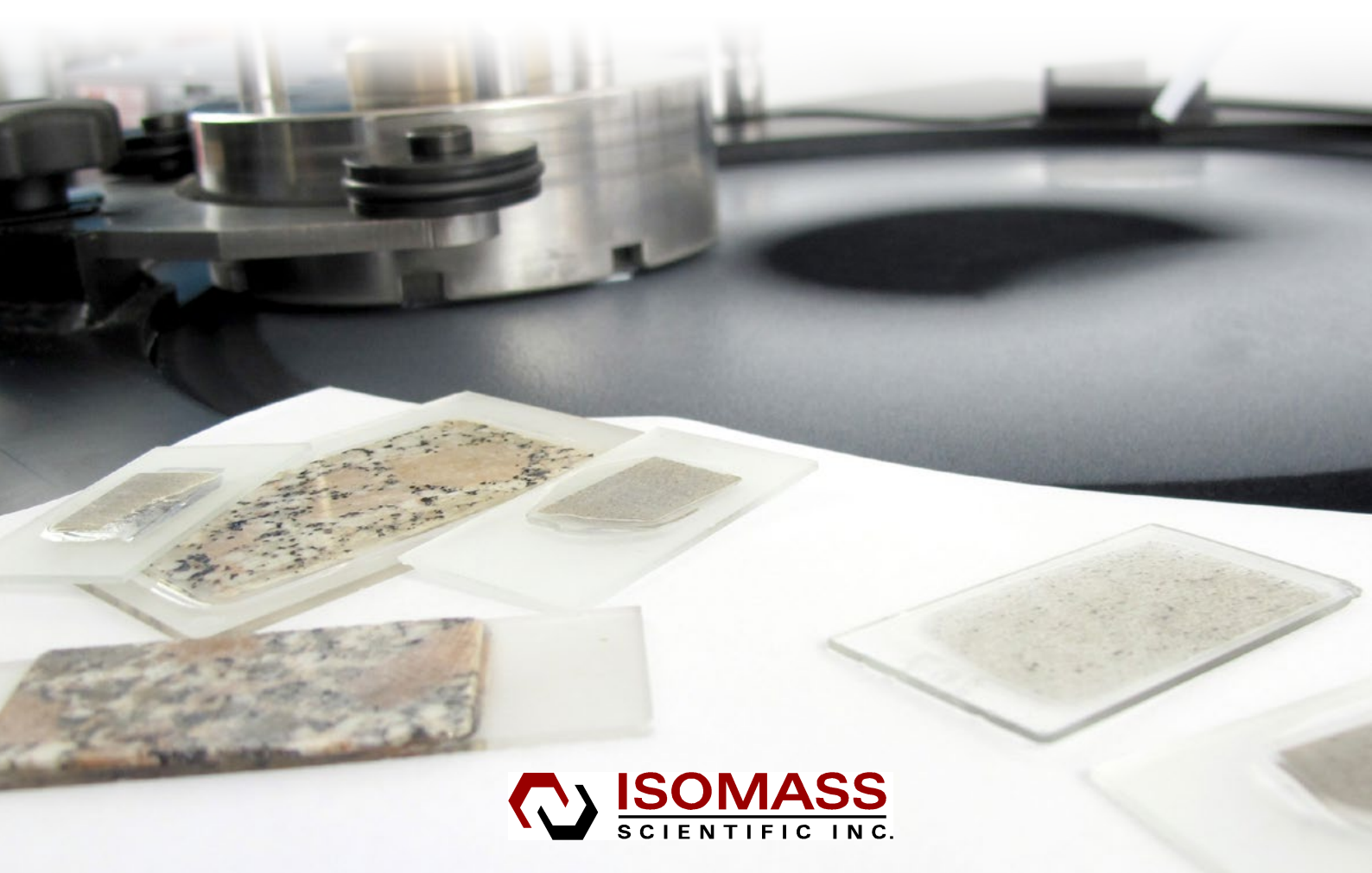
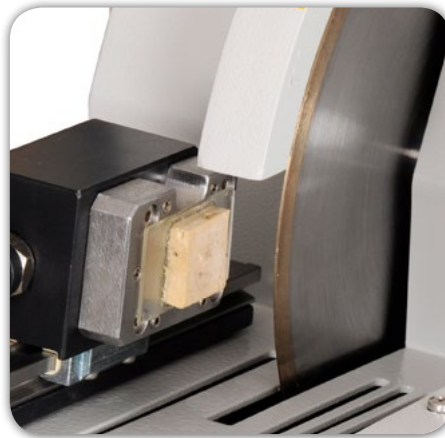


