

Chennai Metco

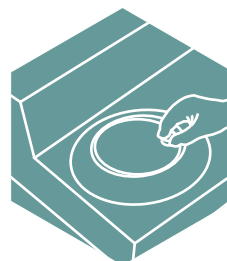
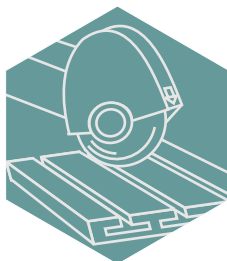
for your metallurgy

www.chennaietco.com

2020-21



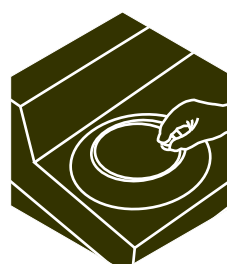
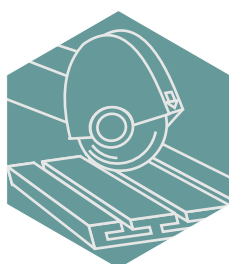
Consumables Catalogue

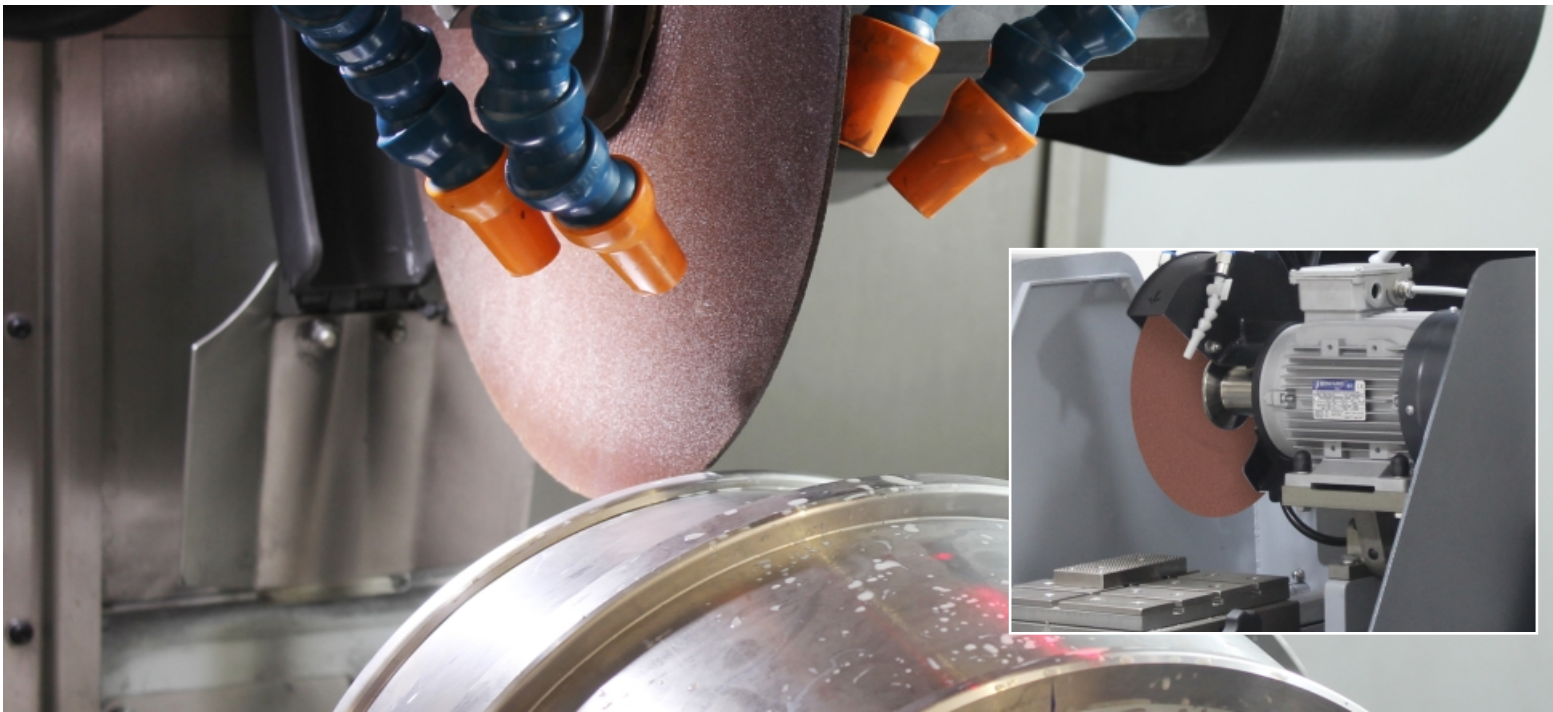




Role of Consumables

Sample preparation requires good quality consumables that improve the results of Microstructure analysis. We at Chennai Metco manufacture consistent, quality consumables for your metallography needs. The usage of right consumables at every stage of sample preparation aid in obtaining enhanced results. Thus Consumables are the key of your Metallography preparation. Choose them wisely.





SECTIONING

Choosing the Right Wheels for Right Application is important. Wrong choice of Wheels can sometimes lead to damaging your specimen.

Using Appropriate grade of wheels makes a big difference in the cutting performance.

The skill of manual cutting and appropriate cutting mode / feed combined with the right wheel is the recipe for success in abrasive cutting.

Breakage of wheels or damage to the cutting surface can best be avoided by proper care.





ABRASIVE CUT OFF WHEELS

Plain cut off wheels

Cutting Wheels	Application	Dimensions (mm)	Code No
General purpose Wheels 	Used on Ferrous Materials with Hardness upto 40 HRC	200 x 31.75 x 1	CW001R
		200 x 31.75 x 1.5	CW01R-1.5
		250 x 31.75 x 1.5	CW002
		300 x 31.75 x 2	CW003
		350 x 31.75 x 2.5	CW004
Wheel for Hard steel 	Used on Hard Ferrous Materials with Hardness 40 – 60 HRC	200 x 31.75 x 1	CW01S-1
		200 x 31.75 x 1.5	CW001S
		203 x 25.4 x 0.7	CW01S-0.7
		250 x 31.75 x 1.5	CW005
		300 x 31.75 x 2	CW006
		350 x 31.75 x 2.5	CW007

ABRASIVE CUT OFF WHEELS

Plain cut off wheels

Cutting Wheels	Application	Dimensions (mm)	Code No
Wheels for non Ferrous & cast iron 	Non-ferrous Materials, Cast Iron	200 x 31.75 x 1.5	CWA005
		250 x 31.75 x 1.5	CWA006
		300 x 31.75 x 1.5	CWA007
		350 x 31.75 x 3	CWA008

Breakage Resistant cut off wheels

Cutting Wheels	Application	Dimensions (mm)	Code No
Partially Reinforced wheels 	Used on Ferrous Materials with Hardness up to 40HRC. Suited to Heavy duty components	300 x 31.75 x 1.5	CW003PR
		400 x 31.75 x 3.2	CW009PR
		500 x 31.75 x 3.2	CW013P
		500 x 40 x 3.2	CW014
	Used on Hard Ferrous Materials with Hardness up to 60HRC. Suited to Heavy duty components	500 x 31.75 x 3.2	CW013S

High Breakage Resistant cut off wheels

Cutting Wheels	Application	Dimensions (mm)	Code No
Fully Reinforced wheels 	Used on Ferrous Materials with Hardness up to 40HRC. More Breakage Resistant for Tough cutting applications	350 x 31.75 x 2	CW003FR
		350 x 31.75 x 3	CWF008FR
		350 x 31.75 x 2FRC	ECW007
		400 x 31.75 x 3.2	CW009FR
		500 x 31.75 x 3.2	CW015FR

ABRASIVE CUT OFF WHEELS

SUPREME CUTTING FINISH

USA GRADE

Used on Abrasive cutting Machines

USAGRADE	Application	Dimensions (mm)	Code No
	Tool Steels, Cast Iron (above 60HRC)	255 x 1.5 x 31.75	CW-031
	Hardened Steels (above 50HRC)	255 x 1.5 x 31.75	CW-032
	Medium Hard Steels and Super alloys (35-50 HRC)	255 x 1.5 x 31.75	CW-033
	Medium Soft Metals (15-35 HRC)	255 x 1.5 x 31.75	CW-034
	For Aluminium, Brass, Titanium and Zirconium	255 x 1.5 x 31.75	CW-036

Used on Precision cutting Machines

USAGRADE	Application	Dimensions (mm)	Code No
	For Titanium and other Alloys	152 x 1 x 16	647
	General Ferrous	101 x 0.3 x 12.7	4F12
	General Non Ferrous	101 x 0.3 x 12.7	4NF12
	General Ferrous	127 x 0.5 x 12.7	5F20H
	Soft to Medium hard Ferrous (below 45 HRC)	127 x 0.3 x 12.7	5F20S

* Wheels of other higher dimensions are also available in USA range.

