

(USD DOLLARS)

MetLab
Corporation



Trusted
since
1968

2023





*Our commitment is providing
Knowledgeable ongoing supported
Service along with superior products
for immediate delivery.*

Terms & Conditions

- Prices subject to change without notice
- Prices quoted F.O.B. Niagara Falls, NY
- Net 30 days with established credit
- Taxes added where applicable

Payment Methods

- Via Check
- Bank Transfer
- Credit Card



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Websites

www.metlabcorp.com

www.metallographicequipment.com

www.hardnesstesting.ca

www.imageanalysis.ca

www.charpynotch.com

Sectioning

Abrasive cut-off wheels	3-5
CBN wafering blades	2
Diamond wafering blades	2
Equipment	43

Mounting

Cold mounting systems	9-11
Comperssion molding powders	7
Mounting supplies	8
Phenolic Preforms	7
Equipment	45

Grinding

Abrasive papers (Premium)	13
Abrasive papers	12
(Production) Abrasive rolls	15
Abrasive strips	15
Belts	15
Piano flexible diamond discs	14
Foil Grinding Discs	14
Stone grinding wheel	16
Equipment	46

Polishing

Diamond aerosol sprays	19
Diamond airsprays	18
Diamond compounds	19
Diamond extenders	20
Diamond Lapping films	25
Diamond suspensions	18-19
Polishing cloths	23-24
Polishing suspensions	18-19
Equipment	49

Other

Light bulbs	27
Pressurized dusters	26
Sample leveling press	28
Shepherd fracture standards	28
Ultras sonic cleaners	26

Scopes

Biological	35
Digital cameras	36,42
Illuminators	33
Inverted microscopes	30
LCD stereoscopes	34
Metallurgical microscopes	29
Stereoscopes	31
Stereoscopes stands	32

Hardness Testers & Imaging

Brinell testers	38
Digital cameras	36,42
Image analysis software	42
Indenters	40
Microhardness testers	37
Macrohardness testers	37
Portable hardness testers	39
Rockwell testers	38-39
Test blocks	41

Equipment

Abrasive cutters	43
Belt grinders	47
Grinders / Polishers	46
Hot mounting presses	45
Petrography	47
Precision cutters	43
Spectroscopy	47
Vacuum impregnation system	45

Charpy

Broaches & Gauges	49
Hand Operated	48
Motorized Fixed & Variable	51
Specimen Milling Fixed & Variable	52

DIAMOND WAFERING BLADES

Type	Description	Qty	Catalog #
HIGH CONCENTRATION - METAL BOND continuous rim diamond wafering blades are recommended for aggressive general laboratory sectioning of ductile materials, most metals, polymers, pc boards, thermal spray coatings and titanium. (Used on higher loads & speeds)	3" X .006" X 1/2"	EACH	M306H \$180.00
	4" X .012" X 1/2"	EACH	M412H 203.00
	5" X .015" X 1/2"	EACH	M515H 244.00
	6" X .020" X 1/2"	EACH	M620H 303.00
	7" X .025" X 1/2"	EACH	M725H 335.00
LOW CONCENTRATION - METAL BOND continuous rim diamond wafering blades are recommended for sectioning very hard or brittle materials including ceramics, carbides, re-fractories, silicon, boron composites, glass and rock. (allows for higher loads being applied at sample interface). (Used on lower loads & speeds)	3" X .006" X 1/2"	EACH	M306L \$180.00
	4" X .012" X 1/2"	EACH	M412L 203.00
	5" X .015" X 1/2"	EACH	M515L 244.00
	6" X .020" X 1/2"	EACH	M620L 303.00
	7" X .025" X 1/2"	EACH	M725L 335.00
RESIN BOND DIAMOND WHEELS continuous rim diamond blades are recommended for cutting of ferrous metals.	8" X .045" X 1 1/4" (32mm)	EACH	M845D \$283.00
	10" X .050" X 1 1/4" (32mm)	EACH	M1050D 294.00
	12" X .062" X 1 1/4" (32mm)	EACH	M1262D 347.00
	14" X .070" X 1 1/4" (32mm)	EACH	M1470D 425.00



CBN WAFERING BLADES

MEDIUM CONCENTRATION METAL BOND/RESIN BOND CONTINUOUS RIM are recommended for sectioning of ferrous materials including high speed steels, inconel, stellite, iron and cobalt base alloys, nickel base super alloys, lead base alloys, titanium alloys and stainless steels.

Type	Description	Qty	Catalog #
USED ON SLOW SPEED /HIGH SPEED	3" X .006" X 1/2"	EACH	M306C \$180.00
	4" X .012" X 1/2"	EACH	M412C 213.00
	5" X .015" X 1/2"	EACH	M515C 255.00
	6" X .020" X 1/2"	EACH	M620C 318.00
	7" X .025" X 1/2"	EACH	M725C 352.00
USED ON HIGH SPEED	8" X .045" X 1 1/4" (32mm)	EACH	M845C \$283.00
	10" X .050" X 1 1/4" (32mm)	EACH	M1050C 294.00
	12" X .062" X 1 1/4" (32mm)	EACH	M1262C 347.00
	14" X .070" X 1 1/4" (32mm)	EACH	M1470C 425.00

CUTTING SUPPLIES

Type	Description	Qty	Catalog #
SOLUBLE OIL	Soluble Oil, Concentrate	QUART	SO-032 \$42.00
	Soluble Oil, Concentrate	GALLON	SO-128 78.00
	SOLUBLE OIL with rust inhibiting additive. For use with all abrasive cut-off machines and belt grinders which have contained recirculating systems. Blue, odorless, foam controlled. Sulfur and nitrate free. Mixture 20:1		
CUTTING FLUID	Cutting Fluid	QUART	CF-032 \$21.00
	Cutting Fluid	GALLON	CF-128 47.50
	OIL BASE LUBRICANT CUTTING FLUID ideally suited for use with high , low and CBN diamond wafering blades on low and high speed saws.		
DRESSING STICKS	4" x 1/2" Square	EACH	DS-1 \$5.50
	4" x 1/2" Square	10/PKG	DS-10 44.00
	DRESSING STICKS - aluminum oxide. Should be used on new and frequently used diamond wafering blades and grinding discs to maintain superior cutting performance.		

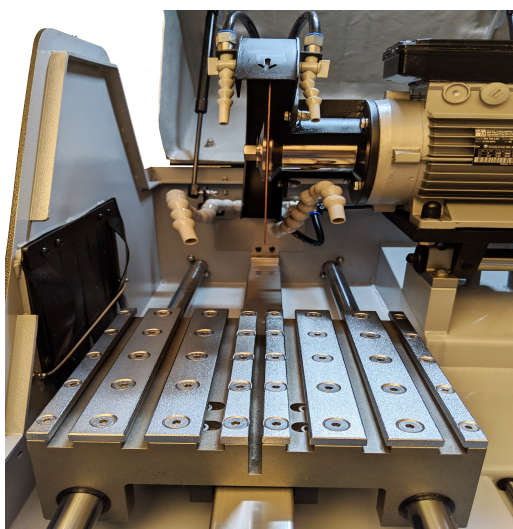
METLAB ABRASIVE CUT-OFF WHEELS

Description	Usage	Qty	Catalog #
LOW SPEED			
4" X .012" X 1/2"	General Ferrous Cutting (A/O)	10/BOX	4F12 \$104.75
4" X .025" X 1/2"	General Ferrous Cutting (A/O)	10/BOX	4F25 104.75
4" X .012" X 1/2"	General Non-Ferrous Cutting (S/C)	10/BOX	4NF12 104.75
4" X .025" X 1/2"	General Non-Ferrous Cutting (S/C)	10/BOX	4NF25 104.75
5" X .020" X 1/2"	Hard Ferrous, Rc45+ (A/O)	10/BOX	5F20H 116.00
5" X .020" X 1/2"	Soft, Medium Hard Ferrous, Rc45 - (A/O)	10/BOX	5F20S 116.00
6" X .020" X 1/2"	Hard Ferrous, Rc45+ (A/O)	10/BOX	6F20H 127.00
6" X .020" X 1/2"	Soft, Medium Hard Ferrous (A/O)	10/BOX	6F20S 127.00
6" X .020" X 1/2"	Soft and Ductile, Non-Ferrous, Al, Cu, Ti (S/C)	10/BOX	6NF20 127.00
HIGH SPEED			
6" X .040" X 5/8"	Hard Steel, Alloys (A/O)	EACH	640 \$17.00
6" X .040" X 5/8"	Soft Steel, Alloys (A/O)	EACH	644 17.00
6" X .040" X 5/8"	Titanium, Other Alloys (S/C)	EACH	647 19.00
6" X .025" X 5/8"	Delicate Cutting of Ferrous Metals and Alloys (A/O)	EACH	650 19.00
7" X .030" X 1/2"	General Ferrous Cutting (A/O)	10/BOX	7F30 140.00
7" X .030" X 1/2"	General Non-Ferrous Cutting (S/C)	10/BOX	7NF30 140.00
8" X .031" X 7/8"	(A/O) 8" (200mm) X .08mm X 22mm	10/BOX	8F30 216.00
8" X .031" X 7/8"	Non Ferrous Cut-Off Wheels, 8" X .031" X 7/8"	10/BOX	8NF30 216.00
8" X .031" X 7/8"	200mm X 0.8 X 22mm, Cutting Hard Ferrous	5/BOX	840 131.25
9" X .032" X 1/2"	General Ferrous Cutting	10/BOX	9F30 228.00

RUBBER BONDED ABRASIVE CUT-OFF WHEELS

Made from sheets of natural rubber and have been manufactured by the "original calendered method." They have a unique composition that makes them ideal for high quality cool, burn-free sectioning on metallographic samples.

Description	Usage	Qty	Catalog #	
9" X .063" X 1 1/4"	Tool steel, hard ferrous alloys, hard steels Rc60+	10/BOX	CW9-10	\$126.00
9" X .063" X 1 1/4"	Medium hard steels and super alloys Rc40-55	10/BOX	CW9-20	126.00
9" X .063" X 1 1/4"	Soft steels Rc15-35	10/BOX	CW9-30	126.00
9" X .063" X 1 1/4"	Soft - Medium hard non-ferrous metals	10/BOX	CW9-40	126.00
9" X .032" X 1 1/4"	Delicate cutting on all ferrous metals	10/BOX	CW9-50	126.00
10" X .063" X 1 1/4"	Tool steel, hard ferrous alloys, hard steels Rc60+	10/BOX	CW10-10	\$136.75
10" X .063" X 1 1/4"	Medium hard steels and super alloys Rc40-55	10/BOX	CW10-20	136.75
10" X .063" X 1 1/4"	Soft steels Rc15-35	10/BOX	CW10-30	136.75
10" X .063" X 1 1/4"	Soft - Medium hard non-ferrous metals	10/BOX	CW10-40	136.75
10" X .040" X 1 1/4"	Delicate cutting on all ferrous metals	10/BOX	CW10-50	136.75
12" X .063" X 1 1/4"	Tool steel, hard ferrous alloys, hard steels Rc60+	10/BOX	CW12-10	\$147.00
12" X .063" X 1 1/4"	Medium hard steels and super alloys Rc40-55	10/BOX	CW12-20	147.00
12" X .063" X 1 1/4"	Soft steels Rc15-35	10/BOX	CW12-30	147.00
12" X .063" X 1 1/4"	Soft - Medium hard non-ferrous metals	10/BOX	CW12-40	147.00
12" X .045" X 1 1/4"	Delicate cutting on all ferrous metals	10/BOX	CW12-50	147.00
12" X .063" X 1 1/4"	General purpose, sectioning all tool and hard steels Rc15+	10/BOX	CW12-60	147.00



RESIN BONDED ABRASIVE CUT-OFF WHEELS

Uses aluminum oxide or silicon carbide particles in a bakelite binder. These wheels are especially formulated to give the ideal cut surface finish for metallographic preparations. The 10", 12" and 17" wheels are designated as our special 'METCUT' series

