEWAT0032	19.00
Water Based lubricant - 1 gallon	METSLUBEWAT0128	37.00
Oil Based Lubricant - 500ml	LAP5LUBP5000002	13.00
Oil Based Lubricant - 2.5 litre	LAP5LUBP2.50001	25.00
Oil Based Lubricant - 5.0 litre	LAP5LUBP5.00003	45.00



Diamond Aerosols

DIAMOND AEROSOL SPRAY 5oz. CAN

DIAMOND SPRAY

The diamond aerosol spray consists of high performance polycrystalline diamond in a quick evaporating carrier. The propellant is ozone safe and an inverted spray top makes dispensing to the cloth easy.

DESCRIPTION	PART NUMBER	PRICE
1/4 Micron Diamond Aerosol Spray - Polycrystalline	METS DSPY000001/4	80.00
1 Micron Diamond Aerosol Spray - Polycrystalline	METS DSPY0000001	80.00
3 Micron Diamond Aerosol Spray - Polycrystalline	METS DSPY0000003	80.00
6 Micron Diamond Aerosol Spray - Polycrystalline	METS DSPY0000006	101.00
9 Micron Diamond Aerosol Spray - Polycrystalline	METS DSPY0000009	101.00
15 Micron Diamond Aerosol Spray - Polycrystalline	METS DSPY0000015	107.00
30 Micron Diamond Aerosol Spray - Polycrystalline	METS DSPY0000030	107.00



Diamond Suspensions

Lapmaster's diamond suspensions are low viscosity suspensions designed for high stock removal rates and precision finishes. They are water soluble, clean easily, and will not clog dispensing lines.

Diamond suspensions are available with either polycrystalline or monocrystalline diamond. Polycrystalline diamond has up to 300% more surface area than monocrystalline diamond resulting in much higher stock removal rates and finer scratch patterns. Polycrystalline diamond is recommended for hard materials, brittle coatings, or sample composed of mixed hardness.

DIAMOND SUSPENSIONS

POLYCRYSTALLINE DIAMOND SUSPENSION

DESCRIPTION	PART NUMBER	PRICE
1/10 Micron Polycrystalline Suspension - 8 oz. With Pump Sprayer	METSUSUSPCD1/10	41.00
1/4 Micron Polycrystalline Suspension - 8 oz. With Pump Sprayer	METSUSUSPCD01/4	41.00
1/2 Micron Polycrystalline Suspension - 8 oz. With Pump Sprayer	METSUSUSPCD01/2	41.00
1 Micron Polycrystalline Suspension - 8 oz. With Pump Sprayer	METSUSUSPCD0001	39.00
3 Micron Polycrystalline Suspension - 8 oz. With Pump Sprayer	METSUSUSPCD0003	56.00
6 Micron Polycrystalline Suspension - 8 oz. With Pump Sprayer	METSUSUSPCD0006	62.00
9 Micron Polycrystalline Suspension - 8 oz. With Pump Sprayer	METSUSUSPCD0009	64.00
15 Micron Polycrystalline Suspension - 8 oz. With Pump Sprayer	METSUSUSPCD0015	64.00
1/20 Micron Polycrystalline Suspension - 16 oz	METSUSUSPCDP/20	147.00
1/10 Micron Polycrystalline Suspension - 16 oz	METSUSUSPCDP/10	72.00
1/4 Micron Polycrystalline Suspension - 16 oz	METSUSUSPCDP1/4	68.00
1/2 Micron Polycrystalline Suspension - 16 oz	METSUSUSPCDP1/2	68.00
1 Micron Polycrystalline Suspension - 16 oz	METSUSUSPCDP001	68.00
3 Micron Polycrystalline Suspension - 16 oz	METSUSUSPCDP003	92.00
6 Micron Polycrystalline Suspension - 16 oz	METSUSUSPCDP006	111.00
9 Micron Polycrystalline Suspension - 16 oz	METSUSUSPCDP009	115.00
15 Micron Polycrystalline Suspension - 16 oz	METSUSUSPCDP015	115.00
1 Micron Polycrystalline Suspension - 1gallon	METSUSUSPCDGL01	325.00
3 Micron Polycrystalline Suspension - 1gallon	METSUSUSPCDGL03	599.00
6 Micron Polycrystalline Suspension - 1gallon	METSUSUSPCDGL06	770.00
9 Micron Polycrystalline Suspension - 1gallon	METSUSUSPCDGL09	799.00
15 Micron Polycrystalline Suspension - 1gallon	METSUSUSPCDGL15	799.00