* Rubber bonded wheels for high quality burn-free sectioning also available

MOQ: 10 Pcs

Delivery 5 to 6 weeks

PRECISION CUT OFF WHEELS

(FOR SMALL COMPONENTS & THIN SLICING APPLICATIONS)

Imported

Used on Abrasive Cutting Machines

German GRADE

Cutting Wheels	Application	Dimensions (mm)	Code No
	Used on Mild Steel, Structural Steel, Free cutting steel, Spring Steel, Piano Wire, Perm alloy, Nichrome (Upto 40HRC)	150 x 0.5 x 25.4	PCW0001
		150 x 1.0 x 25.4	PCW0002
		205 x 0.8 x 31.75	PCW0003
		255 x 1.2 x 31.75	PCW0004
		305 x 1.2 x 31.75	PCW0005
	Used on Hard Ferrous Alloys, Alloy Tool Steel, Bearing Steel, Stainless Steel, Heat resistant Steel, Invar Steel, Silicon Steel, Hardened Steels (Upto 60HRC)	150 x 0.5 x 25.4	PCW1001
		150 x 1.0 x 25.4	PCW1002
		205 x 0.7 x 31.75	PCW1003
		255 x 1.2 x 31.75	PCW1004
		305 x 1.2 x 31.75	PCW1005
		355 x 2.0 x 31.75	PCW1006
		405 x 2.5 x 31.75	PCW1007
	Used on Medium Soft Steels, Thin cut, Cast Iron, Cast Steel, KS Steel, Brass, Bronze, Aluminium alloys, Tungsten Molybdenum alloy, Pure Titanium(α alloy), Lead alloy, Glass (15-35HRC)	150 x 0.5 x 25.4	PCW2001
		205 x 0.8 x 25.4	PCW2002
		230 x 1.2 x 31.75	PCW2003
		255 x 1.2 x 31.75	PCW2004
Spacer	Description	Size (mm)	Code No



Spacer to fit in 1" Spindle and wheel with 31.75 mm ID

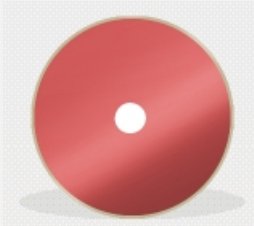
25.4mm ID

CWS06

MOQ: 10 Pcs

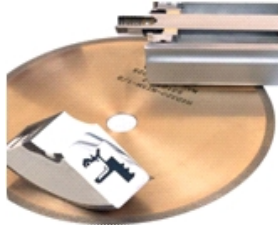
Delivery 5 to 6 weeks

DIAMOND WAFERING BLADES

Wafering Blade	Application	Dimensions (mm)	Code No
	Alumina ceramic, Silicon-Nitride ceramic, glass, copper, and iron, ruby, Quartz, Silica	100 x 12.7 x 0.27 To be used in diamond saws	T4DW
		150 x 31.75 x 1	CWD002
		200 x 31.75 x 1.2	CWD003
		250 x 31.75 x 1.4	CWD004

DIAMOND WAFERING BLADE

USA GRADE

Wafering Blade	Application	Dimensions (mm)	Code No
	Ceramics, Carbides, Boron Composites, Glass, Refractory (above 60HRC) Used in Precision Saws	75 x 12.7 x 0.15	M306L
		100 x 12.7 x 0.3	M412L
		125 x 12.7 x 0.4	M515L
		150 x 12.7x 0.5	M620L
		175 x 12.7x 0.6	M725L
	Polymers, PC Boards, Titanium, Thermal Spray Coating Used in Precision Saws	75 x 12.7 x 0.15	M306H
		100 x 12.7 x 0.3	M412H
		125 x 12.7 x 0.4	M515H
		150 x 12.7x 0.5	M620H
		175 x 12.7x 0.6	M725H
	Hard Ferrous materials	200 x 31.75 x 1.1	M845D
		250 x 31.75 x 1.3	M1050D
		300 x 31.75 x 1.6	M1262D
		355 x 31.75 x 1.8	M1470D

USA GRADE

CBN WAFERING BLADES

CBN WAFERING BLADE

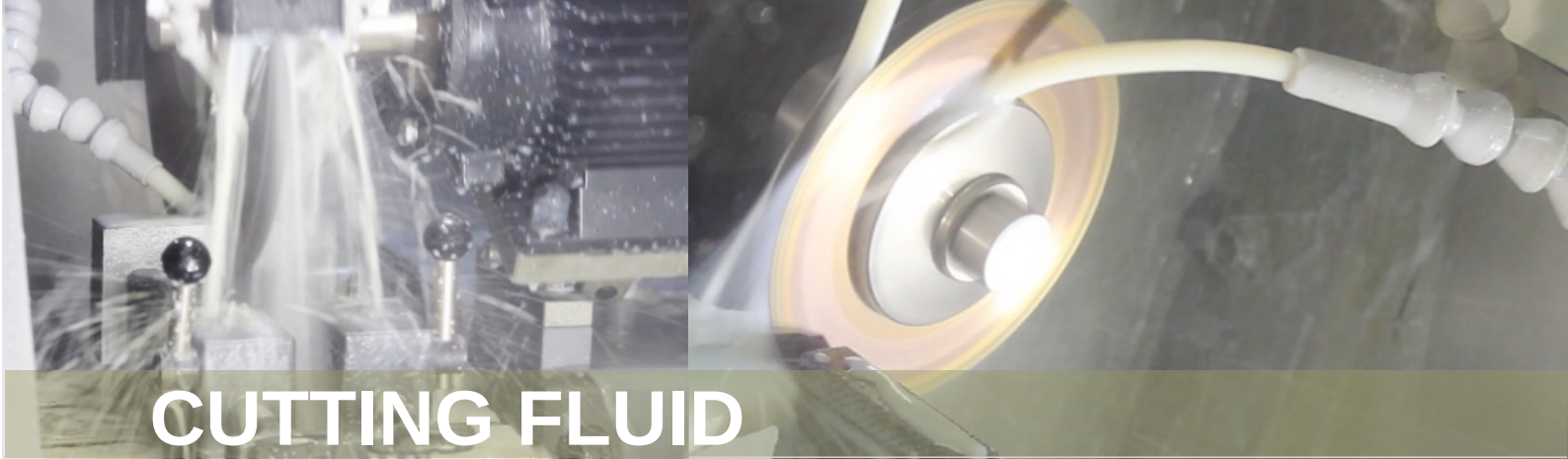
USA GRADE

USA GRADE

Wafering blade	Application	Dimensions (mm)	Code No
	High speed steels, Inconel, Stellite, Iron and Cobalt based alloys, Nickel based Super alloys, Lead base alloys, Titanium alloys and Stainless Steels. (Used on low speed /High speed) Used in Precision Saws	75 x 12.7 x 0.15	M306C
		100 x 12.7 x 0.3	M412C
		125 x 12.7 x 0.4	M515C
		150 x 12.7 x 0.5	M620C
		175 x 12.7 x 0.6	M725C
	High speed steels, Inconel, Stellite, Iron and Cobalt based alloys, Nickel based Super alloys, Lead base alloys, Titanium alloys and Stainless Steels. (Used on High speed)	200 x 31.75 x 1.1 250 x 31.75 x 1.3 300 x 31.75 x 1.6 355 x 31.75 x 1.8	M845C M1050C M1262C M1470C

Dressing Sticks

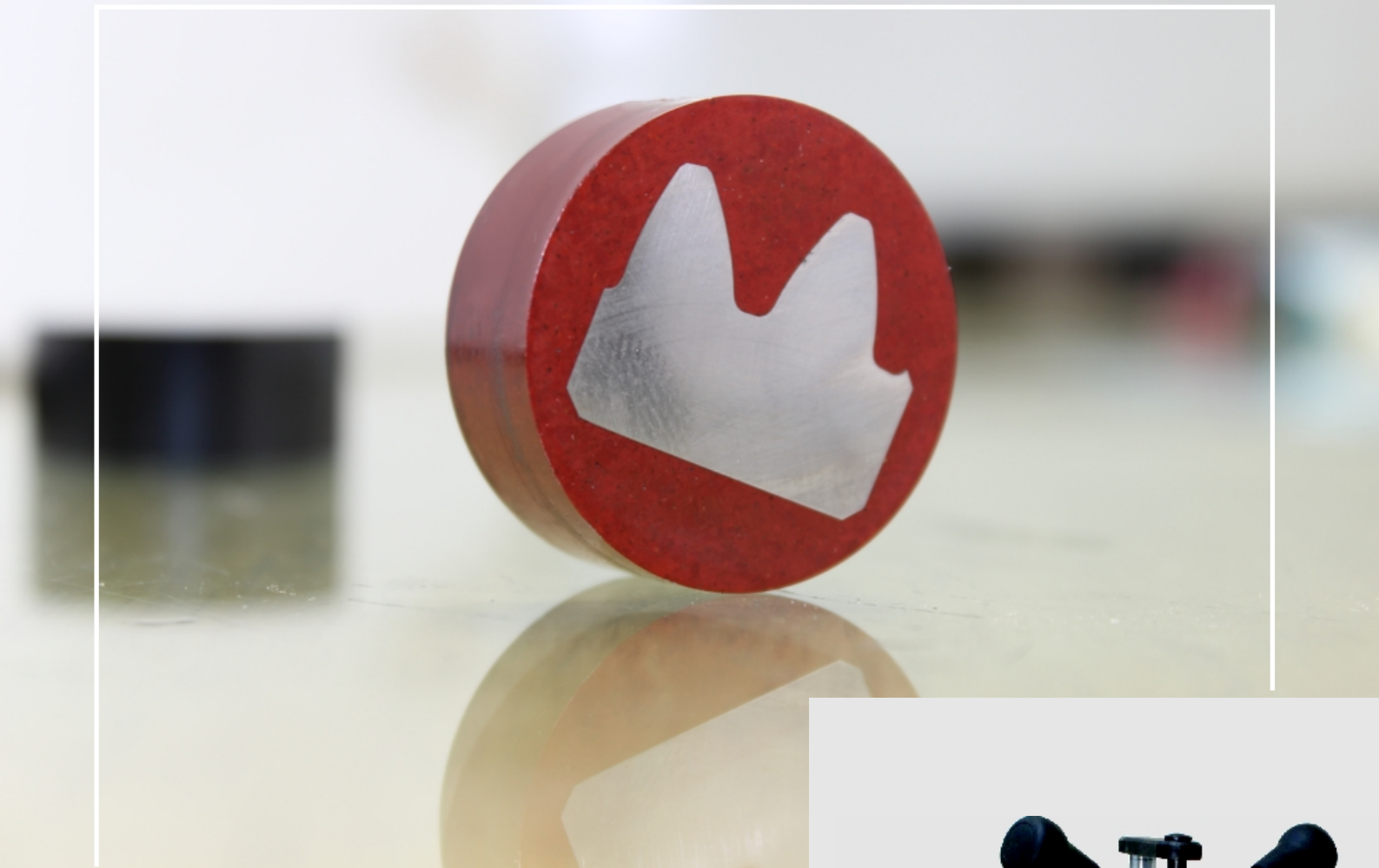
Product	Description	Size (mm)	Code No
	Used on new and frequently used diamond wafering blades and grinding discs to maintained superior cutting performance	4" x 0.5"	DS-10



CUTTING FLUID

Product	QTY	Weight KG	Code No
Coolant Oil Water soluble coolant, used in the ratio 1:30 (Oil:Demin Water) For abrasive cutting operations	1 Ltr	1.2	CWC 007
Isomet Oil Oil-based coolant which can efficiently reduce the Cycle time of Cutting. Used with precision cutting saws.	1 Ltr	1.2	DB 101





MOUNTING

Mounting aids in easy handling of the sample and to preserve the edges of the sample.