Description	Usage	Qty	Catalog #	
10" X .060" X 1 1/4"	Extremely Hard Ferrous Alloys, Tool Steels, White Cast Irons, Nihard, etc. Rc60+	10/BOX	CW-031 A	\$157.00
10" X .060" X 1 1/4"	Extremely Hard Ferrous Alloys, Tool Steels, White Cast Irons, Nihard, Rc60+	10/BOX	CW-031 R	157.00
10" X .060" X 1 1/4"	Extremely Hard Ferrous Alloys, Tool Steels, White Cast Irons, Nihard, Rc60+	10/BOX	CW-031 N	157.00
10" X .070" X 1 1/4"	Extremely Hard Ferrous Alloys, Tool Steels, White Cast Irons, Nihard, Rc60+(Reinforced)	10/BOX	CW-031 RA	175.00
10" X .060" X 1 1/4"	Hard Ferrous Alloys, Hardened Steels, Rc50+	10/BOX	CW-032	157.00
10" X .060" X 1 1/4"	Medium Hard Steels and Super Alloys, Rc35-50	10/BOX	CW-033	157.00
10" X .060" X 1 1/4"	Medium soft Steels, Rc15-35	10/BOX	CW-034	157.00
10" X .060" X 1 1/4"	Soft to Medium Hard Non-Ferrous Metals, Aluminum, Brass, Titanium, Zirconium	10/BOX	CW-036	162.00
12" X .075" X 1 1/4"	Extremely Hard Ferrous Alloys, Tool Steels, White Cast Irons, Nihard. Rc60+	10/BOX	51-MET A	\$171.00
12" X .075" X 1 1/4"	Extremely Hard Ferrous Alloys, Tool Steels, White Cast Irons, Nihard. Rc60+	10/BOX	51-MET R	171.00
12" X .075" X 1 1/4"	Extremely Hard Ferrous Alloys, Tool Steels, White Cast Irons, Nihard. Rc60+	10/BOX	51-MET N	171.00
12" X .080" X 1 1/4"	Extremely Hard Ferrous Alloys, Tool Steels, White Cast Irons, Nihard, Rc60+(Reinforced)	10/BOX	51-MET RA	182.00
12" X .075" X 1 1/4"	Hard Ferrous Alloys, Hardened Steels, Rc50+	10/BOX	52-MET	171.00
12" X .075" X 1 1/4"	Medium Hard Steels and Super Alloys, Rc35-50	10/BOX	53-MET	171.00
12" X .075" X 1 1/4"	Medium soft Steels, Rc15-30	10/BOX	54-MET	171.00
12" X .075" X 1 1/4"	S/C Hard Bond Soft Ductile, Non-Ferrous	10/BOX	56-MET	171.00
14" X .120" X 1 1/4"	Extremely Hard Ferrous Alloys, Tool Steels, White Cast Iron, Nihard Rc60+	10/BOX	CW14-10 A	\$185.00
14" X .120" X 1 1/4"	Extremely Hard Ferrous Alloys, Tool Steels, White Cast Iron, Nihard Rc60+	10/BOX	CW14-10 R	185.00
14" X .120" X 1 1/4"	Extremely Hard Ferrous Alloys, Tool Steels, White Cast Iron, Nihard Rc60+	10/BOX	CW14-10 N	185.00
14" X .125" X 1 1/4"	Extremely Hard Ferrous Alloys, Tool Steels, White Cast Iron, Nihard Rc60+(Reinforced)	10/BOX	CW14-10 RA	222.50
14" X .120" X 1 1/4"	Hard Ferrous Alloys, Hardened Steels, Rc50+	10/BOX	CW14-20	191.00
14" X .120" X 1 1/4"	Medium Hard Steels and Super Alloys, Rc35-50	10/BOX	CW14-30	191.00
14" X .120" X 1 1/4"	Soft Steels, Rc15-30	10/BOX	CW14-40	191.00
14" X .120" X 1 1/4"	Soft to Medium Hard Non-Ferrous Metals, Aluminum, Brass, Titanium, Zirconium	10/BOX	CW14-50	191.00
17" X .125" X 1 1/4"	Extremely Hard Ferrous Alloys, Tool Steels, White Cast Iron, Nihard Rc60+	5/BOX	CW-101	\$187.50
17" X .125" X 1 1/4"	Hard Ferrous Alloys, Hardened Steels, Rc50+	5/BOX	CW-102	187.50
17" X .125" X 1 1/4"	Medium Hard Steels and Super Alloys Rc35-50	5/BOX	CW-104	187.50
17" X .125" X 1 1/4"	Soft to Medium Non-Ferrous Metals Aluminum, Brass, Titanium, Zirconium	5/BOX	CW-106	187.50
17" X .125" X 1 1/4"	Glass Reinforced General Purpose sectioning of Ferrous Alloys	5/BOX	CW-202	214.00
18" X .125" X 1 1/4"	Extremely Hard Ferrous Alloys, Tool Steels, White Cast Iron, Nihard Rc60+	5/BOX	CW18-10 N	\$192.00
18" X .125" X 1 1/4"	Hard Ferrous Alloys, Hardened Steels, Rc50+	5/BOX	CW18-20	192.00
20" X .135" X 1 1/4"	Extremely Hard Ferrous Alloys, Tool Steels, White Cast Iron, Nihard Rc60+	5/BOX	CW20-10 N	\$214.00
20" X .145" X 1 1/4"	Extremely Hard Ferrous Alloys, Tool Steels, White Cast Iron, Nihard Rc60+(Reinforced)	5/BOX	CW20-10 RA	235.00

OTHER SIZES OF SPECIAL WHEELS ARE AVAILABLE UPON REQUEST

MOUNTING SUPPLIES

Type	Measurement	Qty	Catalog #	
Reusable Plastic Molds	1.0" I.D.	12/PKG	M154	\$32.50
	1.25" I.D.	12/PKG	M155	34.00
	1.50" I.D.	12/PKG	M156	37.50
	2.0" I.D.	12/PKG	M1567	58.50
Silicon Rubber Molds	1.0" I.D.	5/PKG	M157	\$40.50
	1.25" I.D.	5/PKG	M158	48.00
	1.50" I.D.	5/PKG	M159	53.50
	2" I.D.	5/PKG	RM2	89.00
	3" x 1.5"	EACH	RM3A	26.00
	3" x 2"	EACH	RM3B	30.00
Specimen Caps	1.0" I.D.	25/PKG	M171	\$5.50
	1.25" I.D.	25/PKG	M172	6.50
	1.50" I.D.	25/PKG	M173	7.00
	2" I.D.	25/PKG	M173-2	8.50
Met Base	4" x 5" PSA	10/PKG	M180	\$24.50



Compression Mounting Properties & Comparison

	PHENOLIC	LUCITE	EPOXY	DIALLYL PHTHALATE
MOLDING TEMP	350° F / 176° C	300° F / 148° C	350° F / 176° C	300° F / 148° C
MOLDING PRESS	4200 PSI	3000 PSI	4200 PSI	3000 PSI
COLORS	BLACK, RED, GREEN	CLEAR	BLACK	BLUE, GREEN
CYCLE TIMES	EXCELLENT	MODERATE	GOOD	GOOD
EDGE RETENTION	FAIR	GOOD	EXCELLENT	EXCELLENT
CLARITY	NONE	EXCELLENT	NONE	NONE
HARDNESS	LOW	GOOD	HIGH	HIGH

COMPRESSION MOLDING POWDERS

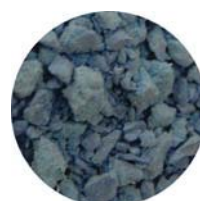
Name	Color	5 lbs	25 lbs
LUCITE	TRANSPARENT	M125 \$85.50	M125-25 \$405.50
LUCITE THERMOPLASTIC provides an economical transparent mount for specimens. Allows the operator to see areas of interest in the mount. Good edge retention & med hardness.			
PHENOLIC THERMOSETTING	BLACK	M126 \$24.00	M126-25 \$97.00
	RED	M127 29.50	M127-25 125.00
	GREEN	M128 29.00	M128-25 122.00
PHENOLIC THERMOSETTING These are the most popular and economical materials to use. Its fast , has a med shrinkage, med edge retention and low hardness.			
DIALLYL PHTHALATE SHORT GLASS	BLUE	M131 \$98.00	
	GREEN	M132 100.00	
DIALLYL PHTHALATE SHORT GLASS used for a harder surface finish. Chemical resistant. Excellent edge retention.			
DIALLYL PHTHALATE MINERAL FILLED	BLUE	M130 \$84.00	
DIALLYL PHTHALATE MINERAL FILLED provides moderate shrinkage and chemical resistance. Excellent edge retention, high hardness.			
BLACK EPOXY COURSE/GLASS FILLED	BLACK	M129C \$64.50	M129C-25 \$255.00
BLACK EPOXY FINE/GLASS	BLACK	M129 74.50	M129-25 265.00
BLACK EPOXY THERMOSETTING has superior edge retention, tough grinding and excellent flow characteristics. Chemical resistant. High hardness.			
CARBON FILLED POWDER	1 LB.	M134 \$40.00	
NICKEL FILLED POWDER	1 LB.	M134-N 127.50	
COPPER FILLED POWDER	1 LB.	M134-C 62.00	

CONDUCTIVE FILLED POWDERS. Mounting powder to make conductive mounts for SEM & OES applications.

PHENOLIC PREFORMS

Color	Qty	1"	1.25"	1.50"
BLACK	500	M126LA \$92.00	M126LB \$124.00	M126LC \$146.00
RED	500		M127LB 124.00	M127LC 146.00
GREEN	500		M128LB 124.00	M128LC 146.00

PHENOLIC PREFORMS involves a combination of pressure and high temperature to mount the specimen in a form. Phenolic preforms are a convenient form for increased speed and production. Exhibits medium edge retention and hardness properties.



MOUNTING

MOUNTING SUPPLIES





Type	Description	Qty	Catalog #	
Mounting Clips	Met-clips (metal)	100/PKG	M163	\$34.25
	Met-clips (plastic white)	100/PKG	M164	31.25
	Uni-clips (black plastic)	100/PKG	M174	46.50
	Met-clips (plastic clear)	100/PKG	M164-C	31.25
	Multi-clips ("S" Type)	100/PKG	M174-MC	48.50
Cups / Sticks	(7oz) Waxed Graduated	100/PKG	M165	\$31.25
	Wooden Spatulas	500/PKG	M166	26.00
Jar with Brush	Silicone Mold Release	8 oz	M167	\$13.00
		16 oz	M167-16	26.00
		32 oz	M167-32	45.00
Scoops & Pumps	Gallon Pump	EACH	M450	\$9.00
	Powder Scoop	EACH	M451	3.00
Safety Ware	Disposable Gloves	100/BOX	M452	\$23.00
	Safety Glasses	EACH	M453	12.00



Cold Mounting Properties & Comparison

	METLAB EPOXY	JETSET EPOXY	ACRYLIC	GLASS ACRYLIC	POLYESTER	TECHNOVIT
TYPE	DUROPLASTIC	DUROPLASTIC	THERMOPLASTIC	THERMOPLASTIC	DUROPLASTIC	DUROPLASTIC
PEAK TEMPERATURE	160° F / 70° C	212° F / 100° C	150° F / 65° C	150° F / 65° C	100° F / 38° C	251° F / 122° C
CURE TIME	4-8 HOURS	1-2 HOURS	8-12 MINUTES	8-12 MINUTES	1½-2 HOURS	7-8 MINUTES
SHORE D-HARDNESS	82	80	80	95	76	78
CLARITY	CLEAR	CLEAR	OPAQUE	BLACK	CLEAR	WHITE
SHRINKAGE	EXCELLENT	GOOD	GOOD	MINIMUM	GOOD	LOW
HARDNESS	EXCELLENT	GOOD	GOOD	EXCELLENT	GOOD	GOOD

TECHNOVIT COLD MOUNTING SYSTEM

Name	Curing Time	Kit		
TECHNOVIT 4000L LARGE KIT	10-13 MINUTES	TN4000 \$262.00 1500 gram powder 1000 ml syrup I 500 ml syrup II		
mixing powder/syrup I+II 2:2:1				
TECHNOVIT 4006	9-13 MINUTES	TN4006 \$210.00 1000 gram powder 500 ml liquid		
mixing powder / liquid 2:1				
TECHNOVIT 4071	5-7 MINUTES	TN4071 \$210.00 1000 gram powder 500 ml 1-C liquid		
mixing powder / liquid 2:1				
TECHNOVIT 5000	7-12 MINUTES	TN5000 \$257.00 1000 gram powder 500 ml liquid		
mixing powder / liquid 20g to 13ml				



Technovit Properties & Comparison

	TN 4000	TN 4006	TN 4071	TN 5000
COLOR	WHITE	HIGH CLEAR	GREEN-SEMI TRANSPARENT	BROWN
APPLICAION	gap-free, specimen embed	bubble-free, specimen embed pressure unit	specimen embedding	conductive material embedding
COMPONENTS	powder/syrup	powder/liquid	powder/liquid	powder/liquid
CURING AT 22°C	10-13	9-13	5-7	7-12
TEMP STABILITY	130°C	125°C	105°C	100°C

For detailed information on technovits, visit metlabcorp.com/technovits

COLD MOUNTING SYSTEM

Name	Time	Kit	Resin	Hardener
METLAB EPOXY	4-8 HOURS used with vacuum if required	M135 \$65.00 1 quart resin ½ pint hardener (10) 7oz waxed cups (10) stir sticks	LIQUID	LIQUID
			M136 \$38.00 1 quart	M138 \$27.00 ½ pint
			M137 102.00 1 gallon	M139 59.00 1 quart
mixing resin to hardener 15:2				

JETSET EPOXY	1-2 HOURS	M135A \$65.00 1 quart resin ½ pint hardener (10) 7oz waxed cups (10) stir sticks	LIQUID	LIQUID
			M136A \$38.00 1 quart	M138A \$27.00 1 pint
			M137A 102.00 1 gallon	M139A 59.00 1 quart
mixing resin to hardener 15:2				

FAST CURE ACRYLIC	8-12 MINUTES	M140 \$56.00 1 lb powder 1 pint hardener (10) 7oz waxed cups (10) stir sticks	POWDER	LIQUID
			M142 \$158.00 5 lbs	M145 \$69.00 ½ gallon
			M143 300.00 10 lbs	M146 122.00 1 gallon
mixing powder to hardener 3:2				

POLYESTER	1½-2 HOURS	M147 \$50.00 1 quart resin 1 unit hardener (10) 7oz waxed cups (10) stir sticks	LIQUID	LIQUID
			M147-5 \$600.00 5 gallon	M148 \$30.00 1 quart
mixing resin to hardener 6 oz : .01 oz or 60 g:1 g				

METMOUNT 1 EPOXY	6 HOURS (Clear Mount)		LIQUID	LIQUID
			M335R-32 \$40.00 32oz.	M335H-8 \$30.00 8oz.
			LIQUID	LIQUID
			M335R-64 \$135.00 64oz.	M335H-16 \$54.00 16oz.
			LIQUID	LIQUID
			M335R-128 \$160.00 128oz.	M335H-32 \$100.00 32oz.



METMOUNT 2 EPOXY	9 HOURS (Clear Mount)		LIQUID	LIQUID
			M336R-32 \$77.00 32oz.	M336H-16 \$50.00 16oz.
			LIQUID	LIQUID
			M336R-128 \$300.00 128oz.	M336H-64 \$150.00 64oz.



**METMOUNT 3
EPOXY**
mixing resin to hardener
5:1 by volume

**2 HOURS
(Clear Mount)**



LIQUID

M337R-32 \$51.25
32oz.

LIQUID

M337H-8 \$25.00
8oz.

LIQUID

M337R-128 \$205.00
128oz.

LIQUID

M337H-32 \$95.00
32oz.

**METMOUNT 4
EPOXY**
mixing resin to hardener
4:1 by volume

**1 - 1.5 HOURS
(Clear Yellowish
Mount)**



LIQUID

M338R-64 \$200.00
64oz.

LIQUID

M338H-16 \$85.00
16oz.