MONOCRYSTALLINE DIAMOND SUSPENSION

DESCRIPTION	PART NUMBER	PRICE
1/4 Micron Monocrystalline Suspension - 8 oz. With Pump Sprayer	METSUSUSMNO01/4	25.00
1/2 Micron Monocrystalline Suspension - 8 oz. With Pump Sprayer	METSUSUSMNO01/2	25.00
1 Micron Monocrystalline Suspension - 8 oz. With Pump Sprayer	METSUSUSMNO0001	23.00
3 Micron Monocrystalline Suspension - 8 oz. With Pump Sprayer	METSUSUSMNO0003	34.00
6 Micron Monocrystalline Suspension - 8 oz. With Pump Sprayer	METSUSUSMNO0006	37.00
9 Micron Monocrystalline Suspension - 8 oz. With Pump Sprayer	METSUSUSMNO0009	39.00
15 Micron Monocrystalline Suspension - 8 oz. With Pump Sprayer	METSUSUSMNO0015	45.00
1/4 Micron Monocrystalline Suspension - 16 oz	METSUSUSMNO1/4	45.00
1/2 Micron Monocrystalline Suspension - 16 oz	METSUSUSMNO1/2	45.00
1 Micron Monocrystalline Suspension - 16 oz	METSUSUSMNO1/1	45.00
3 Micron Monocrystalline Suspension - 16 oz	METSUSUSMNO1/3	62.00
6 Micron Monocrystalline Suspension - 16 oz	METSUSUSMNO1/6	70.00
9 Micron Monocrystalline Suspension - 16 oz	METSUSUSMNO1/9	75.00
15 Micron Monocrystalline Suspension - 16 oz	METSUSUSMNO1/15	75.00
1 Micron Monocrystalline Suspension - 1gallon	METSUSUSMNOGL01	239.00
3 Micron Monocrystalline Suspension - 1gallon	METSUSUSMNOGL03	355.00
6 Micron Monocrystalline Suspension - 1gallon	METSUSUSMNOGL06	440.00
9 Micron Monocrystalline Suspension - 1gallon	METSUSUSMNOGL09	470.00
15 Micron Monocrystalline Suspension - 1gallon	METSUSUSMNOGL15	470.00



Abrasive
Powders & Slurries

ABRASIVE POWDERS & SLURRIES

ALUMINA POWDER

Lapmaster's alumina powders are high purity, polishing powders designed for final polishing of most metallographic specimens. They are available in two different versions – standard and deagglomerated. The standard version is suggested for most applications. The deagglomerated version goes through an extra milling procedure to breakdown agglomerates, and is recommended for final polishing of more critical applications. Both versions are available in three micron sizes: 0.05, 0.3 and 1.0 micron.