Kemet

PETROGRAPHY & GEOLOGICAL SAMPLE PREPARATION

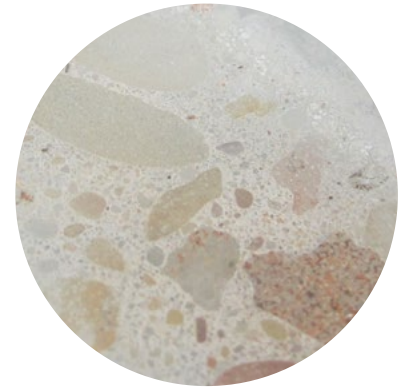


Kemet Petrography Products

Kemet
INTERNATIONAL LTD

Since 1938, Kemet has been at the forefront of precision polishing technology, producing quality diamond pastes, slurries and composite lapping/polishing materials in our purpose built facilities.

For geological and petrographic sample preparation, Kemet offer a complete range of instruments to enable a piece of rock to be processed to a 20 micron thin section specimen. Our equipment offers the latest in technology and functional design to provide high levels of performance in preparation of mineralogical samples for microscopic examination.



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PETROGRAPHY

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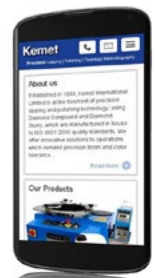
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Geocut - Cutter for Geological Specimens

A geological cutting machine, for sectioning rock, ceramics, minerals, glass, concrete etc.

- Z-axis cutting wheel positioning and table-feed cutting system
- Manual positioning of the specimen in X and Y axis
- X-Y table bed and cross feed table for cutting of plane parallel sections
- Mechanical display of cutting thickness
- Cutting capacity: up to $\varnothing 85$ mm solid stock from $\varnothing 250$ mm diamond wheels. Up to $\varnothing 110$ mm solid stock from $\varnothing 300$ mm diamond wheels
- Compact 4 kW cutting motor
- Electronic brake system
- Interlocking safety switch for hood
- Various clamping systems available



Model	Geocut
Chop Cutting, Z Axis	Manual
Table Feed Cutting, Y Axis	Manual
Parallel Cutting, X Axis	Manual
Wheel Diameter (mm)	$\varnothing 250 - \varnothing 300$
Cutting Capacity $\varnothing 250$ (mm)	$\varnothing 85$
Cutting Capacity $\varnothing 300$ (mm)	$\varnothing 110$
Cutting Capacity $\varnothing 300$, # (mm)	70 x 200
Y, X, Z Axis Travel (mm)	(Y) 225, (X) 70, (Z) 125
T-Slot table dimension, WxD (mm)	380 x 250
T-Slot dimension (mm)	12
Cutting Power kW (S1)	4
Cutting Power kW (S3)	5.1
Wheel Speed (rpm)	2850
Size, WxDxH (cm)	93 x 93 x 63
Size, WxDxH (cm) (with cabinet)	93 x 93 x 139
Weight (kg)	210
Cooling Unit (l)	40
Product Code	345280

The Geocut has a cast aluminium base on which the motor and working space are secured in two separate housings. A large window and a sealed, 12V lamp in the cutting chamber allow safe observation of the cutting process.

The large feed table and generous work area can accommodate a variety of different clamping devices and has a long travel depth making the Geocut ideal for cutting long or deep samples in a single pass. An X-Y Cross table is standard for parallel and serial cutting. A cool water recirculating system is an option with two water jets located on each side of the cut-off wheel.