REPLICATING SYSTEM

Catalog #	Qty	Description	
MET-333	2X50mm	Provil Novo Light media	\$77.00
MET-334	48	Mixing cannula	66.50
MET-335	96	Tips for mixing cannula	61.00
MET-337	EACH	Mixing pistol	98.00



For detailed information on impressions, visit metlabcorp.com/impressions

ABRASIVE GRINDING DISCS

PLAIN PRODUCTION

Grit	Qty	200mm (7.87")		250mm (9.84")		300mm (11.81")	
60	100	M106-60-PRO	\$62.00	M180-60-PRO	\$101.00	M120-60-PRO	\$118.00
120	100	M106-120-PRO	48.50	M180-120-PRO	76.00	M120-120-PRO	91.50
180	100	M106-180-PRO	45.50	M180-180-PRO	69.50	M120-180-PRO	88.50
240	100	M106-240-PRO	45.50	M180-240-PRO	67.00	M120-240-PRO	88.50
320	100	M106-320-PRO	45.50	M180-320-PRO	67.00	M120-320-PRO	88.50
400	100	M106-400-PRO	45.50	M180-400-PRO	67.00	M120-400-PRO	88.50
600	100	M106-600-PRO	45.50	M180-600-PRO	67.00	M120-600-PRO	88.50

OTHER SIZES AVAILABLE UPON REQUEST

ABRASIVE GRINDING DISCS

PSA PRODUCTION

Grit	Qty	200mm (7.87")		250mm (9.84")		300mm (11.81")	
60	100	M112-60-PRO	\$106.00	M114-60-PRO	\$147.00	M115-60-PRO	\$185.00
120	100	M112-120-PRO	77.00	M114-120-PRO	118.00	M115-120-PRO	145.00
180	100	M112-180-PRO	70.00	M114-180-PRO	104.00	M115-180-PRO	135.00
240	100	M112-240-PRO	70.00	M114-240-PRO	104.00	M115-240-PRO	135.00
320	100	M112-320-PRO	70.00	M114-320-PRO	104.00	M115-320-PRO	135.00
400	100	M112-400-PRO	70.00	M114-400-PRO	104.00	M115-400-PRO	135.00
600	100	M112-600-PRO	70.00	M114-600-PRO	104.00	M115-600-PRO	135.00

WET / DRY SILICON CARBIDE C WEIGHT ABRASIVE GRINDING DISCS

are manufactured in North America and are classified to U.S. standards. FEPA is grit classification according to abrasives manufactured in Europe and are classified to European standards.

US (CAMI)	60	80	120	180	240	320	400	600	800	1200
P GRADE (FEPA)	P60	P80	P120	P180	P220	P500	P800	P1200	P2400	P4000
MICRON SIZE	268	192	125	76	52	35	22	14	10	5

ABRASIVE GRINDING DISCS

PLAIN PREMIUM

Grit	Qty	8" (203mm)		9" (228mm)		10" (254mm)		12" (305mm)		14" (355mm)	
60	100	M106-60	\$76.00	M108-60	\$81.00	M180-60	\$113.00	M120-60	\$139.00	M181-60	\$175.00
80	100	M106-80	57.00	M108-80	72.00	M180-80	98.00	M120-80	129.00		
120	100	M106-120	55.00	M108-120	62.00	M180-120	82.00	M120-120	122.75	M181-120	140.00
180	100	M106-180	52.00	M108-180	55.00	M180-180	76.00	M120-180	112.50	M181-180	125.00
240	100	M106-240	52.00	M108-240	55.00	M180-240	76.00	M120-240	112.50	M181-240	125.00
320	100	M106-320	52.00	M108-320	55.00	M180-320	76.00	M120-320	112.50	M181-320	125.00
400	100	M106-400	52.00	M108-400	55.00	M180-400	76.00	M120-400	112.50	M181-400	125.00
600	100	M106-600	52.00	M108-600	55.00	M180-600	76.00	M120-600	112.50	M181-600	125.00
800	100	M106-800	88.50	M108-800	102.00	M180-800	113.00	M120-800	160.00	M181-800	220.00
1000	100	M106-1000	88.50	M108-1000	102.00	M180-1000	113.00	M120-1000	160.00		
1200	100	M106-1200	88.50	M108-1200	102.00	M180-1200	113.00	M120-1200	160.00	M181-1200	220.00

OTHER SIZES AVAILABLE UPON REQUEST

GRINDING

ABRASIVE GRINDING DISCS

PSA PREMIUM

Grit	Qty	8" (203mm)		10" (254mm)		12" (305mm)		14" (355mm)	
60	100	M112-60	\$137.00	M160-60	\$175.00	M115-60	\$209.50	M118-60	\$260.00
120	100	M112-120	105.00	M160-120	144.00	M115-120	188.25	M118-120	240.00
180	100	M112-180	90.00	M160-180	118.00	M115-180	169.00	M118-180	225.00
240	100	M112-240	90.00	M160-240	118.00	M115-240	169.00	M118-240	225.00
320	100	M112-320	90.00	M160-320	118.00	M115-320	169.00	M118-320	225.00
400	100	M112-400	90.00	M160-400	118.00	M115-400	169.00	M118-400	225.00
600	100	M112-600	90.00	M160-600	118.00	M115-600	169.00	M118-600	225.00
800	100	M112-800	129.00	M160-800	167.00	M115-800	218.50	M118-800	330.00
1000	100	M112-1000	129.00	M160-1000	167.00	M115-1000	218.50		
1200	100	M112-1200	129.00	M160-1200	167.00	M115-1200	218.50	M118-1200	330.00

WET / DRY SILICON CARBIDE C WEIGHT ABRASIVE GRINDING DISCS

are manufactured in North America and are classified to U.S standards. FEPA is grit classification according to abrasives manufactured in Europe and are classified to European standards.

US (CAMI)	60	80	120	180	240	320	400	600	800	1200
P GRADE (FEPA)	P60	P80	P120	P180	P220	P500	P800	P1200	P2400	P4000
MICRON SIZE	268	192	125	76	52	35	22	14	10	5

ABRASIVE FOIL GRINDING DISCS

S/C FOIL DISCS

Grit	Qty	8" (203mm)		10" (254mm)		12" (304mm)	
60	100	M112-60-F	\$89.50	M160-60-F	\$148.00	M115-60-F	\$183.00
120	100	M112-120-F	67.00	M160-120-F	102.00	M115-120-F	137.00
180	100	M112-180-F	59.50	M160-180-F	98.00	M115-180-F	136.00
240	100	M112-240-F	56.50	M160-240-F	94.00	M115-240-F	132.50
320	100	M112-320-F	56.50	M160-320-F	94.00	M115-320-F	132.50
400	100	M112-400-F	56.50	M160-400-F	94.00	M115-400-F	132.50
600	100	M112-600-F	56.50	M160-600-F	94.00	M115-600-F	132.50
800	100	M112-800-F	99.50	M160-800-F	164.50	M115-800-F	187.00
1000	100	M112-1000-F	99.50	M160-1000-F	164.50	M115-1000-F	187.00
1200	100	M112-1200-F	99.50	M160-1200-F	164.50	M115-1200-F	187.00

FLEXIBLE PIANO DIAMOND DISCS

MD

Grit	Qty	8" (203mm)		10" (254mm)		12" (305mm)	
80	1	M506-8G	\$107.00	M506-10G	\$142.00	M506-12G	\$224.00
120	1	M506-8R	107.00	M506-10R	142.00	M506-12R	224.00
220	1	M506-8Y	107.00	M506-10Y	142.00	M506-12Y	224.00
600	1	M506-8B	107.00	M506-10B	142.00	M506-12B	224.00
1200	1	M506-8O	107.00	M506-10O	142.00	M506-12O	224.00

MD FLEXIBLE PIANO DIAMOND DISCS reduces grinding processes to just a couple of steps in addition cuts preparation time. Piano Discs replace the conventional silicon carbide abrasive discs and in addition are more economical and produces superior finishes on specimens. Piano Discs use water for cooling. The patterned segmented diamond surface has been designed for grinding materials and minimize build-up of abraded material, produces specimens that are perfectly flat.



GRINDING BELTS

4" x 36"

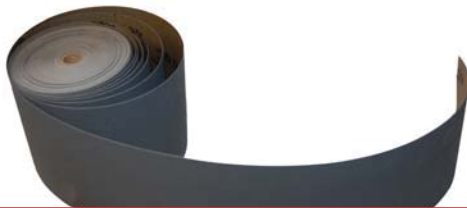
Grit	Silicon Carbide 10/BOX (WET-DRY)		Zirconia 5/BOX (WET-DRY)		Aluminum Oxide 10/BOX (DRY)	
60	M100-60	\$65.00	M117-60	\$45.00	M101-60	\$58.00
80	M100-80	60.00	M117-80	43.00	M101-80	52.00
120	M100-120	60.00	M117-120	40.00	M101-120	50.00
180	M100-180	60.00	M117-180	40.00	M101-180	50.00
220	M100-220	64.00	M117-220	40.00	M101-220	50.00
240	M100-240	60.00			M101-240	50.00
320	M100-320	60.00				
400	M100-400	60.00				
600	M100-600	60.00				

OTHER GRIT & SIZES
AVAILABLE
ON REQUEST

GRINDING BELTS

6" x 48"

Grit	Silicon Carbide 5/BOX (WET-DRY)		Zirconia 5/BOX (WET-DRY)		Aluminum Oxide 5/BOX (DRY)	
60	M525-60	\$90.00	M504-60	\$90.00	M503-60	\$80.00
80			M504-80	80.00	M503-80	67.50
120			M504-120	65.00	M503-120	65.00
180			M504-180	55.00	M503-180	60.00
220			M504-220	55.00	M503-220	60.00
240					M503-240	55.00



ROLLS S/C

Grit	Qty	3" x 75'		3 7/16" x 75'	
180	1	M110-180	\$33.00	M111-180	\$36.00
240	1	M110-240	33.00	M111-240	36.00
320	1	M110-320	33.00	M111-320	36.00
400	1	M110-400	33.00	M111-400	36.00
600	1	M110-600	33.00	M111-600	36.00

STRIPS S/C

Grit	Qty	3" x 11"		PSA
240	100	M114-240	\$45.00	
320	100	M114-320	45.00	
400	100	M114-400	45.00	
600	100	M114-600	45.00	
800	100	M114-800	64.00	
1200	100	M114-1200	64.00	

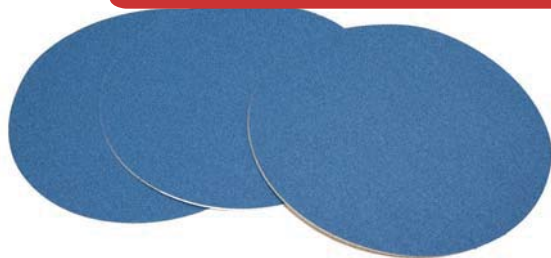
GRINDING

ZIRCONIA ALUMINA DISCS

PSA

Grit	Qty	8" (203mm)		12" (305mm)	
60	25	M183-60	\$85.50	M184-60	\$165.00
120	25	M183-120	80.00	M184-120	149.00
180	25			M184-180	144.00
220	25			M184-220	144.00

WET / DRY ZIRCONIA ALUMINA C WEIGHT ABRASIVE GRINDING DISCS P.S.A. BACK are manufactured in North America and are classified to U.S standards.



OTHER GRIT & SIZES
AVAILABLE
ON REQUEST

STONE GRINDING WHEELS

SGW-AO-060	EACH	14" (356mm) X 1 3/4" X 1 1/2" – GRIT 60 A/O	\$450.00
SGW-AO-150	EACH	14" (356mm) X 1 3/4" X 1 1/2" – GRIT 150 A/O	450.00
SGW-SC-150	EACH	14" (356mm) X 1 3/4" X 1 1/2" – GRIT 150 S/C	500.00
SGW8-AO-150	EACH	8" (200mm) X 1-7/8" X 1 1/2" – GRIT 150 A/O (used with Prepamatic)	157.00



80-150	EACH	150mm (5.9") x 32 mm AL2O3 White Grinding Stone for hard steels	\$120.00
80-151	EACH	150mm (5.9") x 32 mm AL2O3 Pink Grinding Stone for cast iron	120.00



MAGNETIC DISC FIXATION SYSTEM

PSA

8" (203mm)		10" (254mm)		12" (305mm)		Qty
M195-8	\$16.50	M195-10	\$20.50	M195-12	\$25.00	1

This system provides for a quick convenient method for applying, removing, and reusing paper discs and polishing cloths from your grinding/polishing wheel. The system is comprised of two parts, the first part being a magnetic disc which has a pressure sensitive adhesive backing (PSA) and is applied to the wheel. The second part is our unique flexible rubber metal disc which in turn is placed on the magnetic disc. The rubber metal material is rustproof, durable, and reusable, has no sharp edges and sticks to the magnetic disc-like steel. Our rubber metal discs accept both PSA and plain backed grinding discs and polishing cloths. Our MAGNETIC DISC SYSTEM eliminates the expense of additional grinding/polishing wheels and also metal or bimetallic plates which are subject to bending and edge denting.

MD FUGO DISCS

PSA

8" (203mm)		10" (254mm)		12" (305mm)		Qty
M194-8	\$51.50	M194-10	\$62.00	M194-12	\$82.50	5/PKG

MD FUGO DISCS are rubber discs with an adhesive side which are used to attach non-adhesive paper to the wheels.

TEFLON DISCS

8" (203mm)		10" (254mm)		12" (305mm)		Qty
M197-8T	\$48.00	M197-10T	\$62.00	M197-12T	\$108.00	EACH

Teflon Coated Discs allowing easy removal of PSA Grinding Paper

GRIT GRABBER

PSA

8" (203mm)		10" (254mm)		12" (305mm)		Qty
M175	\$25.00	M176	\$38.00	M177	\$47.00	10/PKG

GRIT GRABBERS are double sided adhesive interface discs which are used to attach non - adhesive grit papers and polishing cloths to the wheels.

METAL PLATE

8" (203mm)		10" (254mm)		12" (305mm)		Qty
M197-8	\$23.00	M197-10	\$38.00	M197-12	\$46.00	EACH

Used to ensure flatness while grinding. Attaches to a magnetized wheel

GRINDING

DIAMOND SUSPENSIONS

WATER / OIL SOLUABLE

Heavy Concentration Superior Grade

MONOCRYSTALLINE

μm	airspray 8 oz		bottle only 8 oz		trigger spray 16 oz		refill 32 oz		refill 128 oz	
.10	M240	\$47.25	M250	\$44.00	M260	\$67.00	M260-32	\$95.50	M260-128	\$325.50
.25	M241	47.25	M251	44.00	M261	68.25	M261-32	95.50	M261-128	325.50
.50	M242	47.25	M252	44.00	M262	67.00	M262-32	95.50	M262-128	325.50
1	M243	42.00	M253	39.00	M263	62.00	M263-32	90.25	M263-128	288.75
3	M244	52.50	M254	49.00	M264	72.50	M264-32	116.50	M264-128	399.00
6	M245	52.50	M255	49.00	M265	72.50	M265-32	127.00	M265-128	441.00
9	M246	52.50	M256	49.00	M266	77.00	M266-32	137.50	M266-128	493.50
15	M247	52.50	M257	49.00	M267	77.00	M267-32	137.50	M267-128	493.50
30	M248	57.75	M258	60.00	M268	82.00	M268-32	148.00	M268-128	509.25
45	M249	57.75	M259	60.00	M269	82.00	M269-32	148.00	M269-128	509.25

METLAB highest quality virgin diamond particles which are presently used in our widely acceptable diamond compounds and airspray s have now been formulated into our new Diamond Suspensions. These suspensions are suitable for use in power lapping, general polishing applications or in automated diamond dispensing systems.



