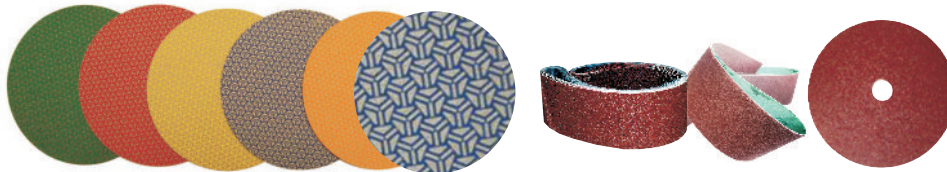
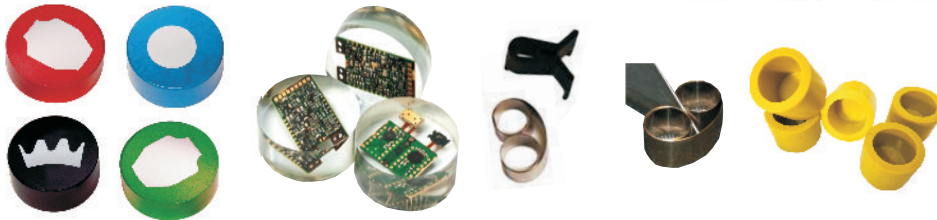
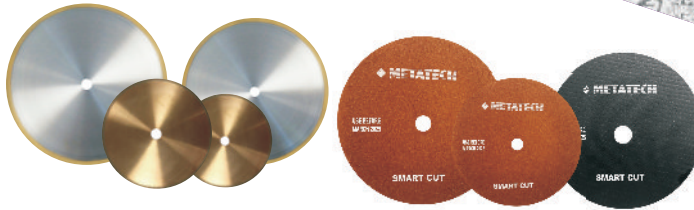


Reliable Consumables for

- ▶ Metallography
- ▶ Mineralogy
- ▶ Petrology
- ▶ Ceramology



Abrasive Cut Off Wheels
Diamond Wafering Blades
Compression Mounting powders
Epoxy Resins (Glass Fiber Filled)
Cold Mounting System
Abrasive Grinding Disc
Abrasive Grinding Belts
Diamond Grinding Discs
Diamond Paste (Monocrystalline)
Diamond Suspensions
Colloidal Silica (Non Coagulating)
Alumina Polishing Suspension
Alumina Polishing Powder
Polishing Cloths
IN-SITU Metallography Kit Consumables
Hardness Test Blocks
Diamond Indenters

- ◆ For Industrial and Research Applications
- ◆ Indigenous / Imported
- ◆ Perfected for critical applications like thin layer protection, ceramics edge retention, inclusion studies soft metals polishing
- ◆ Suitable for any International Machines

Abrasive Cut Off Wheels

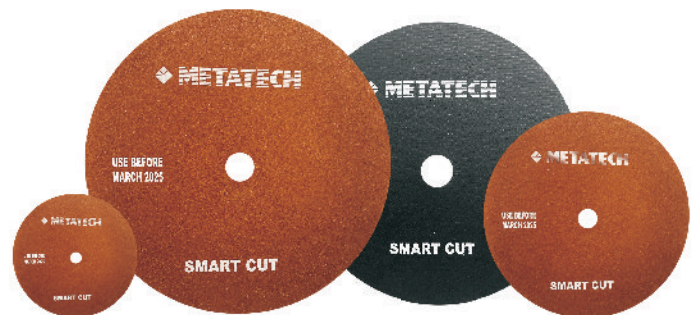
Plain Cut off Wheels / Reinforced Abrasive Cut off Wheels

Aluminum oxide particle wheels are made out of various grits and bonds in phenolic binder. Wheels are formulated to give ideal finish, for metallographic preparations. Aluminium oxide wheels are used for all the ferrous / hard materials and silicon Carbide wheels are used to Soft/ Non Ferrous metals.

Hardness up to 45 HRC (Regular)

Hardness more than 45 HRC (Special)

Size : Dia. X Thk. X Bore Dia. in mm	
150 x 0.8 x 12.7	350 x 2.5 x 25.4
200 x 1.0 x 25.4	400 x 3.0 x 25.4
250 x 1.5 x 25.4	450 x 3.0 x 25.4
300 x 2.0 x 25.4	500 x 3.5 x 25.4



- Custom made wheels available for their Dia., Thk., Bore (31.75 & 32 mm), Hardness.