Chennai Metco offers a wide range of mounting resins in hot and cold mounting systems that suits your application at its best.



HOT MOUNTING CONSUMABLES

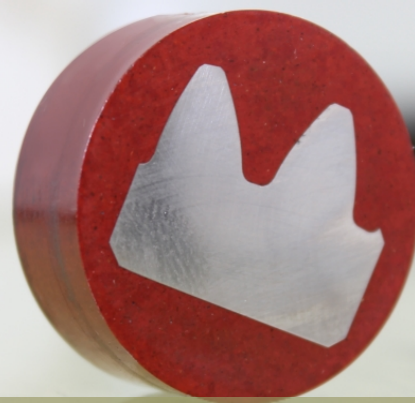
Compression mounting powders

MOUNTING RESIN	Colour	Code No
Phenolic Powder Used for regular analysis, with Fast cycle time	Black	MB101
	Red	MB102
	Green	MB103
Transparent Powder Suited to applications that require Complete visibility of the sample, good flow characteristics	White	MT104
Transparent Granules Suited to applications that require Complete visibility of the sample, moderate flow characteristics	Transparent Granules	MTG105
Conductive Powder Applied across analysis that requires the a Conductive sample, for SEM analysis	Brown	MB105



PRODUCT NAME	DESCRIPTION	QTY	CODE NO
Mold Release Spray 	Sprayed on the walls of the mounting chamber for easy removal of the mold	200 ml	MS001
Mold Release Powder	Highly efficient Anti-Stick agent sprinkled on the walls of the mounting chamber	10g	MS002

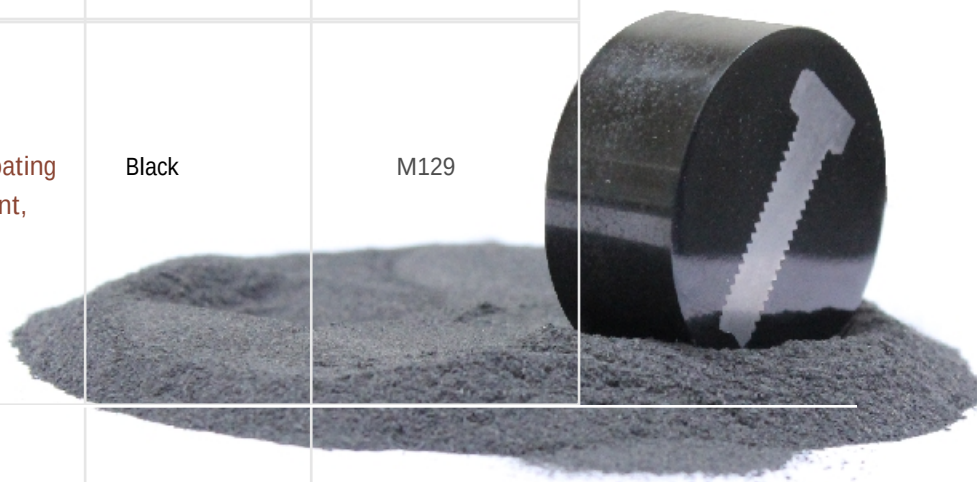
For better edge retention choose premium quality products

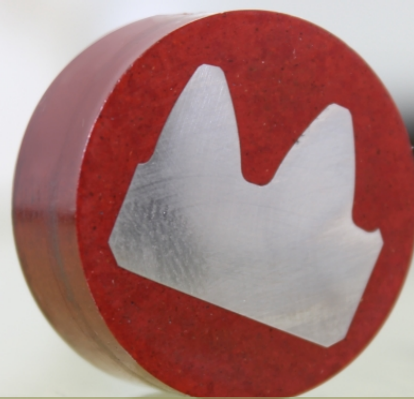


HOT MOUNTING CONSUMABLES

Compression mounting powders - Premium quality

MOUNTING RESIN	Colour	Code No
Phenolic Powder Used for Regular analysis with of Medium hard materials Moderate Edge retention	Black Red Green	M126 M127 M128
Epoxy Powder (Fine glass filled) Used for High end applications like coating thickness and case depth measurement, fastener profile analysis, etc Applied on Hard materials Excellent edge retention	Black	M129
Diallyl Phthalate (Glass filled) Used for High end applications like coating thickness and case depth measurement, fastener profile analysis, etc Applied on Moderately Hard materials Excellent edge retention	Blue	M131
Diallyl Phthalate (Mineral filled) Same as Glass filled Diallyl Phthalate but, More Abrasion resistant than Glass filled		M130



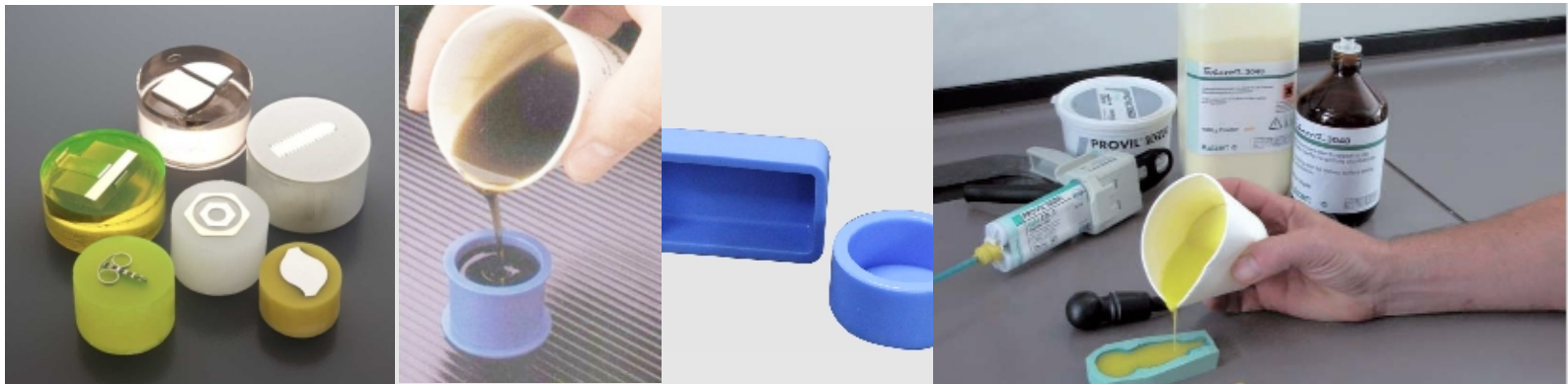


HOT MOUNTING CONSUMABLES

Compression mounting powders - Premium quality

MOUNTING RESIN	Colour	Code No
Transparent Powder Suited to applications that require complete visibility of the sample Fair Edge retention	White	M125
Technotherm 3000 Applied across analysis that requires the a conductive sample, for SEM analysis Moderate Edge retentionn	Black	66003630





COLD MOUNTING CONSUMABLES

Cold Mounting Systems

Product	Description	Components	Code No
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Cold Mounting Compound



Resin : 2 parts
Hardener : 1 part
Curing time : 15 minutes
Color : Pink, opaque
Used for general day to day analysis.

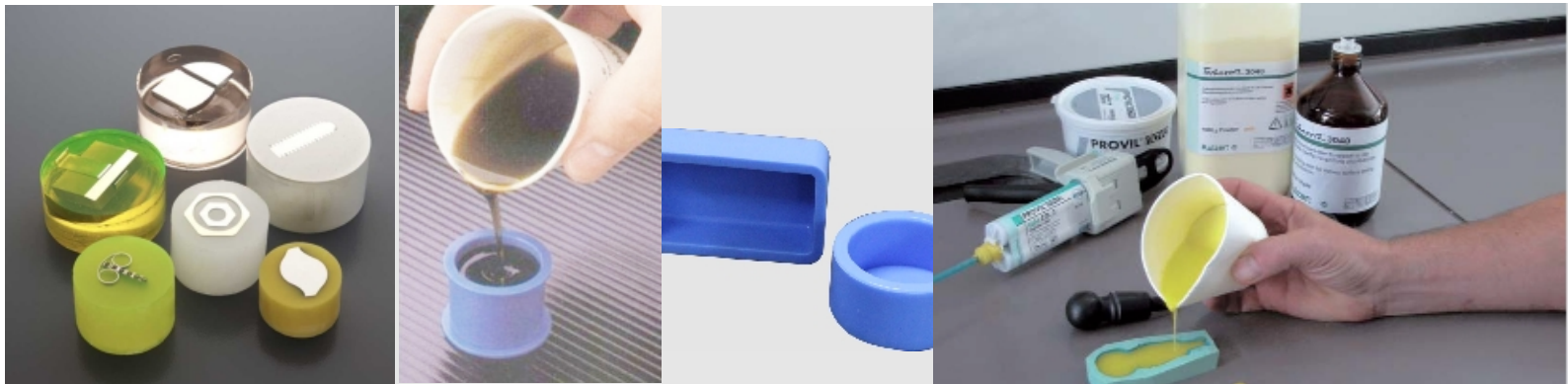
400grams Powder
+
400 ml Liquid

MC001

Cold Mounting Systems

German Grade

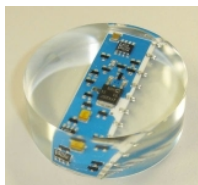
Product	Mixing Ratio / Volume Ratio	Curing Time	Components	Code No
Technovit Epox + (Choose A or B) Transparent High clear Embedding, vacuum impregnation required.	Resin: Hardener 2 : 1 	18 Hours	Resin (1000mL) Hardener Regular A (1000mL)	TECH001 TECH002
		10 hours	Hardener Fast B (1000mL)	TECH003
Technovit 4000 Gap free, Non shrinkage embedding, white colored opaque mold	Powder:Syrup1:Syrup2 2 : 2 : 1 	10 -13 min	Powder (1500g) Syrup1(1000 ml) Syrup 2 (500 ml)	TECH026
Technovit 4002 Gap free embedding, white colored opaque mold Good grinding properties	Powder : Liquid 5 : 3 	12 -17 min	Powder (1000g) Liquid (1000ml)	TECH004