DIAMOND SUSPENSIONS

WATER / OIL SOLUABLE

Heavy Concentration Superior Grade

POLYCRYSTALLINE

μm	bottle only 8 oz		finger pump 8 oz		trigger spray 16 oz		refill 32 oz		refill 128 oz	
.25	M270	\$51.50	M280	\$51.50	M280-16	\$72.00	M280-32	\$132.00	M280-128	\$540.75
1	M271	41.25	M281	41.25	M281-16	67.00	M281-32	118.50	M281-128	448.00
3	M272	51.50	M282	51.50	M282-16	82.50	M282-32	154.50	M282-128	566.50
6	M273	62.00	M283	62.00	M283-16	103.00	M283-32	185.50	M283-128	669.00
9	M274	67.00	M284	67.00	M284-16	113.25	M284-32	206.00	M284-128	700.50
15	M275	67.00	M285	67.00	M285-16	113.25	M285-32	206.00	M285-128	700.50
30	M276	72.00	M286	72.00	M286-16	123.50	M286-32	216.25	M286-128	700.50
45	M277	72.00	M287	72.00	M287-16	123.50	M287-32	216.25	M287-128	700.50

Supreme grade constant suspensions use polycrystalline (black) diamond particles which have a greater number of cutting edges than our standard monocrystalline diamond suspensions. These increased edges reduce subsurface deformation especially on samples which are of different materials and hardness. Ideally suited for use in power lapping, general polishing applications or in all automated diamond dispensing systems.

POLISHING COMPOUND

MONOCRYSTALLINE

µm	5 gram		20 gram	
1/4	M200	\$21.00	M201	\$73.50
1	M202	21.00	M203	63.00
3	M204	28.25	M205	78.75
6	M206	28.25	M207	89.25
9	M208	28.25	M209	94.50
15	M210	31.50	M211	94.50
30	M212	36.75	M213	105.00
45	M214	36.75	M215	105.00

HEAVY CONCENTRATION
WATER / OIL SOLUABLE

POLISHING COMPOUND

POLYCRYSTALLINE

µm	10 gram	
1/4	M200P	\$62.00
1	M202P	62.00
3	M204P	103.00
6	M206P	103.00
9	M208P	128.75
15	M210P	128.75
30		
45		

HEAVY CONCENTRATION
WATER / OIL SOLUABLE



AIR SPRAY

POLYCRYSTALLINE

µm	8 oz (spray)	
.25	M288-A	\$60.00
1	M289-A	67.00
3	M290-A	67.00
6	M291-A	83.00
9	M292-A	83.00
15	M293-A	87.00

HEAVY CONCENTRATION
ALCOHOL BASE

DIAMOND SUSPENSIONS

POLYCRYSTALLINE

µm	bottle only 8 oz		trigger spray 16 oz	
.25	M260-P25	\$113.25	M260-16	\$165.00
1	M261-P1	113.25	M261-16	165.00
3	M262-P3	113.25	M262-16	165.00
6	M260-P6	113.25	M260-P-16	165.00
9	M261-P9	113.25	M261-P-16	165.00
15	M262-P15	113.25	M262-P-16	165.00

OIL SOLUABLE
WATER FREE

DIA-LUBE SUSPENSION

WITH COOLING LUBRICANTS

Description	Used On	16 oz	128 oz
DiaLube Allegra	MD Allegra polishing cloth for fine grinding (water based)	M280-16DL \$66.75	M280-128DL \$422.00
DiaLube Plan	MD Plan polishing cloth for fine grinding (no solvents)	M281-16DL 89.00	M281-128DL 422.00
DiaLube Mol	MD Mol polishing cloth (contains no solvents)	M282-16DL 89.00	M282-128DL 345.00
DiaLube Dac	MD Dac polishing cloth (contains no solvents)	M283-16DL 83.50	M283-128DL 345.00
DiaLube Plus	MD Plus polishing cloth (contains no solvents)	M284-16DL 78.00	M284-128DL 345.00
DiaLube Nap	MD Nap polishing cloth (contains no solvents)	M285-16DL 83.50	M285-128DL 290.00

DIA-LUBE SUSPENSION WITH COOLING LUBRICANTS. A unique blend of quality high performance diamonds accompanied with cooling lubricants. This process ensures a faster and more cost efficient sample preparations.

DIAMOND POLISHING EXTENDERS

Type	Quart	Gallon	5 Gallon
PURPLE (ALCOHOL BASED)	M225-32 \$26.25	M225-128 \$73.50	M225-640 \$288.75
Alcohol-based, general polishing of most materials. No ethylene glycol.			
GREEN (WATER BASED)	M226-32 \$26.25	M226-128 \$73.50	M226-640 \$288.75
Water-based, general polishing of most materials.			
RED (WATER/OIL BASED)	M227-32 \$26.25	M227-128 \$73.50	M227-640 \$288.75
Water / oil based, final polishing softer materials.			
BROWN (ALCOHOL BASED)	M220-32 \$26.25		
Alcohol based for fine grinding on all materials. Used with water free diamond suspension.			
BLUE LUBE (ETHANOL BASED)	M222 \$36.00	M223 \$67.00	M224 \$231.75
Alcohol-based, general polishing on most materials.			



COLLOIDAL SILICA

μm	Type	Quart		Gallon	
≈ 0.06	Colloidal Silica	M306-32	\$31.25	M306-128	\$93.75

COLLOIDAL SILICA (BLUE) Used for chemical/mechanical polishing on oxides, metals, semi conductors and ceramic based materials.

≈ 0.04	OPS Colloidal Silica (pH 10.5)	M511-OPSQ	52.00	M511-OPSG	166.50
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OPS COLLOIDAL SILICA (WHITE) Has been formulated to reduce polishing time and are priced very economically. OPS under normal use may be diluted with water. Used for non-ferrous metals and very ductile materials like refractory metals and others.



ALUMINA SUSPENSIONS

μm	Type	Quart		Gallon	
0.05	Gamma B Alumina	M303-32	\$62.50	M303-128	\$208.00
0.3	Alpha A Alumina	M304-32	57.25	M304-128	208.00
0.1	Alpha SP Alumina	M310-32	60.00	M310-128	208.00
1.0	Alpha C Alumina	M305-32	62.40	M305-128	208.00

ALUMINA SUSPENSIONS are also de-agglomerated . 99.99% pure and permanently remain in solution. The neutral non-toxic base will not dry out on the polishing pad and is completely water soluble.



ALUMINA POWDERS

μm	1 lb		5 lbs	
0.05	M300	\$57.25	M300-80	\$239.25
0.3	M301	57.25	M301-80	239.25
1	M302	52.00	M302-80	234.00

ALUMINA POWDERS are agglomerate-free, they are calcined to a high purity of 99.9% and then "deagglomerated" to break down the large agglomerates which would otherwise cause scratches. The result is a superior alumina that provides a faster time to a scratch-free finish.



Polishing Cloths Comparison & Properties

IMAGES	POLISHING CLOTH	RECOMMENDED USE
	COTTON - very short nap 100% cotton cloth. Used for rough polishing on soft materials.	-diamond compounds -alumina
	CHEM PAD - soft synthetic chemically resistant no nap pad that removes smears from tough materials. For final polishing on titanium, stainless steels, lead/tin solders, electronic packages and soft non-ferrous plastics.	-1µm & finer diamond -alumina -colloidal silica
	DIA DAC - napless satin acetate woven pure medium hard silk cloth of very close weave. Recommended for use with in pre-polishing stages on ferrous and non-ferrous materials, petrographic samples and ceramics.	-3µm diamond products
	DIA NAP - soft very short napped synthetic cloth for use in final polishing on all ferrous metals and sintered carbides.	-1µm & finer diamond
	DIA MOL - woven 100% wool medium/soft cloth for use on ferrous and non-ferrous metals. Typically used on softer materials.	-3µm & finer diamond
	DIA PLUS - soft long napped synthetic cloth for use on ferrous metals and sintered carbides, also used for final polishing on all materials with aluminum oxide powders. Excellent for un-mounted samples or manual polishing.	-3µm & finer diamond -alumina
	DP PLAN - napless woven polyester nylon cloth of close weave, very durable. Recommended for use with 15 to 3 micron diamond to prevent relief and maintain flatness on hard/very hard materials.	-15µm to 3µm diamond
	GOLD LABEL (NYLON) - nap free nylon with plastic backing. Provides excellent flatness	-15µm to 3µm diamond
	METLAB (MICRO) - short synthetic rayon fibers to woven cotton backing giving a soft suede cloth of hard wearing properties. Recommended for final polishing on all materials. Good for high removal rates.	-1µm diamond -alumina
	PAN W - synthetic chemotextile hard nap less material which has oil/water resistant backing. Maintaining flatness, edge and inclusion retention in pre-polishing stages on metals, ceramics, etc.	-9µm & finer diamond
	RED FELT - 100% pure virgin wool fabric plucked rather than sheared pile. Used for general rough and intermediate polishing on all materials.	-1µm diamond -alumina
	SILK - napless pure silk cloth of close weave. Used when slurry or skid polishing techniques are used with alumina or diamond compound on pre-polishing stages on metals or petrographic samples.	-9µm to 3µm diamond -alumina
	VEL LAP - A white synthetic velvet short nap cloth which provides an excellent polish. Used for final polishing on soft metals	-1µm & finer diamond -alumina -colloidal silica

POLISHING CLOTHS

		8"		10"		12"	
CLOTH	TYPE		203 mm	203 mm		305 mm	
COTTON	PLAIN	10/PKG	M590-8PL \$41.00	M590-10PL \$51.50		M590-12PL \$62.00	
CHEM PAD	PSA	5/PKG	M660-8PS \$93.00	M660-10PS \$116.00		M660-12PS \$159.00	
RUBBER BACK	MD	5/PKG	M660-8MD 108.00	M660-10MD 139.00		M660-12MD 175.00	
METAL BACK	MP	5/PKG	M660-8MP 146.25	M660-10MP 227.00		M660-12MP 288.00	
DIA DAC	PSA	5/PKG	M615-8PS \$41.00	M615-10PS \$62.00		M615-12PS \$72.00	
RUBBER BACK	MD	5/PKG	M615-8MD 51.50	M615-10MD 72.00		M615-12MD 93.00	
METAL BACK	MP	5/PKG	M615-8MP 67.00	M615-10MP 98.00		M615-12MP 118.00	
DIA NAP	PSA	5/PKG	M630-8PS \$51.50	M630-10PS \$80.25		M630-12PS \$113.25	
RUBBER BACK	MD	5/PKG	M630-8MD 51.50	M630-10MD 80.25		M630-12MD 113.25	
METAL BACK	MP	5/PKG	M630-8MP 82.50	M630-10MP 134.00		M630-12MP 175.00	
DIA MOL	PSA	5/PKG	M620-8PS \$82.50	M620-10PS \$98.00		M620-12PS \$118.50	
RUBBER BACK	MD	5/PKG	M620-8MD 82.50	M620-10MD 98.00		M620-12MD 118.50	
METAL BACK	MP	5/PKG	M620-8MP 103.00	M620-10MP 165.00		M620-12MP 201.00	
DIA PLUS	PSA	5/PKG	M625-8PS \$77.25	M625-10PS \$98.00		M625-12PS \$118.50	
RUBBER BACK	MD	5/PKG	M625-8MD 77.25	M625-10MD 98.00		M625-12MD 118.50	
METAL BACK	MP	5/PKG	M625-8MP 103.00	M625-10MP 149.25		M625-12MP 180.25	
DP PLAN	PSA	10/PKG	M610-8PS \$51.50	M610-10PS \$72.25		M610-12PS \$91.00	
RUBBER BACK	MD	5/PKG	M610-8MD 62.00	M610-10MD 77.25		M610-12MD 113.25	
METAL BACK	MP	5/PKG	M610-8MP 103.00	M610-10MP 149.25		M610-12MP 180.25	
GOLD LABEL	PSA	10/PKG	M537-8PS 46.50	M537-10PS \$70.00		M537-12PS \$86.00	

OTHER SIZES AVAILABLE UPON REQUEST

POLISHING CLOTHS

CLOTH	TYPE		8"	10"	12"
			203 mm	203 mm	305 mm
METLAB (MICRO)	PLAIN	10/PKG	M500-8PL \$36.00	M500-10PL \$46.50	M500-12PL \$56.50
	PSA	10/PKG	M500-8PS 44.50	M500-10PS 59.00	M500-12PS 78.00
	MD	5/PKG	M500-8MD 41.00	M500-10MD 54.00	M500-12MD 69.00
PAN W	PSA	10/PKG	M560-8PS \$54.00	M560-10PS \$70.25	M560-12PS \$96.50
RUBBER BACK	MD	5/PKG	M560-8MD 51.50	M560-10MD 67.00	M560-12MD 93.00
METAL BACK	MP	5/PKG	M560-8MP 75.00	M560-10MP 102.00	M560-12MP 118.00
RED FELT	PSA	10/PKG	M570-8PS \$51.50	M570-10PS \$72.00	M570-12PS \$98.00
VEL LAP	PSA	10/PKG	M536-8PS \$41.25	M536-10PS \$55.00	M536-12PS \$72.00

DIAMOND LAPPING FILM



8"					10"			
μm	Plain	5/PKG	PSA		Plain	5/PKG	PSA	
0.10	M507-10PL	\$90.00	M507-10PS	\$100.00	M509-10PL	\$154.00	M509-10PS	\$176.00
0.25	M507-25PL	90.00	M507-25PS	100.00	M509-25PL	154.00	M509-25PS	176.00
0.5	M507-05PL	90.00	M507-05PS	100.00	M509-05PL	154.00	M509-05PS	176.00
1	M507-1PL	90.00	M507-1PS	100.00	M509-1PL	154.00	M509-1PS	176.00
3	M507-3PL	90.00	M507-3PS	100.00	M509-3PL	154.00	M509-3PS	176.00
6	M507-6PL	90.00	M507-6PS	100.00	M509-6PL	154.00	M509-6PS	176.00
9	M507-9PL	90.00	M507-9PS	100.00	M509-9PL	154.00	M509-9PS	176.00
15	M507-15PL	90.00	M507-15PS	100.00	M509-15PL	154.00	M509-15PS	176.00
30	M507-30PL	105.00	M507-30PS	110.00	M509-30PL	187.00	M509-30PS	193.00

12"				
μm	Plain	3/PKG	PSA	
0.10	M508-10PL	\$165.00	M508-10PS	\$176.00
0.25	M508-25PL	165.00	M508-25PS	176.00
0.5	M508-05PL	165.00	M508-05PS	176.00
1	M508-1PL	165.00	M508-1PS	176.00
3	M508-3PL	165.00	M508-3PS	176.00
6	M508-6PL	165.00	M508-6PS	176.00
9	M508-9PL	165.00	M508-9PS	176.00
15	M508-15PL	165.00	M508-15PS	176.00
30	M508-30PL	181.00	M508-30PS	214.00

DIAMOND LAPPING FILM DISCS are micron graded diamond particles resin bonded to a uniform 3-mil polyester film backing. This offers a cleaner, more consistent alternative to diamond compounds or slurries. Used to finish and polish hard to grind materials such as glass, ceramics, hardened metals, composites and micro-electronic materials for SEM and TEM analysis. Used wet or dry.