Cutting Fluid

Standard / Regular

With rust resisting additive, water soluble cutting fluid suitable for all abrasive cut off machines. Qty.: 5 Ltr Can

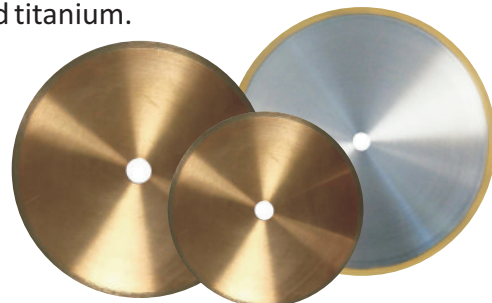


Diamond Wafering Blades

Metal Bonded Diamond wafering blades are offered in low and high concentration diamond impregnation on continuous rim. They are suitable for ductile materials, polymers, pc boards, thermal spray coatings, Titanium etc. and for sectioning very hard or brittle materials including ceramics, carbides, refractories, silicon; boron composite, glasses.

- **Low concentration** blades are recommended for sectioning very hard or brittle materials including ceramic, carbides, refractories, silicon, boron composites & glass.
- **High concentration** blades are recommended for aggressive general laboratory sectioning of ductile materials, most metals, polymers, PC boards, thermal spray coatings and titanium.

Size - 3" Dia. x 0.006" thick x ½" Central hole
 Size - 4" Dia. x 0.012" thick x ½" Central hole
 Size - 5" Dia. x 0.015" thick x ½" Central hole
 Size - 6" Dia. x 0.020" thick x ½" Central hole
 Size - 7" Dia. x 0.025" thick x ½" Central hole
 Size - 8", 9", 10", 12" available



CBN Wafering Blades

MEDIUM CONCENTRATION METAL BOND/RESIN BOND CONTINUOUS RIM are recommend or 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.

Special Coolant Oil for Diamond Cut off Wheels

Special formulation, for quenching the heat during cutting operation.



Compression Mounting

Bakelite / Phenolic Hot Moulding Powder

Black, Red, Green colors available

Superior quality with relatively low shrinkage, high mechanical strength

Technical specifications Specific Hardness-55 Shore D, Gravity 1.4 Kgs

Shrinkage-0.006 in/in in compression.

Coefficient of linear thermal expansion —50 in/in/o C

Transparent Moulding Powder

For Transparent Hot Moulding

Epoxy Resins (Glass Fiber Filled)

BLACK EPOXY THERMOSETTING has superior edge retention, tough grinding and excellent flow characteristics. Chemical resistant. High hardness.

Diallyl Phthalate

This has higher hardness and can be used as a front end or facing moulding material where the hardness difference of the stock (sample) and that of mounting resin is very high to avoid edge rounding effect. Also can be used in case of retaining small plating / coating layers. Being a costly material one can use it in few mm thickness initially and then can use normal moulding material. High hardness.

Conductive Mould Material

This is copper filled thermosetting resin that is electrically conductive

Mould Release Spray

It is advisable to spray the lubricant spray before hot and cold compression for easy ejection.

Cold Mounting

Cold Mounting System

Cold mounting systems are preferred when speed and ease are desired, especially for high volume production. Curing cycle - 15 minutes.

Binder 400 ml + Hardener 400 gm and 1 kg pack also available.

Silicon Rubber Moulds

Reusable mould for Cold Mounting

Dia. 20mm, 25.4 mm, 30 mm, 31.75 mm, 40 mm, 50 mm

Or As per Customers Requirement

Plastic Moulds

Dia. 25.4 mm, 31.75 mm, 40 mm

Or As per Customers Requirement

Mounting Clips

Sample Support Clips

Series of Clips hold thin samples on edge for encapsulation.

Use metal for compression mounting and plastic for cold mounting.

Plastic Clip for Cold Mounting

Stainless Steel Clip for Compression Mounting



Abrasive Grinding Disc

Silicon Carbide abrasive waterproof paper disc.

(Wet/Dry) Paper Quality C weight

Round Discs – 8"/9"/10"/12" dia. Plain / PSA Backed

Grit - 80, 120, 180, 220, 320, 400, 600, 800, 1000,
1200, 1500, 2000

Grit - 2500, 3000, 5000 Size - A4, 8", 9"