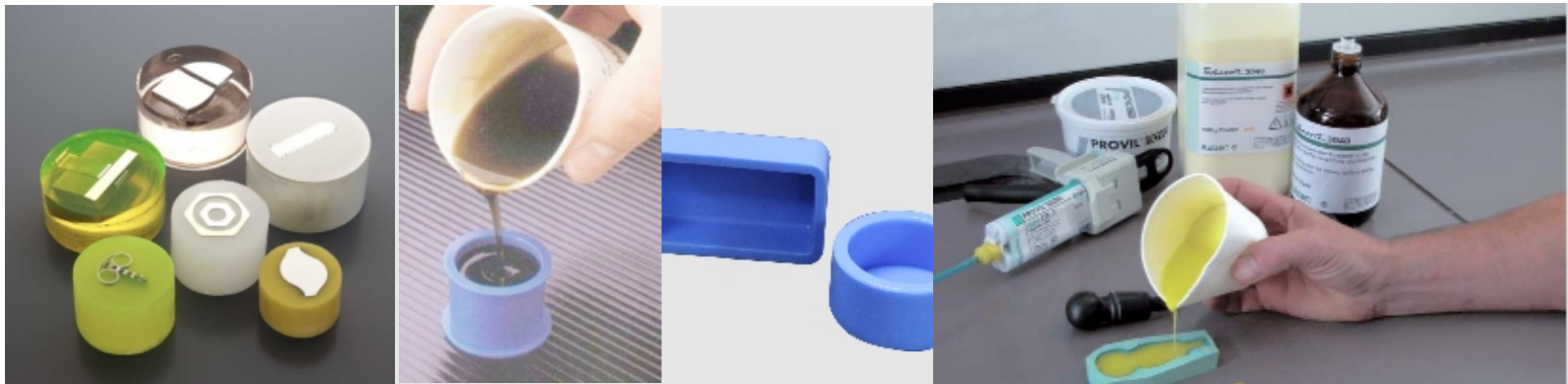


COLD MOUNTING CONSUMABLES

Cold Mounting Systems

German Grade

Product	Mixing Ratio / Volume Ratio	Curing Time	Components	Code No
Technovit 4004 Transparent embedding for Routine examination Vacuum unit required	Powder : Liquid 2 : 1 	9 - 12 min	Powder (1000g) Liquid (1000ml)	TECH0015
Technovit 4006 High clear embedding Vacuum unit required	Powder : Liquid 2 : 1 	9 - 13 min	Powder (1000g) Liquid (1000ml)	TECH0014 TECH0013
Technovit 4006SE High clear semitransparent mould, improved grinding properties Vacuum unit required	Powder : Liquid 2 : 1 	11 - 15 min	Powder (1000g) Liquid (1000ml)	TECH0030
Technovit 4071 Green semitransparent mold, Quick embedding	Powder : Liquid 2 : 1 	5 - 7 min	Powder (1000g) Liquid (1000ml)	TECH005



COLD MOUNTING CONSUMABLES

Cold Mounting Systems

German Grade

Product	Mixing Ratio / Volume Ratio	Curing Time	Components	Code No
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Technovit 5071
Technovit Universal
Liquid

Powder : Liquid
2 : 1

8 - 10 min

Powder (1000g)
Liquid (1000ml)

TECH008
TECH009

Green
semitransparent
embedding

Dissolves in acetone



Technovit 5000

Powder : Liquid
20g : 30ml

7 - 12 min

Powder (1000g)
Liquid (1000ml)

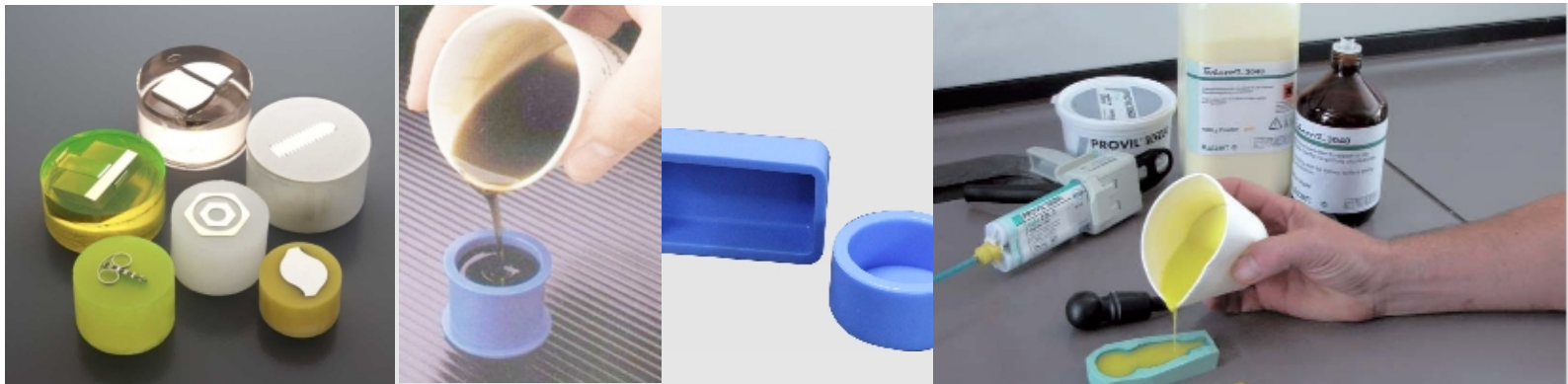
TECH023

Conductive material
embedding, Brown
opaque mold

For SEM analysis



PRODUCT	QTY	Code No
Vacuum impregnation system	1 No	VM-2000



COLD MOUNTING CONSUMABLES

Precision Impression German Grade

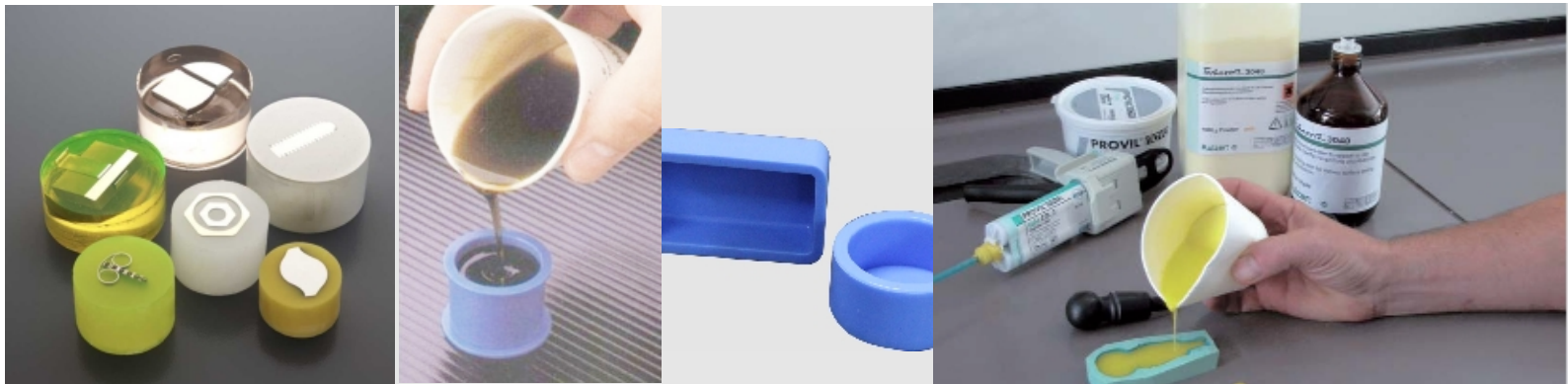
For indirect inspection of the surface.