DESCRIPTION	PART NUMBER	PRICE
0.05 Micron Alumina Powder - 1 lb.	METSALPD.0501LB	79.00
0.3 Micron Alumina Powder - 1 lb.	METSALPD0.301LB	90.00
1.0 Micron Alumina Powder - 1 lb.	METSALPD1.001LB	84.00
0.05 Micron Alumina Powder - 5 lb.	METSALPD.0505LB	291.00
0.3 Micron Alumina Powder - 5 lb.	METSALPD0.305LB	342.00
1.0 Micron Alumina Powder - 5 lb.	METSALPD1.005LB	356.00
0.05 Micron Deagglomerated Alumina Powder - 1 lb.	METSALPD.05D1LB	88.00
0.3 Micron Deagglomerated Alumina Powder - 1 lb.	METSALPD0.3D1LB	88.00
1.0 Micron Deagglomerated Alumina Powder - 1 lb.	METSALPD1.0D1LB	88.00
0.05 Micron Deagglomerated Alumina Powder - 5 lb.	METSALPD.05D5LB	372.00
0.3 Micron Deagglomerated Alumina Powder - 5 lb.	METSALPD0.3D5LB	364.00
1.0 Micron Deagglomerated Alumina Powder - 5lb	METSALPD1.0D5LB	354.00

ALUMINA SLURRY

Lapmaster' alumina slurry is formulated from the same high purity alumina used in our powders. These ready made slurries are not only easy to use, but guarantee consistent performance from lot to lot. Available in 0.05, 0.3 and 1.0 micron sizes, they are packaged in convenient to use 6 oz. Bottles or gallon containers.

DESCRIPTION	PART NUMBER	PRICE
0.05 Micron Alumina Slurry - 6 oz.	METSALSY.0506OZ	24.00
0.3 Micron Alumina Slurry - 6 oz.	METSALSY0.306OZ	24.00
1.0 Micron Alumina Slurry - 6 oz.	METSALSY1.006OZ	24.00
0.05 Micron Alumina Slurry - 1 Gallon	METSALSY.050GAL	247.00
0.3 Micron Alumina Slurry - 1 Gallon	METSALSY0.30GAL	247.00
1.0 Micron Alumina Slurry - 1 Gallon	METSALSY1.00GAL	247.00
5.0 Micron Alumina Slurry - 1 Gallon	METSALSY5.00GAL	285.00



Abrasive
Powders & Slurries

ABRASIVE POWDERS & SLURRIES

POLISHING SUSPENSIONS

COLLOIDAL SILICA

Colloidal silica is an excellent polishing solution for producing scratch-free specimens. It employs a chemical/mechanical action which delivers perfect finishes on many materials. To achieve these fine finishes, the surface of the material being polished is chemically altered while very fine silica particles ranging from 0.02 – 0.06 micron remove the altered layer. Lapmaster's colloidal silica is non-freezing and non-drying thus eliminating many of the problems associated with other colloidal silica. The non-freezing characteristic allows the material to be shipped in cold weather without fear of the silica particles falling out of suspension. The non-drying characteristic allows a polishing cloth to be reused after drying out preventing the dried silica particles from re-crystallizing and forming large scratch producing agglomerates. We also now have new, low viscosity and non-crystallizing colloidal silica available at 0.05 micron and 0.04 micron.

COLLOIDAL ALUMINA

Colloidal alumina is an acidic dispersion which uses a chemical/mechanical action to produce superior surfaces. Outstanding results have been achieved on pure metals such as copper, nickel, tungsten, and beryllium, as well as steel and aluminum. Lapmaster's colloidal alumina is offered in 0.10 micron size.

DESCRIPTION	PART NUMBER	PRICE
Colloidal Silica, 0.02 - 0.06 micron - 6oz.	METSCOLLSIL0006	18.00
Colloidal Silica, 0.02 - 0.06 micron - 32oz.	METSCOLLSIL0032	56.00
Colloidal Silica, 0.02 - 0.06 micron - 1 gal.	METSCOLLSIL0128	156.00
Colloidal Silica, 0.02 - 0.06 micron - 5 gal.	METSCOLLSIL0640	590.00
Colloidal Silica, low viscosity & non-crystallizing, 0.05 micron - 1 gal.	METSCOLLCS50128	151.00
Colloidal Silica, low viscosity & non-crystallizing, 0.04 micron - 1 gal.	METSCOLLCS40128	151.00
Colloidal Alumina, 0.10 micron - 6 oz.	METSCOLLALM0006	33.00
Colloidal Alumina, 0.10 micron - 32 oz.	METSCOLLALM0032	79.00
Colloidal Alumina, 0.10 micron - 1 gal.	METSCOLLALMGALL	231.00
Colloidal Alumina, 0.10 micron - 5 gal.	METSCOLLALM05GA	277.00