PRESSURIZED DUSTERS

Type	Description	Qty	Catalog #
	Dust-Off Chrome Valve	EACH	FGVC \$28.50
	Dust-Off Refill, 10 oz.	EACH	FGSR 11.00
	Dust-Off Refill, 10 oz.	12/PKG	FGSR12 129.00
	Dust-Off Plus 360 Degree Vector Valve	EACH	DPVC \$31.50
	Dust-Off Plus Refill, 12 oz.	EACH	DPSR 11.00
	Dust-Off Plus Refill, 12 oz.	12/PKG	DPSR12 129.00
	Dust-Off XL, 12oz.	EACH	DPSXL \$11.00
	Dust-Off XL, 12oz.	12/PKG	DPSXL12 129.00
ALL NEW 100% SAFE FOR THE OZONE DUST-OFF NO CFCs! NO HCFCs! NO PROPANE! NO BUTANE!			

METLAB PRESSURIZED DUSTERS for very effective dust and lint removal from computers, monitors, laser printers, fax machines, copiers, keyboards, AV equipment, CDs, desktops, delicate equipment and much more. It is, of course, 100% ozone-safe. Both versions of the Dust-Off Plus feature our innovative 360 degree Vector Valve which allows the user to blast dust and lint out of even the most impossible- to-reach places. Dust-Off Chrome Valve System is the original pressurized duster product. Replacement canisters are compatible with most other chrome valve systems.


ULTRASONIC CLEANERS



Branson precision cleaning power is faster, more consistent, and safer than any other method. Hand scrubbing, soaking, or steam don't even come close. It's now powerful enough to remove heavy oils, buffing compounds, or proteins, consistent enough to manage difficult laboratory cleaning ever time and safe enough for those delicate electronic components or fine jewelry. Ultrasonic sound waves moving through a cleaning solution create an effect called cavitation, the rapid formation and collapse of microscopic bubbles. This violent collapse, along with the cleaning chemistry, scrubs every wetted surface. The deep cleaning action of ultrasonics removes the most stubborn contaminants, even from blind holes and internal surfaces. Heat enhances this process.

OTHER


BULBS

	Type & Voltage	Used On	Catalog #	
	Quartz 24V/150W	Unimet, Versamet	M806	\$13.00
	6V/ 30W	Olympus, Nikon	M820	19.00
	8V/ 20W (MR11G4 base)		M821	37.00
	6V/ 10W	Meiji PBH Stand	M822	19.00
	6V/ 15W	Motic	M823	13.00
	6V/ 20W	HMV2000, Olympus	M824	11.00
	12V/ 50W	Olympus PME3, PMG3	M828	26.00
	12V/ 100W	Olympus PME100	M829	27.00
	24V/ 250W		M830	19.00
	15V/150W		M807	21.00



21V/ 150W EKE	Fiber Optic Illuminator	M850	\$27.00
24V/ 250W ELC	Fiber Optic Illuminator	M851	27.00
8V/ 20W	Fiber Optic Illuminator	M852	27.00
120V/250W ETJ	Fiber Optic Illuminator	M853	37.00

 	EL-1B (13.5V/40W)	Unitron series N	M800	\$13.00
	EL-2 (8V/12W)	Unitron MEC	M801	13.00
	EL-11(6V/15W) old style	Unitron BMEC (old)	M802	14.00
	EL-12B(6V/15W) new style	Unitron BMEC (new)	M803	11.00
	EL-2B(8V/12W) frosted	Unitron TM scope	M804	11.00
	EL-38(8V/15W)	Neomet	M805	11.00
	8V/ 0.5A	Type M (screw base)	M825	19.00
	6.3V/ 0.15A	Type M (on/off load)	M826	13.00
	12V/ 10W	Frosted M-400	M827	8.00
	6V/18W		M831	16.00
	12V / 18W	Matsuzawa MMT-X7	M810	47.00

	FL-100 standard	M840	\$63.00
	FL-150 white	M841	63.00
	FL-200 ultra violet	M842	63.00
	Unitron BMECFL-300 yellow	M843	63.00

This is only a very small listing of various bulbs we can supply for Unitron, Olympus, B & L, Leitz, Meiji, Nikon and many others. Please contact us with your specific bulb requirements and we will be pleased to provide you with pricing information.

OTHER BULB REQUIREMENTS AVAILABLE UPON REQUEST

SAMPLE LEVELING PRESS

SLP-1

\$320.00

METLAB SAMPLE LEVELING PRESS is used to level metallurgical samples for examination with upright microscopes and stereoscopes to ensure sample flatness.



OTHER

METALLURGICAL MICROSCOPES

MET-0006*



MET-A0006 - Binocular Head

MET-T0006 - Trinocular Head

Eyepieces WF10×/18
 Objectives 4x, 10x, 40x (20x, 50x, 80x and 100x optional)
 Quadruple Nosepiece
 Double layer mechanical stage 150×140mm/75×50mm
 Coaxial Fine & Coarse Adjustment
 Kohler Illumination, Epi-illuminator with iris aperture diaphragm and iris field diaphragm,
 6V/20W Halogen Lamp, Brightness Adjustable
 Blue, Green, Yellow & Ground Glass filters

MET-A006



MET-A006

Same as above except this unit comes with an 8 inches LCD screen to generate genuine photos and videos. Eyepieces and LCD Screen can both be used for convenient and comfortable viewing by individuals and share with groups alike. It also features the latest 5 Mega Pixels digital imaging microscopy techniques for quick and easy snapshots or videos.

PORTABLE MICROSCOPES

MET-LD003



MET-LD003 - 20X
 MET-LC003 - 40X
 MET-LB003 - 50X
 MET-LA003 - 100X

Eyepiece 10X with reticle and diopter adjustment
 Various of reticle for eyepiece to meet different requirements
 Mechanical Tube Length 160mm
 Eyepiece 10X
 Diameter of Viewing field in Eyepiece ϕ 18mm
 Eyepiece Reticle 0.1mm
 Focus Range 30mm

for more microscopes please visit www.metlabcorp.com

INVERTED METALLURGICAL MICROSCOPES

IM7100



IM7100

The IM7100 delivers an excellent performance-to-cost ratio because it has the features and versatility that one would expect to find in more expensive instruments. The IM7000 binocular Siedentopf-Type model is inclined at 30 degrees has an integrated front mounted camera port with adapters available for 35mm, CCD, CMOS and other cameras. Configured models come with 10x Super Widefield High Point Eyepieces F.N.22, a smooth operating ball bearing angle mounted quadruple nosepiece with 5x, 10x, 20x and 50x E Plan Achromat Infinity corrected objectives with an infinity tube lens F= 200mm. A 100x objective is optional and available as are other eyepieces and accessories. The standard fixed plain stage measures 180mm x 245mm and is ergonomically positioned right-handed with coaxial drop down controls. A powerful Koehler method vertical illuminator provides enhanced image quality.

MET-B0006



MET-B0006

Infinity plan achromat objectives provide bright, high resolution images with long working distances and high NA values. Siedentopf trinocular viewing head, inclined at 30°, interpupillary distance adjustment 48-75mm. Light distribution is 100% to the binocular or for photomicrography 20% to binocular and 80% to the photo tube Koehler vertical illuminator (built-in) with 6v30w halogen lamp, aperture diaphragm, field diaphragm and filter slots Quintuple nosepiece with Infinity Plan Achromat 5x, 10x, 20x & 40x objectives Plain stage 160mm X 250mm with Ø10, 15 and 20mm insert plates Attachable mechanical stage 120 (X) x 78 (Y) mm travel with Ø10, 15 and 20mm stage plates Polarizer and analyzer Filters: Daylight blue, green, yellow and ground glass Coaxial coarse and fine vertical focusing adjustment of objective assembly Coarse stroke 37.7 mm per rotation, fine stroke 0.2mm per rotation Photo tube, power cord, dust cover and manual .

MET-B006



MET-B006

Same as above unit MET-B0006 with added LCD screen features the latest 5 Mega Pixels digital imaging microscopy techniques for quick and easy snapshots or videos.

for more microscopes please visit www.metlabcorp.com

STEREOSCOPES

MET-0203



Offered in both binocular and trinocular heads.
Stereoscope on post stand.
Wide field eyepiece 10×
Zoom ratio 1:4.5
Zoom objective 1× ~ 4.5×
LED reflection illumination
LED transmission illumination built into stand.

MET-0403



Offered in both binocular and trinocular heads.
Stereoscope on post stand.
Extra Wide field eyepiece 10×
Zoom ratio 6.3:1
Zoom objective 0.8×-5×
LED reflection illumination
LED transmission illumination built into stand.

MET-0603



Offered in both binocular and trinocular heads.
Stereoscope on post stand.
Extra Wide field eyepiece 10×
Zoom ratio 1:8
Zoom objective 0.8×-6.4×
Plan Achromatic Objective 1×
LED reflection illumination
LED transmission illumination built into stand.

EMZ-5TRD



Offered in both binocular and trinocular heads.
Stereoscope on post stand.
Extra Wide field eyepiece 10×
Zoom ratio 6.5:1
Zoom objective 0.7×- 4.5×
PK wide stand with focus block
(illumination sold separate)

for more microscopes please visit www.metlabcorp.com

STEREOSCOPES STANDS

MET-KBL-S



With FX focus block with illuminator port
Dimension of Base 15" x 13"

Column Height 11" to 13.5"
Focus range 4"

MET-ZF10-S



MET-ZF11-S



Column Height 11" to 13.5"
Focus range 4"

The Dual Arm Boom Stand with FS holder design has a linear ball bearing for support of its horizontal arms.
Dimension of Base 10" x 10"
Column Height 19"

MET-ZF3-S



MET-FX1-S



Articulating flex arm with FS holder.

An extended working distance ergonomic pole stand with 250mm pole and "F" focusing holder mounted on a ergo base.

PK-STAND



P-STAND



Basic pole stand with "F" focusing holder mounted on a plain base.

Dimension of Base 15.5" x 10.5"
Column Height 17"

MET-ZF2-S



for more microscopes please visit www.metlabcorp.com

ILLUMINATORS

FL-280



Cold Light Illumination is designed as an auxiliary lighting device for microscope in order to get better observation results.

Lamp: T-H Lamp with Reflector 20V/ 150W
Brightness Adjustable
Fan Cooling

Voltage: 115 VAC, 50/60 Hz
220/230 VAC, 50/60 Hz

Dimensions: 5" x 6" x 10"
Fiber Input Dia: 1.00"

LIGHT GUIDES

EEG2823-1 & EEG283-2 GOOSENECK



Gooseneck illuminator available in either single or dual models, features flexible light guide which allows the users to position the light source at desired angles of incident illumination.

Ring light system, provides high intensity illuminations at high magnifications and long working distance, w/o adjustment when refocusing or when zoom features are used.

A3739P - ANNULAR RING LIGHT



RING LIGHTS

MET-72

LED Ring Illuminator with Transformer and with 72 LEDs



LCD STEREOSCOPES

MET-023



5mp Digital Camera
 Picture resolution 2560×1920, Video resolution 640×480
 Sensor Size 1/2.5 Inches
 LCD Screen 8 Inches TFT Screen, Resolution is 800 X 600
 Video Output AV Output (NTSC/PAL)
 Data Output USB2.0, Storage SD Card Slot
 Objective Zoom Range 0.7×-4.5, Zooming Ratio 1:6.5
 Magnification 19×-120×, Visual Field 6.8×8.9-1.0×1.3mm
 Objective 0.5X/0.75X/1X/1.5X/2X , Working Distance 88mm
 Base Light Built-in LED Base Illumination: 45pcs LED Bulbs 5W

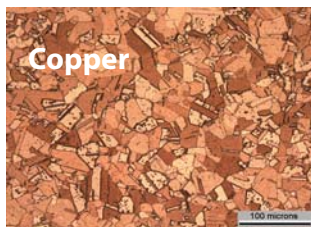
MET-023M



5mp Digital Camera
 Picture resolution 2560×1920, Video resolution 640×480
 Sensor Size 1/2.5 Inches
 LCD Screen 8 Inches TFT Screen, Resolution is 800 X 600
 Video Output AV Output (NTSC/PAL)
 Data Output USB2.0, Storage SD Card Slot
 Objective Zoom Range 0.7×-4.5, Zooming Ratio 1:6.5
 Magnification 19×-120×, Visual Field 6.8×8.9-1.0×1.3mm
 Objective 0.5X/0.75X/1X/1.5X/2X , Working Distance 88mm
 Base Light Built-in LED Base Illumination: 45pcs LED Bulbs 5W
 X-Y Axis Moving Survey Range 30X30mm
 Minimum Measuring Reading 0.001mm
 Measurement Accuracy <7μm
 Longer stand and base: Using 0.5X objective lens