For 1 μ dimensional accuracy choose Technovit 3040, for < 0. 1 μ dimensional accuracy choose Provil Novo



Product	Mixing Ratio / Volume Ratio	Components	QTY	Code No
Technovit 3040	Powder : Liquid Ratios between 1 : 1 and 3 : 1	Technovit Universal Liquid (Choose C or D)	1000 ml	TECH010
		Yellow Powder (C)	1000 g	TECH011
		Black Powder (C)	1000 g	TECH012
Provil Novo Putty Regular	Base : Catalyst 1 : 1	Base	450 ml	TECH017
		Catalyst	450 ml	
Provil Novo Putty Regular Soft	Base : Catalyst 1 : 1	Base	450 ml	TECH024
		Catalyst	450 ml	
Provil Novo Light Regular	Base : Catalyst 1 : 1	One component	2 X 50 ml	TECH025

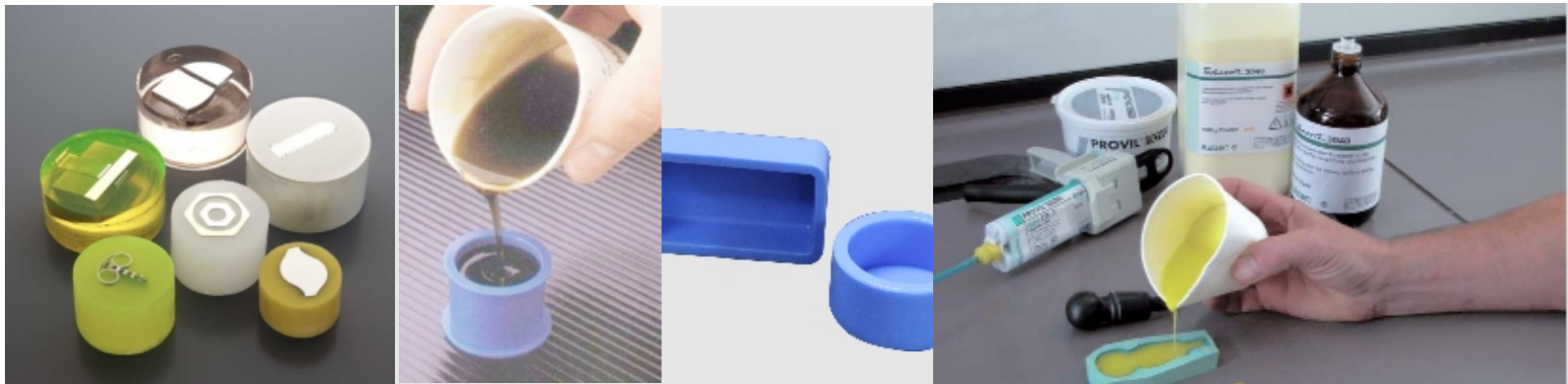




COLD MOUNTING CONSUMABLES

Cold Mounting Accessories

Product	Product Name	Size	Code No
	Rubber Mould	20 mm	MDSI001
		25 mm	MDSI002
		30 mm	MDSI003
		40 mm	MDSI004
		50 mm	MDSI005
		(55 x 25) mm	MDSI006
		(70 X 40) mm	MDSI007
		(100 x 50) mm	MDSI008
	Metallic Die	1"	MDI001
		1 ¼ "	MDI002
		1 ½ "	MDI003
		2"	MDI004
	Reusable Plastic Mould	30 mm	MPSI011
	Plastic Holding Clips (100 Nos)	0.25 (kg)	MCL001



COLD MOUNTING CONSUMABLES

Cold Mounting Accessories

Premium Quality for Longer life

Rubber mould

Grade	Size	Code No
US Grade	1"	M157
	1 1/4 "	M158
	1 1/2 "	M159
	2 "	RM2
	3 "	RM3A

Mixing Cup and Spatula German

Grade	Size	Code No
Mixing Cup	10 Nos	TECH0020
Mixing Spatula	10 Nos	TECH0021

Plastic Molding Clips: USA

Grade	Size	Code No
Metal Clips	100 Nos	M163
Black Plastic Clips	100 Nos	M174



Grinding & Polishing



GRINDING

Grinding operation is intended to achieve flatness for further sample preparation.

The fascinating range of grinding consumables offered by Chennai Metco aids in achieving quick results

GRINDING BELTS FOR PLANAR GRINDING

	Product	Dimension (mm)	Grit Size	Code No
	Abrasive Belt Coarse grinding of general ferrous and non ferrous materials	100 X 915	60	BA001
			80	BA002
			120	BA003
			220	BA007
			320	BA006
			400	BA004
			600	BA005
	Wet Belt Coarse grinding of general ferrous and non ferrous materials. Can be used with water	100 X 915	80	WBA002
			120	WBA003
	Zircon Belt Coarse grinding of Stainless Steels and aluminium alloys	100 X 915	60	ZBA001
			80	ZBA002
			120	ZBA003
	Heavy Duty Belt Coarse grinding of general ferrous and non ferrous materials. Used for grinding large components.	150 X 1220	60	HB001
			80	HB002
			120	HB003
	Linishing Belt Same as Heavy Duty belts but for different dimension.	50 X 2000	60	LBA001
			80	LBA002

GRINDING PAPERS

Regular Grade SIC Papers

Available Grit Size	Sheet Dimension 9" X 11" Without PSA
80	ES001
120	ES002
180	ES003
220	ES004
320	ES005
400	ES006

Available Grit Size	Sheet Dimension 9" X 11" Without PSA
600	ES007
800	ES008
1000	ES009
1200	ES010
1500	ES011
2500	ES012

Premium Grade SIC Papers

Available Grit Size	Sheet Dimension 9" X 11" Without PSA
80	PRE001
120	PRE002
180	PRE003
220	PRE004
320	PRE005
400	PRE006

Available Grit Size	Sheet Dimension 9" X 11" Without PSA
600	PRE007
800	PRE008
1000	PRE009
1200	PRE010
1500	PRE011
2500	PRE012

Economy Grade SIC Papers

Available Grit Size	Sheet Dimension 9" X 11" Without PSA
80	EC001
120	EC002
180	EC003
220	EC004
320	EC005
400	EC006

Available Grit Size	Sheet Dimension 9" X 11" Without PSA
600	EC007
800	EC008
1000	EC009
1200	EC010
1500	EC011
2500	EC012



SIC Papers

SIC

REGULAR GRADE

Grinding Disc	GRIT	8" Code no	10" Code no	12" Code no
With PSA 	80	EA001	EAE001	ESE121
	120	EA002	EAE002	ESE122
	180	EA003	EAE003	ESE123
	220	EA004	EAE004	ESE124
	320	EA005	EAE005	ESE125
	400	EA006	EAE006	ESE126
	600	EA007	EAE007	ESE127
	800	EA008	EAE008	ESE128
	1000	EA009	EAE009	ESE129
	1200	EA010	EAE010	ESE130
	1500	EA011	EAE011	ESE131
	2000	EA012	EAE012	ESE132

Grinding Disc	GRIT	8" Code no	10" Code no	12" Code no
Without PSA	80	ED001	EDE001	ESE101
	120	ED002	EDE002	ESE102
	180	ED003	EDE003	ESE103
	220	ED004	EDE004	ESE104
	320	ED005	EDE005	ESE105
	400	ED006	EDE006	ESE106
	600	ED007	EDE007	ESE107
	800	ED008	EDE008	ESE108
	1000	ED009	EDE009	ESE109
	1200	ED010	EDE010	ESE100
	1500	ED011	EDE011	ESE111
	2000	ED012	EDE012	ESE112



SIC Papers

SIC

PREMIUM GRADE

Grinding Disc	GRIT	8" Code no	10" Code no	12" Code no
With PSA	80	PRE013	PRE025	PRE037
	120	PRE014	PRE026	PRE038
	180	PRE015	PRE027	PRE039
	220	PRE016	PRE028	PRE040
	320	PRE017	PRE029	PRE041
	400	PRE018	PRE030	PRE042
	600	PRE019	PRE031	PRE043
	800	PRE020	PRE032	PRE044
	1000	PRE021	PRE033	PRE045
	1200	PRE022	PRE034	PRE046
	1500	PRE023	PRE035	PRE047
	2500	PRE024	PRE036	PRE048

Grinding Disc	GRIT	8" Code no	10" Code no	12" Code no
Without PSA	80	PRE049	PRE061	PRE073
	120	PRE050	PRE062	PRE074
	180	PRE051	PRE063	PRE075
	220	PRE052	PRE064	PRE076
	320	PRE053	PRE065	PRE077
	400	PRE054	PRE066	PRE078
	600	PRE055	PRE067	PRE079
	800	PRE056	PRE068	PRE080
	1000	PRE057	PRE069	PRE081
	1200	PRE058	PRE070	PRE082
	1500	PRE059	PRE071	PRE083
	2500	PRE060	PRE072	PRE084



SIC Papers

SIC

ECONOMY GRADE

Grinding Disc	GRIT	8" Code no	10" Code no	12" Code no
With PSA	80	EC0013	EC0025	EC0037
	120	EC0014	EC0026	EC0038
	180	EC0015	EC0027	EC0039
	220	EC0016	EC0028	EC0040
	320	EC0017	EC0029	EC0041
	400	EC0018	EC0030	EC0042
	600	EC0019	EC0031	EC0043
	800	EC0020	EC0032	EC0044
	1000	EC0021	EC0033	EC0045
	1200	EC0022	EC0034	EC0046
	1500	EC0023	EC0035	EC0047
	2500	EC0024	EC0036	EC0048

Grinding Disc	GRIT	8" Code no	10" Code no	12" Code no
Without PSA	80	EC049	EC061	EC101
	120	EC050	EC062	EC102
	180	EC051	EC063	EC103
	220	EC052	EC064	EC104
	320	EC053	EC065	EC105
	400	EC054	EC066	EC106
	600	EC055	EC067	EC107
	800	EC056	EC068	EC108
	1000	EC057	EC069	EC109
	1200	EC058	EC070	EC110
	1500	EC059	EC071	EC111
	2500	EC060	EC072	EC112

PREMIUM QUALITY MAGNETIC SYSTEM

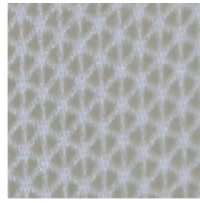
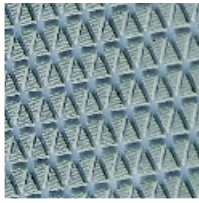
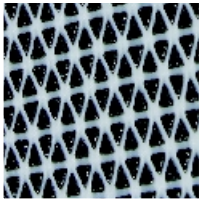


Reduces the time involved in replacing PSA backed consumables

This magnetic system consists of magnetic substrate disc and a ferromagnetic carrier sheet.

Product Name	8" Code no	10" Code no	12" Code no
Magnetic Substrate Disc PSA backing Pasted on the Aluminium platen	TMGD801	TMGD802	TMGD803
Ferromagnetic Carrier Sheet for sand paper / cloths Attached on the magnetic disc Serves as backing for PSA backed consumables	TMGDF801	TMGDF802	TMGDF803

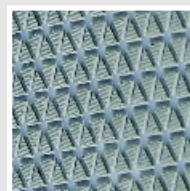
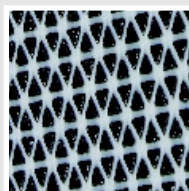
DIAMOND EMBEDDED DISCS



Replaces the conventional silicon carbide abrasive discs. Can process 6000 to 8000 samples.