Many petrographic cutting applications require the sectioning of a specimen from an irregular shaped sample, creating positioning and clamping difficulties for the operator. Kemet offers a number of special clamping devices to overcome these difficulties



Servocut - Thin Section Cutting Machine



The Servocut 401 has a cast aluminium base on which the motor and the working space are in two separate housings. A large window and a sealed LED lamp in the cutting chamber allow safe observation of the cutting process. The large, T-slotted feed table and generous work area can accommodate a variety of different clamping devices. The feed table also has a long travel depth making the Servocut ideal for cutting long or deep samples in a single pass. A side access port makes it possible to make transverse sections on long core samples and a stainless steel tray catches small specimens. The precision cutting of this machine can eliminate the need for grinding action before lapping the specimen.

The Servocut 401 has X-Y-Z triple axes cutting capability:

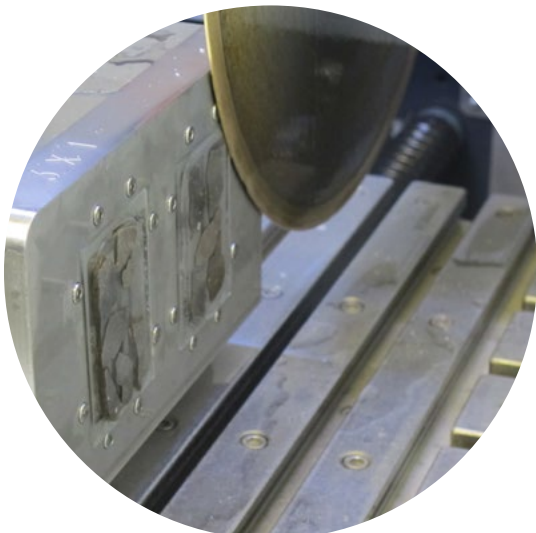
- Z-axis Chop cutting: The specimen is clamped and the cut-off wheel approaches the specimen.
- Y-axis Table-feed cutting: Feeding the clamped specimen into a rotating cut-off wheel using the T-slotted feed table.
- X-axis Parallel Cutting (optional): Parallel serial sectioning in the x-axis with optional movable x-bed.
- A standard 80 mm diameter outlet for fume extraction is at the back of the hood.

An optional integrated vacuum pump allows cutting of not only large rock samples, but also slide mounted sections.

Kemet offer a range of vacuum fixtures which give the Servocut potential for cutting either multiple standard slide mounted specimens, or custom vacuum fixtures for special slide sizes up to 150mm x 100mm.



Custom slide mounts available on request



All of our cutting machines can be modified to provide cutting requirements on most materials. Other versions available, see our metallography catalogue or website for details

Model	Servocut 401-AA
Chop Cutting, Z Axis	Automatic
Table Feed Cutting, Y Axis	Automatic
Parallel Cutting, X Axis	Automatic (Optional)
HMI Touch Screen (inch)	7"
Step;Segment;Diagonal Cut	Optional
Pulse Cutting	Yes
Wheel Diameter (mm)	Ø 350 - Ø 400
Cutting Capacity Ø350 (mm)	Ø 120
Cutting Capacity Ø400 (mm)	Ø 145
Cutting Capacity Ø400, # (mm)	85 x 285
Y, X, Z Axis Travel (mm)	(Y) 300, (X) 100, (Z) 225
T-Slot table dimension, WxD (mm)	521 x 402
T-Slot dimension (mm)	12
Cutting Power kW (S1), (S3)	(5.5), (7.9)
Wheel Speed (rpm)	2200
Variable Wheel Speed (rpm)	600 - 3200 (Optional)
Table Feedrate, µm (mm/s)	100 - 5000
Size, WxDxH (cm)	125 x 106 x 155
Weight (kg)	540
Cooling Unit (lt)	100
Voltage	380V-3 Phase-50Hz

Diamond Cut-off Wheels

Continuous rim, diamond coated cut off wheels for Petrographic sample preparation.

Type / Materials	Diameter	Thickness	Arbor	Code
Low concentration metal bond for ceramics, glass and geological samples.	100 mm	0.3 mm	12.7 mm	600033
	125 mm	0.4 mm	12.7 mm	600034
	150 mm	0.5 mm	12.7 mm	600035
	175 mm	0.6 mm	12.7 mm	600036
	200 mm	0.8 mm	12.7 mm	600037
Continuous rim diamond cut off wheels for petrography.	100 mm	0.4 mm	12.7 mm	600038
	150 mm	1.0 mm	12.7 mm	600044
	200 mm	1.35 mm	12.7 mm	600048
	250 mm	1.35 mm	32 mm	600049
	300 mm	1.6 mm	32 mm	600059
	350 mm	2.4 mm	32 mm	600075

Other sizes are available on request.