HARDNESS TEST BLOCKS



ROCKWELL HARDNESS TEST BLOCKS

COMPLIANT WITH ASTM E-18-CURRENT*

DESCRIPTION	PART NUMBER	PRICE
HRC Low-Range Test Block 20-30	METSHDNSBLK0001	71.00
HRC Mid-Range Test Block 35-55	METSHDNSBLK0002	71.00
HRC High-Range Test Block 59-65	METSHDNSBLK0003	71.00
HRBW Test Block 40-59	METSHDNSBLK0004	71.00
HRBW Test Block 60-79	METSHDNSBLK0005	71.00
HRBW Test Block 80-100	METSHDNSBLK0006	71.00
HR30N Low-Range Test Block 40-50	METSHDNSBLK0007	71.00
HR30N Mid-Range Test Block 55-73	METSHDNSBLK0008	71.00
HR30N High-Range Test Block 75-80	METSHDNSBLK0009	71.00
HR30TW Test Block 43-56	METSHDNSBLK0010	71.00
HR30TW Test Block 57-70	METSHDNSBLK0011	71.00
HR30TW Test Block 70.1 - 82	METSHDNSBLK0012	71.00

*Other certified and non-certified test blocks are available; consult your LAPMASTER representative.

**Part numbers, specifications, and prices are subject to change.

COMPLIANT WITH ASTM E-18-05*

DESCRIPTION	PART NUMBER	PRICE
HRC Low-Range Test Block 20-30	METSHDNSBLK0013	71.00
HRC Mid-Range Test Block 35-55	METSHDNSBLK0014	71.00
HRC High-Range Test Block 59-65	METSHDNSBLK0015	71.00
HRB Low-Range Test Block 40-59	METSHDNSBLK0016	71.00
HRB Mid-Range Test Block 60-79	METSHDNSBLK0017	71.00
HRB High-Range Test Block 80-100	METSHDNSBLK0018	71.00
HR30N Low-Range Test Block 40-50	METSHDNSBLK0019	71.00
HR30N Mid-Range Test Block 55-73	METSHDNSBLK0020	71.00
HR30N High-Range Test Block 75-80	METSHDNSBLK0021	71.00
HR30T Low-Range Test Block 43-56	METSHDNSBLK0022	71.00
HR30T Mid-Range Test Block 57-70	METSHDNSBLK0023	71.00
HR30T High-Range Test Block 70-82	METSHDNSBLK0024	71.00

*Other certified and non-certified test blocks are available; consult your LAPMASTER representative.

**Part numbers, specifications, and prices are subject to change.

MICROHARDNESS TEST BLOCKS

DESCRIPTION	PART NUMBER	PRICE
Test Block, Vickers (500 gf, 700 HV range)	METSHDNSBLK0025	525.00
Test Block, Knoop (500 gf, 700 HK range)	METSHDNSBLK0026	525.00
Test Block, Vickers (300 gf, 700 HV range)	METSHDNSBLK0027	525.00
Test Block, Knoop (300 gf, 700 HK range)	METSHDNSBLK0028	525.00
Test Block, Vickers (500 gf, 500 HV range)	METSHDNSBLK0029	525.00
Test Block, Knoop (500 gf, 500 HK range)	METSHDNSBLK0030	525.00

*Other certified and non-certified test blocks are available; consult your LAPMASTER representative.