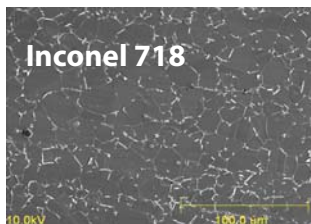
Bainite



Copper



Die Cast Aluminum



Inconel 718



Low Carbon Steel



Tungsten Carbide

for more microscopes please visit www.metlabcorp.com

BIOLOGICAL MICROSCOPES

MET-0402*



MET-A0402 - Binocular Head

MET-T0402 - Trinocular Head

Compensation Free binocular head, 30° inclined, Interpupillary 48-75mm
 Trinocular head (Optional)
 Wide Field Eyepiece WF 10×/18
 Infinite Semi-plan Achromatic Objectives 4X,10X,40X,100X
 Quadruple Nosepiece
 Double Layers Mechanical Stage 140mm×140mm/ 75mm×50mm
 Sliding-in condenser NA1.25
 Coaxial Coarse & Fine Adjustment, Moving Range 20mm
 6V/ 20W Halogen Lamp, Brightness Adjustable

MET-0802



MET-0802 - Trinocular Head

Compensation Free Trinocular Head, Inclined at 30°, Interpupillary 48-75mm
 Extra Wide Field Eyepiece EW10×/ 22
 Backward Quintuple Nosepiece
 Infinite Plane Achromatic Objective 4x,10x,40x,100x
 Swing-out Condenser NA 0.9/ 0.25
 Double Layers Mechanical Stage 185×142mm, moving range 75×55mm
 External Illumination, Aspherical Collector, Halogen Lamp 6V/30W
 Blue and green filter

MET-0802MH



MET-0802MH

Infinite Optical System
 Compensation Free Trinocular Head, Inclined at 30°, 360° Rotatable,
 Interpupillary Distance 48-75mm
 Compensation Free Binocular Head, Inclined at 30°, 360° Rotatable,
 Interpupillary Distance 48-75mm
 Extra Wide Field Eyepiece EW10×/ 20
 Inverse Quintuple Nosepiece
 Infinite Plan Achromatic Objective 4×, 10×, 40×, 100×
 Swing Condenser N.A.0.9/ 0.25
 Coaxial Coarse & Fine Focus Adjustment, Fine Division 0.002mm
 Double Layers Mechanical Stage 185×142mm, Moving Range 75×55mm
 External Illumination, Halogen Lamp 12V/ 50W
 Green LED Pointer , Brightness Adjustable


for more microscopes please visit www.metlabcorp.com

DIGITAL CAMERAS

PART #	Resolution	Description
C002-2CUB	Color 2.0 Megapixels 1600x1200	12 fps at 1600x1200
C023-2CUB	Color 3.2 Megapixels 2048x1536	9 fps at 2048x1536
C005-2CUB	Color 5.0 Megapixels 2592x1944	6 fps at 2592x1944

Package Content Includes:

- High Quality USB 2.0 Cable
- Scope Image Software
- Compatible with Windows 2000/XP/Vista/7



MET-HD500



A revolutionary product in microscope area which combines of tablet PC and a digital camera, it can preview, take snaps, videos and save them, make measurements, wireless transmission, 3G internet surfing. Abundant images, videos and dates can be stored in the built-in 32G Hard Drive Disk. It has a C-mount connector which can be connected to any microscopes with microscope adaptors. It is an Ideal instrument of industrial optical inspection, teaching and scientific research.

Features:

1. Real 5.0 Megapixel color CMOS sensor designed for professional microscopes.
2. 10.1" high resolution LCD touch screen.
3. Professional measuring software.
4. Windows 7 operation system, powerful functions.
5. Built-in 32G disk drive, large storage capacity.
6. Can be attached to any microscopes with optional microscope adaptor (0.5x microscope adapter($\Phi 23\text{mm}$), $\Phi 30\text{mm}$ and $\Phi 30.5\text{mm}$ connecting ring.)
7. Aluminum C-mount connection for microscopes, solid and reliable.



FOR MORE INFO GO TO WWW.METLABCORP.COM/SCOPES

MICRO HARDNESS TESTERS

MANUAL



- LCD displays
- Test load 10 25 50 100 200 300 500 1000 gf
- 10X & 40X Objective
- Auto- Turrent

SEMI AUTOMATIC



- SAME AS MANUAL TESTER
- Digital stage micrometers
- 1.3 mono digital camera
- CMT Measurement software
- Adapter "C" mount TV
- High Performance computer

FULLY AUTOMATIC



- SAME AS SEMI TESTER
- Motorized stage 75X50mm travel
- Auto focus kit
- Joystick stage controller kit with X-Y-Z cables
- Self level vise with insert ring

MACRO HARDNESS TESTERS

MANUAL



- Loads***
- LCD displays
- 10X & 20X Objective
- Auto- Turrent
- Digital 10X Eyepiece
- Auto Load, dwell & unload

***Loads (Selected Models)

MODEL # MAHT-10 Kgf = 0.3, 0.5, 1, 2, 2.5, 3, 5, 10

MODEL # MAHT-30 Kgf = 0.5, 1, 2, 3, 5, 10, 20, 30

MODEL # MAHT-50 Kgf = 1, 2, 3, 5, 10, 20, 30, 50

SEMI AUTOMATIC



- SAME AS MANUAL TESTER
- Digital stage micrometers
- 1.3 mono digital camera
- CMT Measurement software
- Adapter "C" mount TV
- 25x25mm stage
- High Performance computer

RETROFITTING TESTER



We can retrofit your current hardness tester to use CMT measuring software, digital camera with computer

DIGITAL CAMERA

CL-13-213
Mono 1.3mp Digital
1280x1024



for more information please visit www.hardnesstesting.ca

www.metlabcorp.com
1-800-828-6866

ROCKWELL HARDNESS TESTERS

R150 - Digital Rockwell Hardness Tester



- Test Force 60, 100 & 150Kgf
- Digital LCD display
- Automatic Loading Control
- Throat Depth 165mm
- Converts to HRA,HRB,HRC,HRE,HV,HK HBW,HR15N,HR30N, HR45N, HR15T,HR30T and HR45T
- Mini printer for data output
- Supports RS232 interface

RS150 - Digital Twin Rockwell Hardness Tester



- Test Force 3, 10, 15, 30 & 45 Kgf
- Digital LCD display
- Automatic Loading Control
- Throat Depth 160mm
- Converts to HRA,HRB,HRC,HRE,HV,HK HBW,HR15N,HR30N, HR45N, HR15T,HR30T and HR45T
- Mini printer for data output
- Supports RS232 interface

28-40-20-01 Brinell Microscope

\$575.00



20x magnification consisting of 10x eyepieces and 2x objective lens provides sharp images of indent. Focusable eyepieces assures sharp focus on reticle. Cross line reticle measures up to 7mm in both X & Y in 0.1mm increments. Large knurled ring provides smooth, accurate focusing. Unique vertical illumination eliminates shadows. Focusable flashlight provides annular illumination uniformly highlighting the entire edge of any size indent. Two interchangeable base adapters are standard. 1.5" diameter for stability & 9/16" diameter for fillet weld inspection. Durable hardwood case with foam inserts to protect all components.

BRINELL HARDNESS TESTERS

HTB-3000C Digital Brinell Hardness Tester



- Test Force 62.5,100,125, 187.5,250,500,750,1000, 1500, 3000Kgf
- Testing range 8-650 HBW
- Digital LCD display
- 20X Mechanical Microscope
- Throat Depth 124mm
- Converts to HR, HV, HK
- Mini printer for data output
- Supports RS232 interface

HTB-3000D Digital Brinell Hardness Tester



- Test Force 62.5,100,125, 187.5,250,500,750,1000, 1500, 3000Kgf
- Testing range 8-650 HBW
- Digital LCD display
- 20X Mechanical Microscope
- Throat Depth 135mm
- Mini printer for data output
- Supports RS232 interface

for more information please visit www.hardnesstesting.ca

PORTABLE HARDNESS TESTERS

PRH-150 ROCKWELL TESTER



Testing Range:
20-88HRA, 20-100HRB, 20-70HRC
Scales:
HRA, HRB, HRC, HV, HB

PHB-3000 - BRINELL DUROMETER



Test Force: 3000kg
(500kg, 750kg, 1000kg, and
1500kg available)
Testing Range: 100-650HBW
Throat Depth: 100mm

PBD Series - BRINELL DUROMETER



Test Force: 1580kg
Tolerance of Test Force: <0.5%
Testing Range: 100-650HB
Casting, forging and steel raw materials

PWD SERIES - WEBSTER DUROMETER



Measuring Scope: 0~20HW
Indication Error: 0.5HW(5~17HW)
Repeatability Error: 0.5HW(5~17HW)
Different Models for Hardness Ranges

PLT-1000A - LEEB HARDNESS TESTER



Testing Range: 200-900 HL (Leeb Value)
Scales: HL, HV, HB, HRB, HRC, HSD
Testing Direction: Any Direction
UTS: Kg/cm², Tons/in², Lbs/in² (PLT-2000A)

PSD-100 - DIGITAL SHORE DUROMETER



Test Scale: Shore Hardness
Measurement Deviation: <1%H
Parameters: Hardness result, average
value, maxes. value
Different Models for Measurement Ranges

for more information please visit www.hardnesstesting.ca

ROCKWELL DIAMOND INDENTERS

NIST Traceable

	Part #	Order Description	Price
STANDARD DIAMOND INDENTERS			
ASTM E18-08B Rockwell Diamond Indenter	DI-C	Standard C Scale	\$371.00
	DI-N	Standard N Scale	371.00
	DI-A	Standard A Scale	371.00
	DI-CN	Combination C & N Scale	371.00
NEWAGE® VERSITRON & INDENTRON DIAMOND INDENTERS			
ASTM E18-08B Rockwell Diamond Indenter	DI-C-V	Standard C Scale - Versitron	\$371.00
	DI-N-V	Standard N Scale - Versitron	371.00
	DI-C-VT	C Scale - Taper Versitron	371.00
	DI-N-VT	N Scale - Taper Versitron	371.00
	DI-C-I	Standard C Scale - Indentron	371.00
	DI-N-I	Standard N Scale - Indentron	371.00
	DI-A-I	Standard A(Carbide) - Indentron	371.00
	DI-CN-I	C & N Combination - Indentron	371.00
PORTABLE HARDNESS TESTERS – DIAMOND INDENTERS			
ASTM E18-08B Rockwell Diamond Indenter	PDI-C-W	C Scale - Portable Wilson	\$463.00
	PDI-C-CAR	C Scale - Portable Clark, ATS	521.00
	PDI-C-A	C Scale - Portable Ames	445.00

Other indenters are available upon request

Calibration Certificates are supplied with all diamond indentors

BALL PENETRATORS & CARBIDE BALLS

	Part #	Order Description	Price
ROCKWELL CARBIDE BALL PENETRATORS (CLASS B)			
ASTM E18 - Compliant to the latest ASTM E18 Revision which includes required Long Form Certification.	CRBP-16	1/16" Penetrator with Ball	\$225.00
	CRBP-8	1/8" Penetrator with Ball	225.00
	CRBP-4	1/4" Penetrator with Ball	350.00
	CRBP-2	1/2" Penetrator with Ball	445.00
ROCKWELL CARBIDE BALLS (CLASS B)			
ASTM E18 - Compliant to the latest ASTM E18 Revision which includes required Long Form Certification.	CRB-16	1/16" Carbide Ball	\$30.00
	CRB-8	1/8" Carbide Ball	52.00
	CRB-4	1/4" Carbide Ball	70.00
	CRB-2	1/2" Carbide Ball	80.00
BRINELL CARBIDE BALLS (CLASS B)			
ASTM E18 - Compliant	CRB-10	10mm Carbide Ball	\$45.00
	CRB-25	2.5mm Carbide Ball	45.00

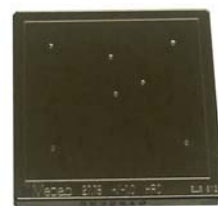
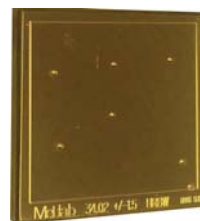


ROCKWELL TEST BLOCKS

NIST Traceable

please allow +/- 3 on range

Scale	Range	Part #	Order Description	Price
STANDARD TEST BLOCKS				
"A" Scale	20-80	HRA	A Scale (specify range)	\$70.00
"B" Scale	1-99	HRB	B Scale (specify range)	70.00
"C" Scale	10-68	HRC	C Scale (specify range)	70.00
"D" Scale	40-73	HRD	D Scale (specify range)	70.00
"E" Scale	14-96	HRE	E Scale (specify range)	70.00
"F" Scale	18-85	HRF	F Scale (specify range)	70.00
"G" Scale	10-66	HRG	G Scale (specify range)	70.00
SUPERFICIAL TEST BLOCKS				
"15N" Scale	69-93	15N	15N Scale (specify range)	\$70.00
"15T" Scale	69-93	15T	15T Scale (specify range)	70.00
"30N" Scale	41-84	30N	30N Scale (specify range)	70.00
"30T" Scale	20-82	30T	30T Scale (specify range)	70.00
"45N" Scale	19-75	45N	45N Scale (specify range)	70.00
"45T" Scale	9-72	45T	45T Scale (specify range)	70.00



Special test blocks are available upon request

BRINELL TEST BLOCKS

NIST Traceable

please allow +/- 5 on range

Load	Range	Part #	Order Description	Price
3000 kg	80-500	HB3000	3000 kg Load (specify range)	\$198.00
2500 kg	80-500	HB2500	2500 kg Load (specify range)	198.00
2000 kg	80-500	HB2000	2000 kg Load (specify range)	198.00
1500 kg	80-500	HB1500	1500 kg Load (specify range)	198.00
1000 kg	50-195	HB1000	1000 kg Load (specify range)	198.00
750 kg	50-195	HB750	750 kg Load (specify range)	198.00
500 kg	60-140	HB500	500 kg Load (specify range)	198.00
250 kg	60-140	HB250	250 kg Load (specify range)	198.00
187.5 kg	60-500	HB187	187.5 kg Load (specify range)	198.00



MICROHARDNESS TEST BLOCKS

NIST Traceable

Type	Range	Part #	Order Description	Price
Knoop	70-800	KTB	10-1000g (specify load & range)	\$600.00
Vickers	55-750	VTB	10-1000g (specify load & range)	600.00
Vickers HL	80-1700	VTB-HL	2-50kg (specify load & range)	600.00
Dual V & K		DVK	10-1000g (specify load & range)	650.00



TEST BLOCKS

IMAGE ANALYSIS SOFTWARE

Scope Image



Scope Image is image-processing software professionally designed for digital microscope. It allows you to view, capture, edit, record, zoom, measure, and process microscope images. Included with most of our digital cameras.