Minimizes Edge Rounding of the sample

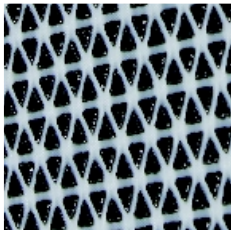
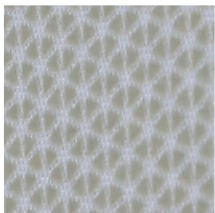


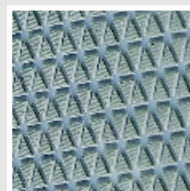
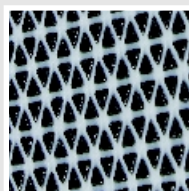


Diamond Embedded Discs

Resin Bonded Discs

German Grade

Embedded Disc	Size μm	Diameter (mm)	Code No. PSA backed	Code No. Metal backed
APOLLO S Hard Ferrous materials 	125	200	DRS1251	DRM1251
		250	DRS1252	DRM1252
		300	DRS1253	DRM1253
		350	DRS1254	DRM1254
	91	200	DRS911	DRM911
		250	DRS912	DRM912
		300	DRS913	DRM913
		350	DRS914	DRM914
	75	200	DRS751	DRM751
		250	DRS752	DRM752
		300	DRS753	DRM753
		350	DRS754	DRM754
	54	200	DRS541	DRM541
		250	DRS542	DRM542
		300	DRS543	DRM543
		350	DRS544	DRM544
	18	200	DRS181	DRM181
		250	DRS182	DRM182
		300	DRS183	DRM183
		350	DRS184	DRM184
CARAT Fine grinding application. Nitride and oxide layer on steel can be ground without chipping. 	15	200	DRS151	DRM151
		250	DRS152	DRM152
		300	DRS153	DRM153
	6	200	DRS61	DRM61
		250	DRS62	DRM62
		300	DRS63	DRM63
	3	200	DRS31	DRM31
		250	DRS32	DRM32
		300	DRS33	DRM33

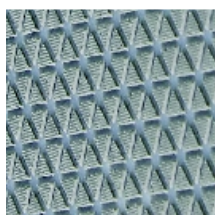


Diamond Embedded Discs

Resin Bonded Discs

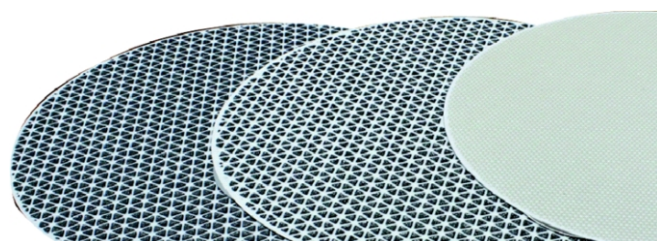
German Grade

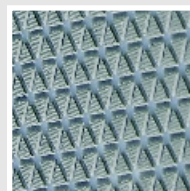
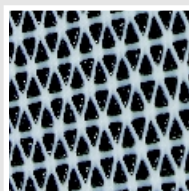
Embedded Disc	Size μm	Diameter (mm)	Code No. PSA backed	Code No. Metal backed
SQUADRO M Patterned Surface Reduces the grinding time compared to Apollo and Carat discs	60	200	DRS601T	DRM601T
		250	DRS602T	DRM602T
		300	DRS603T	DRM603T
		350	DRS604T	DRM604T
	30	200	DRS301T	DRM301T
		250	DRS302T	DRM302T
		300	DRS303T	DRM303T
		350	DRS304T	DRM304T
	15	200	DRS151T	DRM151T
		250	DRS152T	DRM152T
		300	DRS153T	DRM153T
		350	DRS154T	DRM154T
	6	200	DRS61T	DRM61T
		250	DRS62T	DRM62T
		300	DRS63T	DRM63T
		350	DRS64T	DRM64T
	3	200	DRS31T	DRM31T
		250	DRS32T	DRM32T
		300	DRS33T	DRM33T
		350	DRS34T	DRM34T



Note:

Lubricant : Water / Water free lubricants for corrosive materials.

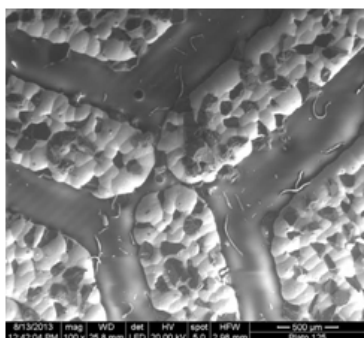




Diamond Embedded Discs

Metal Bonded Discs German Grade

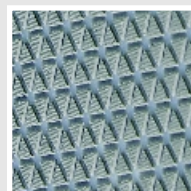
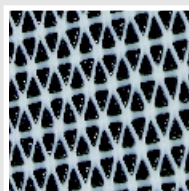
Embedded Disc	Size μm	Diameter (mm)	Code No. PSA backed	Code No. Metal backed
PLATO High hardness ferrous material, concrete and ceramics	125	200	DMS1251	DMM1251
		250	DMS1252	DMM1252
		300	DMS1253	DMM1253
	75	200	DMS751	DMM751
		250	DMS752	DMM752
		300	DMS753	DMM753
	54	200	DMS541	DMM541
		250	DMS542	DMM542
		300	DMS543	DMM543
	10	200	DMS101	DMM101
		250	DMS102	DMM102
		300	DMS103	DMM103



Note:

Lubricant : Water / Water free lubricants for corrosive materials.





Diamond Embedded Discs

Resin Bonded Discs

USA Grade

Flexible Magnetic Backing

GRIT	8" (203 mm)	10" (254 mm)	12" (305 mm)
80	CM506-8G	CM506-10G	CM506-12G
120	CM506-8R	CM506-10R	CM506-12R
220	CM506-8Y	CM506-10Y	CM506-12Y
600	CM506-8B	CM506-10B	CM506-12B
1200	CM506-8O	CM506-10O	CM506-12O

Metal Bonded Discs

USA Grade

PSA Backing

MICRON	8" (203 mm)	12" (305 mm)
163	M190-165	M191-165
70	M190-70	M191-70
45	M190-45	M191-45
30	M190-30	M191-30
15	M190-15	M191-15
9	M190-9	M191-9



Resin Bonded Discs

ECONOMY

GRIT	8" (203 mm)	10" (254 mm)	12" (305 mm)
80	CM506-8L0	CM506-10L0	CM506-12L0
120	CM506-8L1	CM506-10L1	CM506-12L1
220	CM506-8L2	CM506-10L2	CM506-12L2
600	CM506-8L3	CM506-10L3	CM506-12L3
1200	CM506-8L4	CM506-10L4	CM506-12L4



SPECTRO GRINDING DISCS

Huge samples subjected to spectrographic analysis are coarse ground through these discs. The disc is composed of coarse alumina abrasive.

GRIT SIZE	Code no	SIZE (Dia X ID) mm	Backing Type
36	SGD002	350 x 40	Without PSA
60	SGD003	350 x 40	Without PSA
80	SGD004	350 x 40	Without PSA



PORTABLE GRINDING DISCS

These grinding discs are used in Portable Grinding Machines.

Applications that require the work piece to be tested in its original environment.

Example: foundries, welding shops, fabrication plants, steel mills, forge shops and shipyard.

Available Grit Size (30 mm)	Code No With PSA
80	SED007
120	SED008
180	SED009
220	SED010
320	SED011
400	SED012
600	SED013
800	SED014
1000	SED015
1200	SED016
1500	SED017
2000	SED018

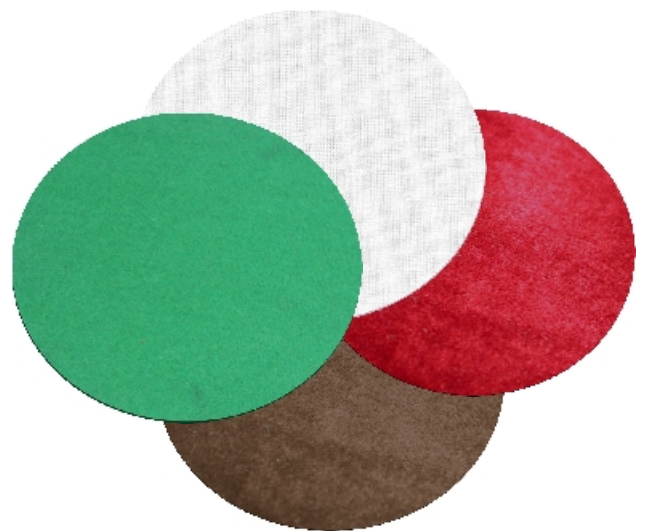




Polishing Cloth

Polishing operation is aimed at achieving mirror finish on the sample surface for further microscopic analysis. The right combination of material with proper polishing media yields a perfect finish most suitable for the application.

Chennai Metco offers a vast range of polishing consumables for most demanding applications.





POLISHING CLOTH

Cloth	NAP	Fabric	Recommended Use	
BILLIARDS <i>Rough Polishing</i>	Napless	Wool	Used with 6-12 μ diamond paste and aerosol spray.	
VELVET <i>Fine Polishing</i>	Long Napped	Synthetic	Used with 3-4 μ diamond paste and aerosol spray.	
MICRO CLOTH <i>Ultra - Fine Polishing</i>	Short Nap	Synthetic rayon	Used with 0.5-1 μ diamond paste and aerosol spray.	
SELVYT <i>For Perfect mirror finish</i>	Short Piled	Cotton	Alumina / colloidal silica suspension.	