**Part numbers, specifications, and prices are subject to change.

ULTRASONIC CLEANING SOLUTIONS

FORMULATED CLEANING CONCENTRATES & SOLUTIONS

DESCRIPTION	PART NUMBER	PRICE
OC- Optical Cleaner (1 Gallon)	LAP5UCSOC000001	38.00
OC- Optical Cleaner (5 Gallon Pail)	LAP5UCSOC000005	202.00
BC- Buffing Compound Remover (1 Gallon)	LAP5UCSBC000001	35.00
BC- Buffing Compound Remover (5 Gallon Pail)	LAP5UCSBC000005	139.00
OR - Oxide Remover (1 Gallon)	LAP5UCSOR000001	36.00
EC - Electronic Cleaner (1 Gallon)	LAP5UCSEC000001	30.00
EC - Electronic Cleaner (5 Gallon Pail)	LAP5UCSEC000005	121.00
GP- General Purpose Cleaner (1 Gallon)	LAP5UCSGP000001	30.00
IS- Industrial Strength Cleaner (1 Gallon)	LAP5UCSIS000001	31.00
IS- Industrial Strength Cleaner (5 Gallon Pail)	LAP5UCSIS000005	140.00
MC1- Metal Cleaner (1 Gallon)	LAP5UCSMC100001	30.00
MC1- Metal Cleaner (5 Gallon Pail)	LAP5UCSMC100005	154.00
MC2- Metal Cleaner (1 Gallon)	LAP5UCSMC200001	30.00
MC2- Metal Cleaner (5 Gallon Pail)	LAP5UCSMC200005	154.00
MC3- Metal Cleaner (1 Gallon)	LAP5UCSMC300001	30.00
MC3- Metal Cleaner (5 Gallon Pail)	LAP5UCSMC300005	154.00
RS- Rust Stripper (35 lb Pail)	LAP5UCSRS000035	106.00
RS- Rust Stripper (175 lb Drum)	LAP5UCSRS000175	406.00
RS- Rust Stripper (485 lb Drum)	LAP5UCSRS000485	1,062.00

GRIT CONVERSION CHART

DEFINITIONS

ANSI

American National Standards Institute.

FEPA

Federation of European Producers of Abrasives. The FEPA distinguishes between grain for sanding paper (FEPA P) and grain for sharpening stones or wheels (FEPA F) The decisive factor for comparison is FEPA F. FEPA P is only used for sanding paper.

MICRON

As measuring unit it describes 1 thousandth of a millimeter ($1 \mu = 0.001 \text{ mm}$).

MM

Micro-mesh grit in comparison to other standards.

ANSI US Grit	FEPA P - Paper	Micron μm	FEPA F-Grain	JIS R6001 Japan 1973	MM	
60	P60	269	F60	J60		
			F70			
80	P80	201	F80			
			P100	162		
			F90			
120	P120	125	F100	J100		
			F120			
150	P150	100				
180	P180	82	F150	J150		
220	P220	68	F180	J180		
			F220		J220	
					J240	
				J280		
	P240	58.5 ± 2		J320		
240	P280	52.2 ± 2	F230			
			P320	46.2 ± 1.5	J360	
			F240			
280	P360	40.5 ± 1.5		J400		
320	P400	35.0 ± 1.5	F280			
				J500		
360	P500	30.2 ± 1.5	F320	J600		
	P600	25.8 ± 1				
400	P800	21.8 ± 1	F360	J700	1500	
	P1000	18.3 ± 1		J800		
500			F400	J1000		
600	P1200	15.3 ± 1			1800	
	P1500	12.6 ± 1	F500	J1200	2400	
800	P2000	10.3 ± 0.8			3200	
			F600	J1500		
1000	P2500	8.4 ± 0.5		J2000		
	P3000	7				
1200	P4000					
	P5000	5				
			F800			
			F1000	J3000	4000	
					6000	
			F1200	J4000	8000	
			F1500	J6000	12000	
			F2000	J8000		

CUTTING

MOUNTING

GRINDING

POLISHING

IMAGING

HARDNESS TESTING

www.lapmaster-wolters.com/metallographic.html



501 West Algonquin Road Mount Prospect, IL 60056
TOLL-FREE (877) 352-8637 FAX (224) 659-7103
sales@lapmaster.com