Grinding Discs for Spectro Polishing Machine

Aloxite / Zircon (Plain/PSA) - Paper Base and Cloth Base

Size : 10" dia x 25.4 mm bore Size : 11" dia x 40.0 mm bore

Size : 14" dia x 40.0 mm bore

Grit - 36, 40, 60 Or as per customer requirement



Sample Holder for Spectro Polishing Machine

Magnetic Sample / Coin Holder for Spectro Polishing Machine



Abrasive Grinding Belts

Aluminum Oxide / Zirkon Belts / Silicon Carbide

Size : 100 x 915 mm, 100 x 1220 mm

Grit : 60, 80, 120, 220, 320, 400, 600

Customized Belts Available

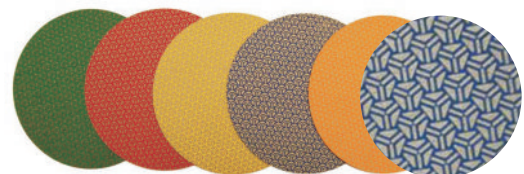


Diamond Grinding Discs

Diamond Grinding Discs are available in standard sizes in both metal or resin bonded varieties with Pressure Sensitive Adhesive (PSA), plain back or overhanging cloth. They are recommended for coarse and fine grinding of high hardness materials. Metal flex feature a flexible, color-coded, open patterned metal bonded disc for aggressive cutting and reduced loading. Resin flex feature a flexible, color-coded, open patterned resin bonded disc for aggressive cutting. Metal bonded discs consist of a high quality diamond abrasive grit bonded to a wheel by an electroplating process. Resin bonded discs also consist of a high quality diamond abrasive grit bonded to a flat aluminum disc with resin.

Grit : 80, 120, 220, 320, 400, 500, 800, 1500, 3000

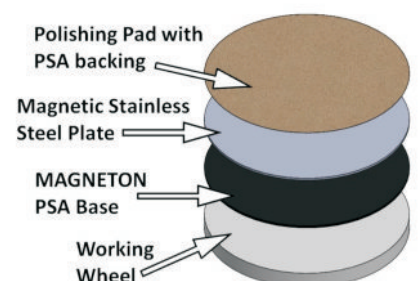
Sizes : 8" (203mm), 10" (254mm), 12" (305mm)



Imported

Magnetic Fixation : (Retrofit to any make)

Magnetic base pad, which is permanently attached to the working wheel with a pressure-sensitive adhesive. PSA-backed polishing papers and cloths can be temporarily attached to a teflon-coated magnetic metal plate. This plate with the attached polishing Paper and cloths can be easily removed and exchanged. When the polishing paper or cloth has been depleted, simply remove it from the teflon-coated plate and replace with a new PSA-backed polishing paper or cloth.



Diamond Paste (Monocrystalline)

Mono crystalline (M.C.) structure type diamond with heavy concentration ensures the free cutting action required to achieve best cutting action.
Size : 0.25, 1,3, 6, 8, 15, 30, 45 Microns — 5 gm syringe.



Aerosol Spray

For extremely accurate tolerances and flawless finishes in microns or light band. Aerosol Spray can achieve a virtually scratch-free surface with the highest degree of flatness and brilliance.



Diamond Suspensions

Monocrystalline / Polycrystalline

Water / Oil Soluble

These suspensions are suitable for use in power lapping, general polishing applications or in automated diamond dispensing systems.

Size : 0.25, 1,3, 6, 9, 15, 30, 45 Microns

Packing - Bottle only, Finger pump, Trigger spray & Refill



Colloidal Silica

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. (Non Coagulating). **Micron 0.04 and 0.06.**



Imported

Alumina Polishing Suspension / Powder

(Universal grade)

Lavigated Alumina suspension for routine ferrous and non ferrous laboratory applications. Bottle / 500 gms

Imported Alumina Suspension available :-

0.05, 0.3, 0.1, 1.0



Polishing Cloths

Sizes : 8", 10", 12" dia. Plain / Self Adhesive (PSA) / Magnetic Back / Metal Back

- Synthetic fiber flocked on flexible water proof carrier, can be used with 'A' — 3 micron diamond compound.
- Synthetic flocked on flexible cotton carrier, Used with 3-6 micron diamond compound
- Synthetic flocked on a flexible cotton carrier. A more heavy duty cloth for use with 6-9 micron diamond compound.
- Silk cloth —for napless polishing application
- Billiard cloth — for general /coarse application
- Special Cloth for Fine diamond & Colloidal Silica



Imported Polishing Cloths

Sizes : 8", 10", 12" dia.

IN-SITU METALLOGRAPHY KIT CONSUMABLES



Grinding Discs & Polishing Cloths

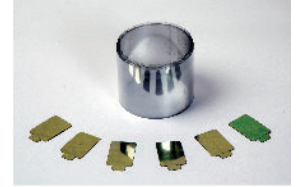
Various grinding discs of grit sizes 80, 120, 180, 240, 320, 400, 600, 800, 1000, 1200 and cloths with PSA back



32 mm Dia.

Replica

Transparent replica / tape Reflecting replicas. These are backed by reflecting aluminum foil and are of green colour. Reflecting foil improves the light gain of microscope and green colour improves the contrast while observation.