Polishing Cloth Without PSA

Polishing Cloth	Product Name	QTY	10" Code No	12" Code No	14" Code No
Without PSA	Velvet	10	PC001	PC12V	PC14V
	Micro	10	PC002	PC12M	PC14M
	Selvyt	10	PC003	PC12S	PC14S
	Billards	10	PC004	PC12B	PC14B
	Velvet (Black)	10	LP10PC	LP12PC	
	Velvet (Brown)	10	LP10BR	LP12BRPC	

Polishing Cloth With PSA

Polishing Cloth	Product Name	QTY	8" Code No	10" Code No	12" Code No
With PSA	Velvet (Black)	10	LP001	LP002	LP005
	Velvet (Brown)	10	LP003	LP004	LP006



POLISHING CLOTH

Polishing Cloth

USA Grade

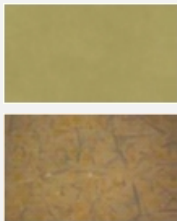
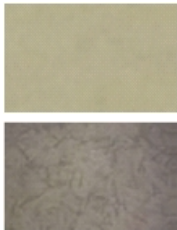
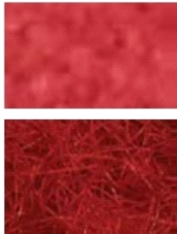
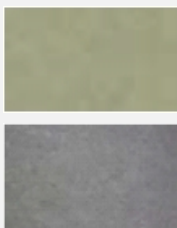
Polishing Cloth	Cloth Design	NAP	FABRIC	Recommended Use
CHEM PAD Final polishing on titanium, stainless, lead/tin solders, electronic packages and soft non-ferrous and plastics	 	Napless	Soft synthetic chemically resistant	Used with aluminum oxide powders, colloidal silica suspensions and 1 μ and finer diamond products
DIA DAC Pre-polishing stages on ferrous and non-ferrous materials, petrographic samples and ceramics.	 	Napless	Satin acetate woven pure medium hard silk cloth of very close weave	Used with 3 μ diamond products.
DIA PLUS Polishing on Ferrous and sintered carbides. Excellent for unmounted samples or manual polishing	 	Long Napped	Synthetic Cloth	Used with 3 μ and finer diamond products, alumina suspensions..
DIA PLAN Maintain Flatness on hard / very hard materials.	 	Napless	Woven polyester nylon cloth of close weave	Used with 15 to 3 μ diamond products.
DIA MOL Typically used for softer materials	 	Napless	Woven wool medium / soft	Used with 6 to 1 μ diamond. Alumina powders.



POLISHING CLOTH

Polishing Cloth

USA Grade

Polishing Cloth	Cloth Design	NAP	FABRIC	Recommended Use
DNA-NAP Final Polishing of all ferrous metals and sintered carbides		Very short napped	Synthetic Cloth	Used with 1 μ and finer diamond
VEL LAP Used for Final polishing of soft metals.		Short Nap	White Synthetic	Used with Aluminas, diamond and colloidal silica suspensions.
MICRO CLOTH Final polishing of all materials. Higher removal		Short Napped	Synthetic rayon	Used with Alumina and 1 μ diamond suspension.
RED FLAT Rough and intermediate polishing of all metals		Napless	100% pure virgin wool fabric plucked rather than sheared pile	Used with 1 μ diamond and Alumina suspensions
PAN W Maintain flatness, edge and inclusion retention in pre-polishing stages on metals, ceramics etc		Napless	Hard Synthetic Chemotextile	Used with 3 μ or finer diamond compounds



POLISHING CLOTH

Polishing Cloth With PSA

USA Grade

With PSA	No / Pack	8" Code No	10" Code No	12" Code No
Dia - Mol	5	M620-8PS	M620-10PS	M620-12PS
Dia - Nap	5	M630-8PS	M630-10PS	M630-12PS
Chem Pad	5	M660-8PS	M660-10PS	M660-12PS
Dia - Dac	5	M615-8PS	M615-10PS	M615-12PS
Dia - Plan	5	M610-8PS	M610-10PS	M610-12PS
Dia - Plus	5	M625-8PS	M625-10PS	M625-12PS
Red Felt	10	M570-8PS	M570-10PS	M570-12PS
Micro	10	M500-8PS	M500-10PS	M500-12PS
Vel Lab	10	M536-8PS	M536-10PS	M536-12PS
Pan W	10	M560-8PS	M560-10PS	M560-12PS

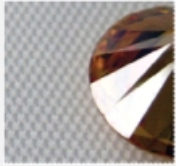
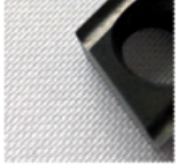
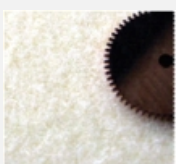
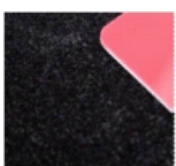
Polishing Cloth Magnetic Backing

USA Grade

With PSA	No / Pack	8" Code No	10" Code No	12" Code No
Dia - Mol	5	M620-8MD	M620-10MD	M620-12MD
Pan w	5	M560-8MD	M560-10MD	M560-12MD
Micro	5	M500-8MD	M500-10MD	M500-12MD
Dia Nap	5	M630-8MD	M630-10MD	M630-12MD
Chem Pad	5	M660-8MD	M660-10MD	M660-12MD
Dia Dac	5	M615-8MD	M615-10MD	M615-12MD
Dia Plan	5	M610-8MD	M610-10MD	M610-12MD
Dia Plus	5	M625-8MD	M625-10MD	M625-12MD

POLISHING CLOTH

German Grade

Polishing Cloth	Cloth Design	Thickness	FABRIC	Recommended Use
QUICK-STEP First choice for pre-polishing. Very high removal rate on all materials		0.5 mm	Hard Synthetic fibre	Used with 6 - 15µ diamond products
STEP-PLUS Good removal rate and superb finishing on almost all materials		0.75 mm	Medium hard synthetic fiber cloth	Used with 6 - 3µ diamond products
SAMBA-N Fine polishing of larger workpieces, excellent for manual polishing		0.65 mm	Medium hard woven wool polishing cloth	Used with 1 - 15µ diamond products.
JAZZ-PLUS Good removal rate and superb finish on metals and optical materials preparation		0.7 mm	Non-woven polishing pad, PU impregnated	Used with 1 - 6µ diamond products
FOX-PLUS Good removal rate and superb finishing on all kinds of metals		0.85 mm	Flocked universal polishing pad	Used with 1 - 15µ diamond products
SWING-PLUS Polishing pad for super-finishing.		0.7 mm	Flocked universal polishing cloth with very low flock density	Used with 0.1 - 6µ diamond products
ALUPOL-PLUS Perfect cross-over pad, for diamond and oxide polishing.		0.6 mm	Flocked universal polishing cloth with extremely high flock density	Used with 0.1 - 3µ diamond, Alumina suspensions
MAMBO Final finishing with oxide polishing slurries		1.5 mm	Chemically resistant, spongy oxide polishing cloth	Alumina and colloidal silica suspensions

Polishing Cloth With PSA

German Grade

With PSA	8" Code No	10" Code No	12" Code No	14" Code No	16" Code No
Quick-Step	PCG01	PCG11	PCG21	PCG31	PCG41
Step-Plus	PCG02	PCG12	PCG22	PCG32	PCG42
Samba-N	PCG03	PCG13	PCG23	PCG33	PCG43
Jazz-Plus	PCG04	PCG14	PCG24	PCG34	PCG44
Fox-Plus	PCG05	PCG15	PCG25	PCG35	PCG45
Swing-Plus	PCG06	PCG16	PCG26	PCG36	PCG46
Alupol-Plus	PCG07	PCG17	PCG27	PCG37	PCG47
Mambo	PCG08	PCG18	PCG28	PCG38	PCG48

Polishing Cloth Metal Backing

German Grade

With PSA	8" Code No	10" Code No	12" Code No	14" Code No
Quick-Step	PDG01	PDG11	PDG21	PDG31
Step-Plus	PDG02	PDG12	PDG22	PDG32
Samba-N	PDG03	PDG13	PDG23	PDG33
Jazz-Plus	PDG04	PDG14	PDG04	PDG34
Fox-Plus	PDG05	PDG15	PDG25	PDG35
Swing-Plus	PDG06	PDG16	PDG26	PDG36
Alupol-Plus	PDG07	PDG17	PDG27	PDG37
Mambo	PDG08	PDG18	PDG28	PDG38

Portable Polishing cloths

The portable polishing cloths find great application in portable polishing devices. Applications that involve on-site inspection of metals require these portable cloths to polish the surface of interest.

Polishing Cloth	Product Name	Size (mm)	Code No
With PSA	Velvet Polishing Cloth-Grey	30	PCS002
	Velvet Polishing Cloth- Black (Premium Quality)	30	LP30PS
	Velvet Polishing Cloth Brown (Premium Quality)	30	LP30BRPS
With PSA (German Grade)	Technotron MM 420	75	TECH029



DIAMOND SLURRIES & LUBRICANTS

Type 1: Diamond Slurries to be used
with Lubricants

Type 2: Lubricant integrated
Diamond slurries

Type 1	Type 2
Diamond Slurry + Lubricant ↓ Quick Result with just few drops of slurry and lubricant	Lubricant Integrated ↓ Results achieved at a moderate rate, Cost - effective.