Captiva



Clemex Captiva is the tool for you. Clemex Captiva software allows users to capture multiple images automatically, to make non-destructive direct measures and annotations, and save or share images and results with colleagues. Intelligent software dedicated to scientific imaging Clemex Captiva fills a need in quantitative microscopy with its intelligent capture and measurement features. Clemex Captiva is ready to use out of the box, and is an entry-level, upgradeable software, that is the gateway to a wide range of Clemex image analysis products.

Vision Lite



Clemex Vision Lite is a flexible yet affordable software solution that enables you to acquire, measure and even analyze your images using optional application packages. From basic image acquisition, to adding non-destructive annotations, to performing manual and automated measures, Clemex Vision Lite is the right choice if you do not require advanced toolsets for developing complex image analysis routines.

Vision PE



Clemex Vision PE, is available as a stand-alone solution or part of a turnkey image analysis system including all necessary hardware components. From measuring grain size to counting particles, Clemex Vision is an intuitive software program that empowers you to easily develop custom image analysis macros without writing a single line of code!

CMT.HD



When a hardness testing solution that produces reliable, accurate and repeatable test results is needed, choose from the Clemex CMT.HD line of macro and micro (single or dual) hardness testing solutions. Field proven systems, they offer unparalleled capabilities and are fully ASTM E-384 and DIN/ISO 6507 compliant.

DIGITAL CAMERAS

PART #	Resolution	Description
CL-13-213	Mono 1.3 Megapixels 1280x1024	30 FPS at 640x480 res
CL-13-334	Color 1.3 Megapixels 1280x1024	30 FPS at 640x480 res
CL-13-219	Color 3.0 Megapixels 2048x1536	20 FPS at 1024x768 res
CL-13-224	Color 5.0 Megapixels 2592x1944	25 FPS at 800x600 res



for more information please visit www.imageanalysis.ca

PRECISION CUT-OFF MACHINES

METCUT - 5



16 10

METCUT-5 (LOW SPEED PRECISION CUTTER)

Used for cutting small cylindrical, rectangular metal body or electronic circuit board materials. This machine uses weight block load constant cutting force automatic cutting, after cutting it will stop automatically. Using micrometer device, sample cutting thickness can be adjusted, achieving the precision cutting, so it can be used as transmission electronic microscopy supporting sample preparation equipment. With variable speed from 0-800rpm. 110V, 1 phase, 50/60 Hz.

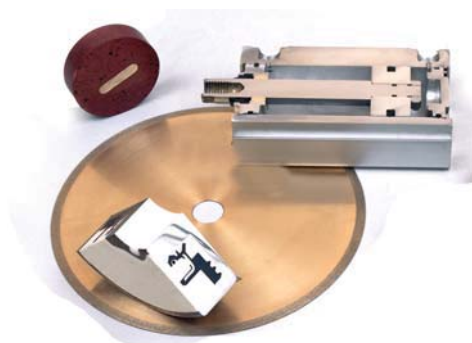
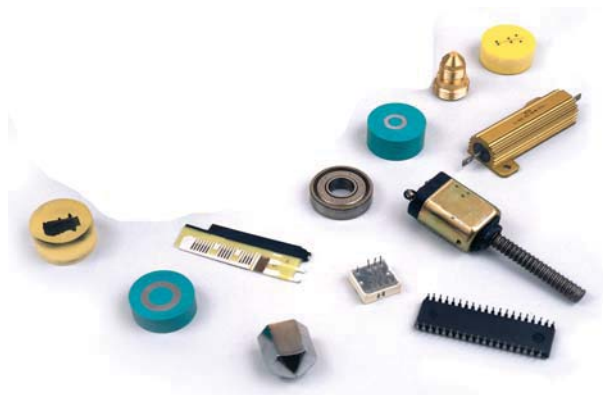
METCUT-8



50 08

METCUT-8 (HIGH SPEED PRECISION CUTTER)

Automatic "Y" axis, Joystick controlled "X" and "Z" axis, Cutting capacity up to 50mm
Wheel size up to 8", Arbor size 1-1/4" (32mm), Safety hood lock, Large T-Slot table
250mm x 200mm, Variable speed 100-5000 rpm, Recirculating unit built in, -1 Hp motor
Large touch screen, Pulse cutting, 110V, 1 phase, 60Hz.



ABRASIVE CUT-OFF MACHINES

METCUT -10



50 02

METCUT - 10 (Manual)

Abrasive cutting machines offer an economical solution to your metallographic sample preparation needs. With features including Fluorescent led light, Left and Right cam vises, Reinforced FRP hood, Overload protection, Amp meter, Electric safety lock on hood, Electric motor brake, Side opening for large specimens, Large shatter proof viewing window and start button with safety key. Use 13 gallon cooling unit, and up to 10" diameter wheel. 220V, 3 Phase, 50/60 Hz.

METCUT -12



50 03

METCUT-12

(Manual Abrasive Cut-Off Machine with Manual Y-Axis)

Abrasive cutting machines offer an economical solution to your metallographic sample preparation needs. With features including 5HP Motor, Cutting Capacity up to 150mm, Spindle Speed 2800 rpm, Cut-Off Wheels up to 12" with 1.25" Wheel Arbor, Reinforced "FRP" Hood, LED Light, Over Load Protection, Extra Large Twin T-Slotted Clamping Table 12" x 10.5", Electronic Hood Safety Lock, Cabinet Included, Motor Brake, Side Opening for Large Samples, Y Movement up to 450mm Travel, Epoxy Coated Chamber for Easy Clean Up, 26 Gal. Re-Circulating Tank 220V 3 Phase 60hz

METCUT -12A



50 04

METCUT-12A

(Automatic Y-Axis with pulse cutting Cut-Off Machine with Manual Z-Axis)

Abrasive cutting machines offer an economical solution to your metallographic sample preparation needs. With features including 5HP Motor, Cutting Capacity up to 150mm, Spindle Speed 2800 rpm, Cut-Off Wheels up to 12" with 1.25" Wheel Arbor, Reinforced "FRP" Hood, LED Light, Over Load Protection, Extra Large Twin T-Slotted Clamping Table 12" x 10.5", Electronic Hood Safety Lock, Cabinet Included, Motor Brake, Side Opening for Large Samples, Automatic "Y" Movement with pulse cutting, up to 450mm Travel, Epoxy Coated Chamber for Easy Clean Up, 26 Gal. Re-Circulating Tank 220V 3 Phase 60hz

METCUT -14



50 06

METCUT-14

(Manual Abrasive Cut-off Machine with Manual Y & Z Axis)

7.5HP Motor, 14" Abrasive wheels, Cutting Capacity up to 5", -Spindle Speed 2880 rpm Cut-Off Wheels up to 14" with 1.25" Arbor, Extra Large Viewing Window, LED light Extra Large Twin T-Slotted Clamping Table 17.5" x 13.75", Electronic Hood Safety Lock Cabinet Included, Motor Brake, 120 Liter re-circulation tank Included 220V, 3-Phase, 60Hz.

METCUT -20A



50 05

METCUT-20A (AUTOMATIC ABRASIVE CUT-OFF SAW)

Sturdy Floor Model cutting for sectioning for Metallographic Samples, Heavy Duty Rust Proof Steel Construction, -Two Way Sliding Door System – Large envelop to place bigger components, Cutting Capacity up to 180 mm dia Corrosion Resistant Cutting Chamber, 15 HP (11 Kw), 440v, 3 Phase Ac Motor Variable Spindle speed 1000 -3000 rpm, Ergonomic Manual Cutting Hand Wheel Movement (Z Movement), cutting action automatic - 'Y' Movement Large Graphical Display with Touch Screen PLC System, LED illumination, Screw Vice Set T Slot Bed: 500mm x 500mm with 12mm T-Slot, Door interlock System Manual "X" Movement, Fume digester, 440V, 3 Phase, 50Hz.

HOT MOUNTING

METPRESS A



25 01

METPRESS A METPRESS, AUTOMATIC MOUNTING PRESS

- Electro Hydraulic Pressure (No Air Line Required)
- LCD Display with User Friendly Touch Screen Control
- Pressure Up To 350 BAR
- Temperature Up To 200° C
- Robust Slide Closer
- Corrosion Resistant Steel Construction
- Heating Power of 1000W
- 110V, 1 Phase 50/60Hz

METPRESS A2



25 09

METPRESS A 2 DOUBLE AUTOMATIC MOUNTING PRESS

- Electro Hydraulic Pressure (No Air Line Required)
- LCD Display with User Friendly Touch Screen Control
- Pressure Up To 350 BAR
- Temperature Up To 200° C
- Robust Slide Closer
- Corrosion Resistant Steel Construction
- Heating Power of 1300W
- 220V, 1 Phase 50/60Hz

VACUUM IMPREGNATION

METVAC



25 06

METVAC VACUUM IMPREGNATION SYSTEMS

Offers a high quality alternative to more expensive systems. Domed cap with external vacuum system. Holds up to 8 mounts. 110V, 1 phase.

GRINDING / POLISHING

METPOL 2V



37 02

METPOL 2V (8" 10" 12")

Dual wheel series of grinding/ polishing machines offer an economical solutions to your metallographic sample preparation needs. METPOL series of instruments are available in 8"(200mm) / 10" (250mm) / 12" (300mm) wheel sizes and come with both single or double wheel versions with variable rotating wheel speed of 50-600 RPM. Detachable water sprayer for easy cleaning. A feather touch digital control panel as well as a fully molded FRP body with easy disc change design. 110V, 1 phase, 50/60 Hz.

METPOL 300-1V



37 03

METPOL 300-1V (8" 10" 12")

Single wheel grinding/ polishing machines offers an economical solutions to your metallographic sample preparation needs. In 12"(300mm) wheel size and comes with single wheel version with variable rotating wheel speed of 50-600 RPM. Detachable water sprayer for easy cleaning. A feather touch digital control panel as well as a fully molded FRP body with easy disc change design. 110V, 1 phase, 50/60 Hz.

METPOL - A



37 03-A

METPOL-A (10" 12")

Single wheel Automatic grinder / polisher machine offering an economical solution to you metallographic sample preparation needs with variable speeds from 50-600rpm. Along with our large HMI user friendly touch screen and robust metal construction. The auto head allows storage up to 50 programs, and rotates clockwise and counter clockwise. METPOL-A can also be used in manual mode. Optional automatic doser as shown in pic.



PETROGRAPHY

METCUT-10 GEO



50 07

METCUT-10 GEO Precision thin sectioning machine for petrography

- Cutting and Grinding up to 30 microns or less
- Diamond Wheels from 10"
- Cup grinding wheels from 10"
- Complete with Vacuum pump and chuck
- Built in micrometer
- 2 HP Motor
- 110V 1 Phase 60Hz

SPECTROSCOPY

MET-SPECTRA



80 08

MET-SPECTRA

Single disc spectro grinder offering an economical solution to your spectrographic grinding needs used for Flat Coarse Grinding of Iron & Steel Spectrographic Samples, 14" Vacuum Grinding Disc, Variable Speed From 100-3000 RPM, 1 HP Motor, Built-In Vacuum Suction System & Hood Safety Lock, 220V, 3 Phase, 60Hz.

BELT GRINDERS

METS4S



METS4S

METS4S

Dry Belt Grinder Sander All-purpose- for wood, metal and plastics
1/2 HP, 1 phase.
Vertical or horizontal position.
3450 RPM
4" x 36" belt with full OSHA guard
50 lbs

METS4SWB



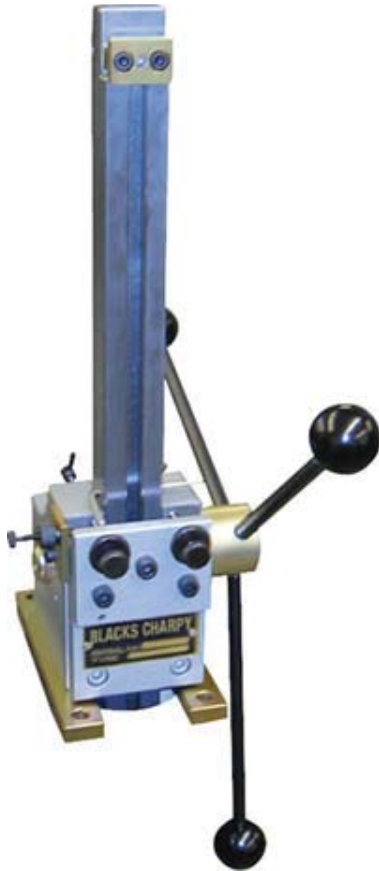
METS4SWB

METS4SWB

WET/DRY Metallurgical Benchtop Belt Sander
4" x 36" wet benchtop belt sander
4" wide x 6" long platen/work area
1/2 hp, 110 vac, TEFC motor
self contained coolant tank & pump
Quick belt change, Pre-set belt tension
Dimensions: L20" x W 20" x H 12"

HAND OPERATED CHARPY

CNB-35



The CNB-35 Hand Operated Charpy Notch Broaching Machine is designed for test houses and laboratories, which are producing small batches of test pieces in carbon steels, easily machined low alloy steels, non-ferrous and plastic materials.

The machine is of robust construction designed to be mounted on a customers bench.

This hand Charpy machine will cut Charpy and Izod 'V' and 'U' notches in pre-machined standard 10mm square, sub-size and 0.45" diameter specimens. Hand operation makes it ideal for small batch quantities.

The CNB-35 Hand Operated Charpy Notch Broaching Machine is designed for test houses and laboratories, which are producing small batches of test pieces in carbon steels, easily machined low alloy steels, non-ferrous and plastic materials.

The machine is of robust construction designed to be mounted on a customers bench.



The broach is mounted in a square section rack and secured at the top & bottom by clamps. Adjusting screws built into the machine body are set to obtain the correct depth of notch and its position along the specimen.