ETCHING CHEMICALS

- Nitric Acid
- Hydrochloric Acid
- Acetone
- Methanol
- Ethanol
- Picric Acid etc.

MILLIPORE FLUID CONTAMINATION ANALYSIS KIT

- Vacuum / Pressure Pump
- Dispensing Pressure Vessel
- Filter Jet Solvent Dispenser
- Petri Slides
- Filter Paper
- Filter Flask
- Dispensing Bottles
- Solvent Filtering Dispenser



Vacuum / Pressure Pump



Dispensing Pressure Vessel



Filterjet Solvent Dispenser



Petri Slides (Optional)

PORTABLE HYDRAULIC BRINELL HARDNESS TESTER



APPLICATION :

- On-site test of steel products, nonferrous metal, castings, forgings, and semi-finished heat treatment parts.
- Applied to too large parts for desk testers to test. Replace Leeb testers which are in low accuracy and reliability.
- Indentation could be read by indentation automatic measurement system and hardness values displayed directly.

Wet/dry Silicon Carbide C Weight Abrasive Grinding Discs Manufactured in North America and are classified to US standards. FEPA is grit classification according to abrasive manufactured in Europe and are classified to European standards

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

HARDNESS TESTERS



Rockwell Hardness Tester

Instruction:

Hardness tester is used to determine the hardness of materials, and hardness test is a means to judge the quality of metal materials or parts of products. The so-called hardness is the ability of a material to resist the indentation of another body without residual deformation under certain conditions. The greater the resistance, the higher the hardness, and vice versa,



Superficial Rockwell Hardness Tester

Application:

Superficial Rockwell Hardness Tester suitable for measuring superficial rockwell hardness of Ferrous Metals, Alloy Steel, Carbide and Metal after treated surface (carburizing, nitriding, plating layer). Especially suitable for precision measurement of Parallel Planes.



Brinell Hardness Tester

Application Fields:

Mainly used to determine the hardness of cast iron, steel, non-ferrous metals and soft alloys, and it can also be used to determine the hardness of some non-metallic materials such as hard plastics and Bakelite.



Portable Leeb Hardness Tester

Specifications:

Measure the hardness of metal workpiece. Applicable to Die cavity of molds, Inspection of bearing and other mass produced parts on a production line.

Features: Test at any angle, even upside down.

Direct display of hardness scales HRB, HRC, HV, HB, HS, HL. Large memory could store 50 groups including single measured value, impact direction, material and hardness scale etc. User recalibration function allowed.

Manual or automatic shut down.

Use USB/RS-232 data output to connect with PC.

HARDNESS TEST BLOCKS DIAMOND INDENTERS

- Rockwell
- Rockwell Superficial
- Vickers
- Micro Vickers
- Brinell

David Ellis Co, Inc.



Authorised Distributor

Accredited by NVLAP



NABL

Rockwell Regular Hardness Test Blocks	Rockwell Superficial Hardness Test Blocks	Rockwell Diamond Penetrators	Rockwell Ball Penetrators	Aluminum Test Block
Brinell Hardness Test Blocks	Brinell Ball Indenters	Micro Hardness Test Blocks	Micro Hardness Indenter	Diamond Indenters

MAGNETIC PARTICLE INSPECTION CONSUMABLES



**Fluorescent yellow-green
Oil Base Magnetic Powder**

**Liquid / Dye Penetrant
Testing Chemicals**

Electro Magnetic Yokes

**Fluorescent Magnetic
Water Base Powder**

MPI Carrier Oil

UV LED Lamps



METATECH MACHINES

Metallography



Metacut - 50/80 (SACT)
Capacity 50/80 mm dia
Hardened Section



Capacity
140 mm dia
& above

**Oscillating Abrasive Cut-off
Machine - Oscicut**



**Automatic Moulding Machine
Auto Mount**



Model - Autopol
Semi Automatic Grinding
Polishing Machine



Metapol DC II
Grinding Polishing Machine

Micro Hardness Testers

More than
200
Installations

Indigenous

Motorized Stage
Autofocus
Automatic Graph / Profile



Fully Automatic - MVH - V

Microscopy



Metagraph - I/II

Jominy End Quench

As per SAE J406 May 85
and
BS Std. 4437 - 1969



**Jominy End Quench
Hardenability Set-up**

Corporate Office :

476, Narayan Peth, Cosmos Bank Bldg.,
Off Laxmi Road, Pune - 411 030. India.

Tel.: +91 - 20 - 24450312 / 530,

Fax : +91 - 20 - 24450312.

Mob. : +91 9822006106, 8380015435

Email : sales@metatechind.com,
consumables@metatechind.com

 **METATECH
INDUSTRIES**
www.metatechind.com