Polycrystalline

Water based Diamond Slurries

Should be used with lubricants (Type 1)

USA Grade

μm	Bottle only 8 oz (240 ml)
0.25	M270
1	M271
3	M272
6	M273
9	M274
15	M275
30	M276
45	M277



DIAMOND SLURRIES

Monocrystalline Water based Diamond Slurries

Should be used with lubricants (Type 1)

USA Grade

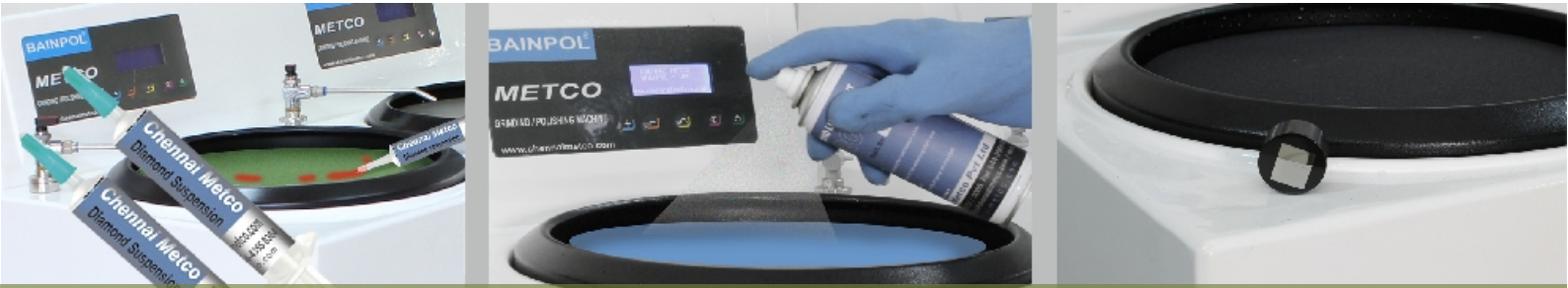
µm	Bottle only 8 oz (240 ml)
0.10	M250
0.25	M251
0.5	M252
1	M253
3	M254
6	M255
9	M256
15	M257
30	M258
45	M259

Lubricants to be used with diamond slurries

USA Grade

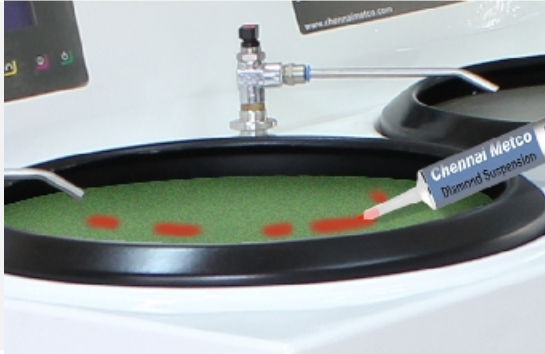
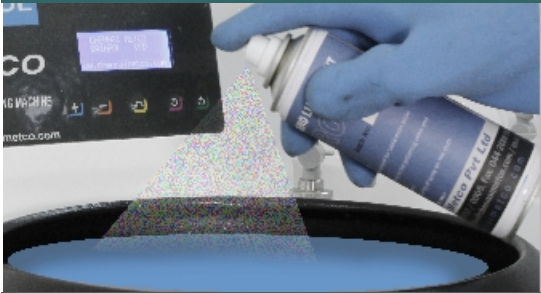
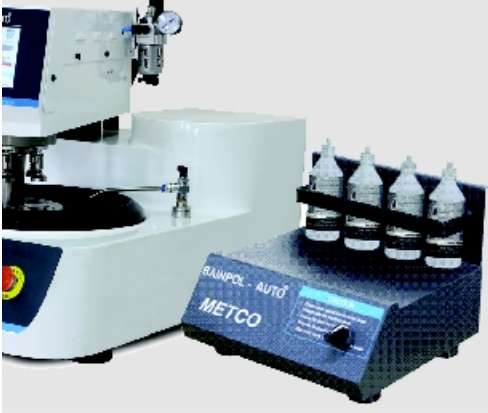
Type	Quart (950 ml)	Gallon (3.8L)	5 Gallon (19L)
Purple (Alcohol based)	M225-32	M225-128	M225-640
Green (Water based)	M226-32	M226-128	M226-640
Red (Water/Oil based)	M227-32	M227-128	M227-640
Brown (Alcohol based)	M220-32	—	—
Blue Lube(Ethanol based)	M222	M223	M224

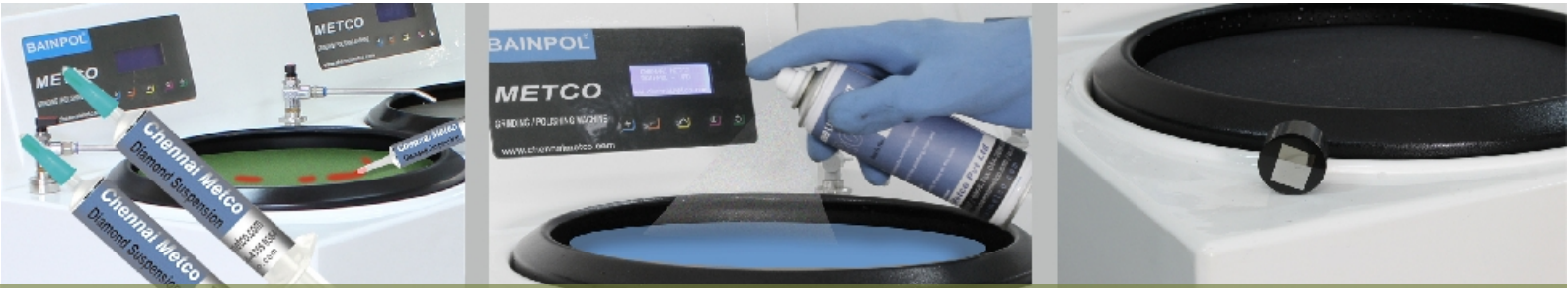




DIAMOND PASTE AND LUBRICANTS

DIAMOND PASTE AND LUBRICANTS

Diamond Past	Particle Size	Weight	Code No
	0.5-1 Miron	0.005kg / 5cc	DP001
	3-4 Micron	0.005kg / 5cc	DP002
	6-12 Micron	0.005kg / 5cc	DP003
Lubricant Aerosol Spray	QTY		Code No
	200 ml		DL001
Lubricant Aerosol Liquid	QTY		Code No
	1 Ltr		DL001L



DIAMOND PASTE AND LUBRICANTS

Diamond Paste

USA Grade

Product	μm	Code No 5g	Code No 10g	Code No 20g
Monocrystalline Water and Oil Soluble	0.25	M200	—	M201
	1	M202	—	M203
	3	M204	—	M205
	6	M206	—	M207
	9	M208	—	M209
	15	M210	—	M211
	30	M212	—	M213
	45	M214	—	M215
Polycrystalline Oil Soluble	0.25	—	M200P	—
	1	—	M202P	—
	3	—	M204P	—
	6	—	M206P	—
	9	—	M208P	—
	15	—	M210P	—



Diamond Aerosol Spray

USA Grade

Product	μm	QTY	Code No
Diamond Aerosol Spray	0.25	150 ml	M288
	1	150 ml	M289
	3	150 ml	M290
	6	150 ml	M291
	9	150 ml	M292
	15	150 ml	M293
	30	150 ml	M294
	45	150 ml	M295





DIAMOND SUSPENSION

PREMIUM DIAMOND SUSPENSION

Polycrystalline water based
diamond suspension

μm	240 ml
0.25	M270
1	M271
3	M272
6	M273
9	M274
15	M275
30	M276
45	M277

Monocrystalline water based
diamond suspension

μm	240 ml
0.1	M250
0.25	M251
0.5	M252
1	M253
3	M254
6	M255
9	M256
15	M257
30	M258
45	M259

ECONOMY DIAMOND SUSPENSION

Polycrystalline water based
diamond suspension

μm	240 ml
0.25	ECO001
1	ECO002
3	ECO003
6	ECO004
9	ECO005
15	ECO006
30	ECO007
45	ECO008

Monocrystalline water based
diamond suspension

μm	240 ml
0.1	ECO017
0.25	ECO018
0.5	ECO019
1	ECO020
3	ECO021
6	ECO022
9	ECO023
15	ECO024
30	ECO025
45	ECO026





Oxide Polishing

ALUMINA COMPOUNDS For Ultra-Fine polishing

Product	μm	QTY	Code No
Alumina Powder	1	1 Kg	AP001
Alumina Fast Pol (Alumina Suspension)	1	200 ml	FP001



Alumina and colloidal silica compounds

For Ultra-Fine polishing
De-agglomerated alumina

Premium quality

Product	μm	QTY	Code No
Alumina Powder	0.05	455g	M300
	0.3	455g	M301
	1	455g	M302
Alumina Suspensions	0.05	200 ml	IFP00004
	0.1	200 ml	IFP00002
	0.3	200 ml	IFP00003
	1	200 ml	IFP00001
Collodial Silica pH 10.5	0.04	1000 ml	M511-OPSQ
	0.05	1000 ml	OPS00001
	0.06	1000 ml	M306-32



Economy

Product	μm	QTY	Code No
Colloidal silica	0.04	1000ml	WC511-OPSQ

Metallurgical Charts

Code No.	Product Name	QTY (No)	Size (L XB) mm
AHC001	Alpha Hardness Conversion	1	650 x 500
GS0004	Grain size	1	900 x 630
IR0003	Inclusion Rating	1	820 x 700
ICD002	Iron Carbon Diagram	1	680 x 500

Terms & Conditions	
GST No	33AABCC5678E1ZS
GST Tax	SGST 9% + CGST 9% = 18% within Tamil Nadu, 18% IGST for Outstate
Packing Charge	5% Extra
HSN Code	9024 9000
Freight	Extra to your account
Delivery	Standard consumables - 1 week; Imported Consumables - 4 to 6 weeks
Payment	100% against Performa Invoice
Insurance	Extra to your account
Address	Chennai Metco Pvt Ltd, C8, Ambattur Industrial Estate, Chennai - 600 058.
Phone No	+91-44-2688 0737, 2688 0005, 3999 5000, 09600094293
Fax No	+91-44-2688 0850
Email Id	consumables@chennaietco.com, consumables@chennaietco.co.in, mktg@chennaietco.com
Website	www.chennaietco.com
Bank Details	State Bank of India, Chennai - 600 058, AME Ambattur Branch - 14376
Account Number	34219379099
MICR Code Number	600002194
IFCS/RTGS Code	SBIN0014376
Swift Code No	SBININBB292
AD Code	0000265-9020066

Metallography Consumables



Chennai Metco Pvt Ltd

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