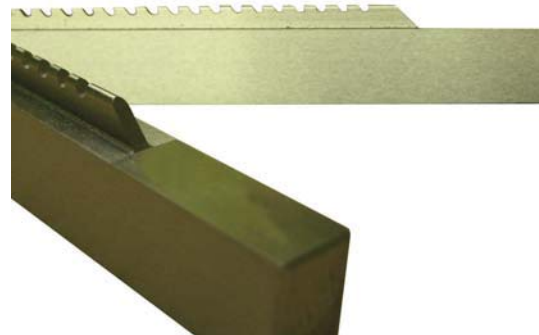
V Notch Sample



U Notch Sample



V Notch Broach



U Notch Broach

CHARPY / IZOD NOTCHING BROACHES

Catalog#	Notch Form	Depth	Radius	Cutting Rc	Price
NBT-V1	V	2 mm	.25 mm	42	\$656.25
NBT-V1-TC	V	2 mm	.25 mm	50 Titanium Nitride Coated	724.50
NBT-V1-HC	V	2 mm	.25 mm	53 Special Proprietary Coating	782.25
NBT-U1	U	2 mm	1 mm	42	1,000.00
NBT-U2	U	3 mm	1 mm	35	1,000.00
NBT-U3	U	5 mm	1 mm	25	1,100.00

RE-WORKING BROACHES

NBT-V1-SP	Re-sharpening of V Notch Broaches	\$105.00
NBT-TC	Tin Coating for Non Tin Coated Broach	65.00
NBT-SP-TC	Re-Sharpener & Re-Tin coat broach	200.00
NBT-SP-HC	Re-Sharpener & Re-Hard coat broach	220.00



NOTCH DEPTH CALIPER GAUGES

Catalog#	Description	Price
CNB26-012A3	2mm 'V' notch to ASTM A370-E23 (8mm +/- 0.025)	\$895.00
CNB26-003A3	2mm 'V' notch to BS131-1:1961 Ferrous (8mm +/- 0.10)	895.00
CNB26-017A3	2mm 'V' notch to EN 10 045-1:1990 (8mm +/- 0.06)	895.00
CNB26-026A3	2mm 'V' notch to BS EN ISO 148-1:2010 (8mm +/- 0.075)	895.00
CNB26-016A3	2mm 'U' notch to BS EN ISO 148-1:2010 (8mm +/- 0.11)	930.00
CNB26-015A3	3mm 'U' notch to BS EN ISO 148-1:2010 (7mm +/- 0.11)	930.00
CNB26-018A3	5mm 'U' notch to BS EN ISO 148-1:2010 (5mm +/- 0.09)	1,125.00



Notch Gauge



Use of Gauge



Specimen Gauge

SPECIMEN SIZE CALIPER GAUGES

Catalog#	Description	Price
CNM-199A3	10mm specimen to ASTM A370-E23 (10mm +/- 0.075)	\$750.00
CNM-200A3	7.5mm specimen to ASTM A370-E23 (7.5mm +/- 0.075)	750.00
CNM-201A3	6.7mm specimen to ASTM A370-E23 (6.7mm +/- 0.067)	750.00
CNM-202A3	5mm specimen to ASTM A370-E23 (5mm +/- 0.05)	750.00
CNM-210A3	3.3mm specimen to ASTM A370-E23 (3.3mm +/- 0.033)	750.00
CNM-211A3	2.5mm specimen to ASTM A370-E23 (2.5mm +/- 0.025)	750.00

MOTORISED CHARPY



Blacks motorized broaching machine is a self-contained floor mounted unit, specially designed for cutting Charpy and Izod 'V' and 'U' notches in pre-machined standard 10mm square, sub-size and 0.45" diameter specimens.

This machine is simple to operate and of robust construction, with large removable panels to provide access for routine maintenance. The design of the machine provides a comfortable working height.

The cutting operation is achieved by drawing a specially designed multi-toothed broach across the specimen. The broach is drawn into the machine by precision twin lead screws via a geared mechanism to ensure the broach cuts perpendicular to the specimen clamp, limit switches are fitted for end of stroke travel. The lead screws are matched with the travel nut to ensure minimum-operating clearances, while spring loaded safety guards ensure swarf and debris cannot enter into the lead screws and nuts.

Guards:

The machine guards totally enclose the drive motor and operating mechanism. A broach guard is fitted to comply with safety regulations; limit switches prevent motor operation when the guards are open.



The sample is secured in the machine by the clamp. A light coating of cutting oil (RTD recommended) is applied to the broach and the lower push-button/switch is operated which draws the broach through the specimen to produce an accurate notch profile. After the notch has been cut, the sample is removed, the broach raise push-button/switch operated, which raises the broach and the broach teeth

MOTORISED CHARPY

CNB-31	FIXED SPEED
CNB-33	VARIABLE SPEED



CNB-31 FIXED SPEED MOTORISED CHARPY NOTCH MACHINE

Notches can be cut in carbon steels, easily machined low alloy steels, non-ferrous and plastic materials.

Fixed Speed Drive:

Once the notch depth has been set and the specimen clamped in position, the machine operation is activated via lower and raise push- buttons. An additional stop button is fitted for emergency use.

The machine operation is controlled by the lower and raise push- buttons, which forward and reverse the machine motor, resulting in the broach cutting and return strokes being at a fixed speed. The motor has thermal overload protection to protect the drive mechanism.



CNB-33 VARIABLE SPEED MOTORISED CHARPY NOTCH MACHINE

The variable speed control allows adjustment of the broach cutting speed, so more difficult materials can be broached and to give extended broach life between sharpening.

Notches can be cut in carbon steels, more difficult to machine alloy steels, stainless steels, non-ferrous and plastic materials. The variable speed drive and our hard cut broaches allow a wider range of materials to be cut, including stainless steel or more difficult to machine alloy steels.

Variable Speed Drive:

Once the notch depth has been set and the specimen clamped in position, the machine operation is activated via a lower and raise switch. A graduated knob controls the speed the broach cuts and the broach return speed is factory set at a constant fast speed. A stop button is fitted for emergency use.

The motor is controlled via a variable speed, frequency converter thyristor drive and the pre-programmed P.L.C. ensures motor overload does not occur to protect the drive mechanism.

SPECIMEN MILLING MACHINES



The Blacks CNM range of machines have been specially designed to allow laboratories and test houses to produce their own standard and sub-size Charpy / Izod test pieces ready for cutting the appropriate notch.

Two variations of the Charpy Specimen Milling Machine (CNM) are available to cover a wide range of materials.

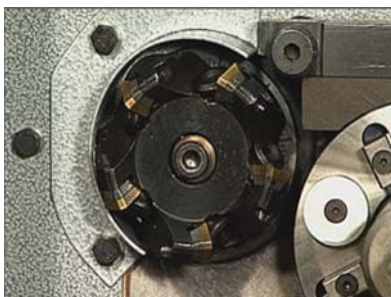


Work Holding Fixture:

The circular fixture allows up to four specimens to be machined during the same operation.

Various clamps, anvils and clamping screws are available to suit the type of rough cut blanks being used.

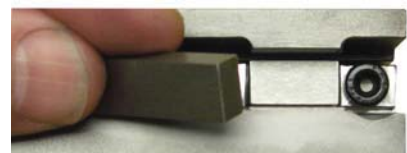
One circular fixture is included with each machine. For maximum machine production a 2nd fixture (optional extra) is recommended, so that whilst the 1st fixture is being machined, the 2nd fixture can have its samples loaded.



Cutter:

The cutter is fitted with five ISO carbide inserts, which are easily replaceable.

A micro adjuster allows for accurate control of specimen size and allows for compensation of cutter tip wear.



Sub size Fixture

SPECIMEN MILLING MACHINES

CSM-1	FIXED SPEED
CSM-1V	VARIABLE SPEED
CSM-RF	ROTATING WORK-HOLDING FIXTURE (ONE SUPPLIED WITH CSM-1) - TWO FIXTURES ARE NECESSARY TO ACHIEVE MAXIMUM PRODUCTION RATE
CSM-SRF	SUB-SIZE ROTATING WORK-HOLDING FIXTURE TO PRODUCE 5MM & 7.5 MM SAMPLES
CSM-CT	CARBIDE CUTTER TIPS 5 ARE REQUIRED TO COMPLETELY REPLACE WORN TIPS ON CUTETR 10/PKG



CSM-1 FIXED SPEED CHARPY SPECIMEN MILLING MACHINE

The Fixed Speed Machine is recommended for customers who are producing specimens in carbon steels, easily machined low alloy steels, non-ferrous and plastic materials. This machine has a fixed cutter speed of 1.98 m/sec and a variable feed rate for the samples of 2.5-9.0 mm/sec.

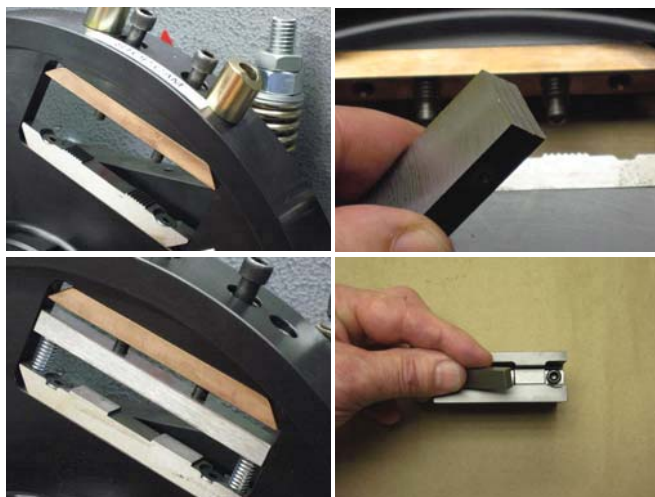
For customers producing specimens in a wider range of materials, see the CSM-1V with variable cutter speed



CSM-1V: VARIABLE SPEED SPECIMEN MILLING MACHINE

The Variable Speed Machine is recommended for customers who are producing specimens in carbon steels, more difficult to machine alloy steels, stainless steels, non-ferrous and plastic materials. This machine has a variable cutter speed of 1.0-2.5 m/sec and a variable feed rate for the samples of 2.2-9.0 mm/sec.

The varying of the cutter speed for differing materials improves the cutter tip life.



Fixture:

The rotating work holding fixture is fitted with clamps, anvils and clamping screws to suit the type of blank being used, i.e. rough sawn square/rectangular, round or tubular section and the size of specimen to be produced, i.e. 10mm square or sub-size

A			D	
Abrasive Cut-Off Machines	43		Diamond Wafering Blades	2
Abrasive Cut-Off wheels	3-5			
Abrasive Grinding Paper	12-13		Digital Cameras	36,42
Aerosol Spray	19		Disc Fixation	17
Alumina Powder	21		Disposable Gloves	8
Alumina Suspensions	21		Dressing Stick	3
			Dust-Off Refill	26
B			E	
Belt Grinders	47		Epoxy molding powder	7
Belts	15			
Biological Microscopes	35		Extenders	20
Branson Ultrasonic Cleaners	26			
Brinell Microscope	38		F	
Brinell Portable	39		Fast Cure Acrylic Cold Mounting	10
Brinell Test Blocks	41		Bulbs	27
Brinell Testers	38		Fugo Discs	17
Broaching Machines	48,51			
Bulbs	27		G	
C			Goose Necks	33
Cameras	36,42		Graduated Cups	8
Carbide Balls	40		Grain Size Standards	28
CBN Wafering Blades	2		Grinding Belts	15
Charpy Broaches	49		Grinding Machines	46
Charpy Gauges	49		Grinding Rolls	15
Charpy Milling Machine	52		Grinding Strips	15
Chrome Valve	26		Grit Comparison Chart	12
Cloth Reference Chart	22		Grit Grabber	17
Cloths	2			
Cold Mounting Reference Chart	8		H	
Cold Mounting System	9-11		Halogen Bulbs	27
Colloidal Silica	21		Hand Operated Broaching	48
Compression Mounting Presses	45		Hardness Testers	37-39
Cup Wheels	16		Hardness Testing Reference Chart	39
Cut-Off Machines	43		High Speed Precession Machines	43
Cut-off Wheels	3-5		Hot Compression Reference Chart	6
Cutting Fluid	3			
D			Illuminators	33
Degreaser	8		Image Analysis Software	42
Diallyl Phthalate Molding Powder	7		I	
Dia-Lube Suspensions	20		Indenters	40
Diamond Extenders	20		Inverted Microscopes	30
Diamond Indenters	40			
Diamond Lapping Film	25			
Diamond Suspensions	18			

J	Jetset Epoxy Cold Mounting	10	P	Precession Cut-off Machines	43
L	Lapping Film	25		Pressurized Dusters	26
	LCD Microscopes	29-30		PSA Polishing Cloths	23-24
	LCD Stereoscopes	34	R	Replicating Systems	11
	LED Ring Lights	33		Retrofitting Testers	37
	Leeb Testers	39		Ring Lights	33
	Lights Guides	33		Rockwell Diamond Indenters	40
	Low Speed Precession Machines	43		Rockwell Penetrators	40
	Lucite molding powder	7		Rockwell Portable	39
M	Macro hardness Testers	37		Rockwell Test Blocks	41
	Magnetic Disc Fixation	17		Rockwell Testers	38-39
	Magnetic Polishing Cloths	23-24		Rolls	15
	Metal Bonded Diamond Discs	14	S	Safety Glasses	8
	Metallurgical Microscopes	29		Sample Leveling Press	27
	Metlab Epoxy Cold Mounting	10		Scoops	8
	Micro hardness Testers	37		Shepherd Fracture Standards	28
	Micro Test Blocks	41		Shore Durometers	39
	Milling Tips			Silicon Molds	6
	Monocrystalline Compound	19		Silicone Lubricant	8
	Monocrystalline Suspensions	18		Software	42
	Motorized Charpy	51		Soluble Oil	3
	Mounting Clips	8		Specimen Caps	6
	Mounting Presses	45		Specimen Milling Machine	52
P	Petrography Machines	47		Spectroscopy	47
	Phenolic Preforms	7		Stereoscopes	31
	Phenolic Thermosetting Powder	7		Stereoscopes Stands	32
	Piano Discs	14		Stone Grinding Wheels	16
	Plain Polishing Cloths	23		Strips	15
	Plastic Molds	6	T	Technovits	9
	Plastic Spray	8		Test Blocks	41
	Polishing Cloths	23-24		Tungsten Bulbs	26
	Polishing Compounds	19	U	Ultrasonic Cleaners	26
	Polishing Machines	46	V	Vacuum Impregnation	45
	Polycrystalline Aerosol Spray	19	W	Wooden Spatulas	8
	Polycrystalline Compound	19	Z	Zirconia Discs	16
	Polycrystalline Suspensions	18			
	Polyester Cold Mounting	10			
	Portable Hardness Testers	39			
	Portable Microscopes	38			
	Powder Scoops	8			

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