Kemet Dressing Stick

Used for cleaning resin and dirt particles from the diamond cut off wheels. Dimensions 25 x 25 x 150 mm

Product	Code
Dressing Stick	362240



Cutting & Coolant Fluid & Anti Rust Agent

Kemet Cutting and Coolant Fluid is a mineral oil-free, water-miscible cutting fluid that provides excellent corrosion protection and is completely free on nitrate, chlorine and zinc.

The Anti Rust Agent is for use with cut off wheels and lapping slurries to avoid corrosion or oxidation of machines and specimens.

Product	Size	Code
Cutting and Coolant Fluid	5 Litre	600096
Anti Rust Agent	5 Litre	600116



Glass Slides

Glass slides for mounting specimens are available in many sizes. The thickness of slides vary between 1.2 - 1.5mm. Use KEP & KEPT epoxy (see page 4) to bond the samples to the slide.

Glass Slides	Code	Glass Slides	Code
152 x 102 mm	363172	51 x 26 mm	362025
100 x 100 mm	363171	48 x 28 mm	361783
76 x 51 mm	361784	45 x 60 mm	363170
76 x 26 mm	361782		

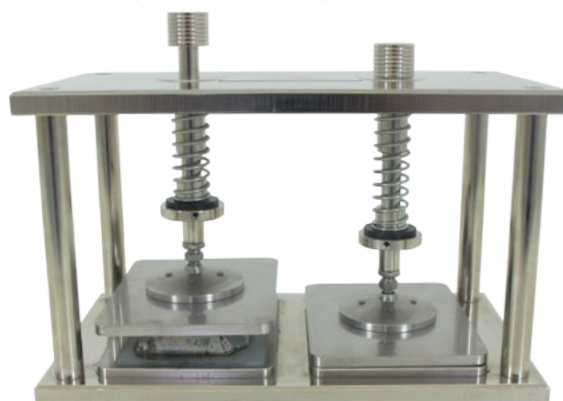
Other sizes available on request



Geofix - Mounting Fixture for Thin Sections

The Geofix is a fixture for mounting specimens to glass slides for thin sectioning. Its spring activated loading system provides a uniform thickness of bonding material between the specimen and the glass slide.

Large Geofix for 2 slides up to 152 x 102 mm



Small Geofix for 8 slides up to 76 x 51 mm



Product	Code
Small Geofix	345286
Large Geofix	363084



Mounting Moulds and Accessories

A wide range of mounting moulds which can be used in conjunction with all Kemet cold mounting resins.

- KM Acrylic Resin Mould - detachable aluminium base (non-reusable)
- Teflon Mould - reusable with detachable base
- Rubber Mould - one piece (reusable)

Moulds	Size (mm)	Quantity	Code	Moulds	Size (mm)	Quantity	Code
Rubber Moulds	55 x 30	Pk 5	600727	Teflon Moulds	200	Pk 5	600723
	70 x 40	Pk 5	600728		250	Pk 5	600724
	100 x 50	Pk 5	600729		300	Pk 5	600710
	250	Pk 5	600062		400	Pk 5	600725
	300	Pk 5	600063		500	Pk 5	600726
	400	Pk 5	600064				
KM Acrylic Moulds (Acrylic with aluminium base)	250	Pk 30	600070	Accessories		Quantity	Code
	300	Pk 30	600709	Cups and stirrers	Pk 100	600058	
	400	Pk 30	600722	250ml measuring cup & stirrer	Pk 5	600730	
				Stainless steel clips	Pk 100	600050	
				Plastic clips	Pk 100	600053	
				Silicon mould release spray	500ml	600157	

Cold Mounting Resins

The Kemet range of cold mounting resins includes acrylic and epoxy solutions. Cold mounting systems are particularly useful for delicate specimens that will not withstand the heat and pressure from a hot mounting press. They are also a good way of producing high volumes of mounted samples, one mix producing many samples.

Type	Application	Cure Time	Shrinkage	Hardness	Colour	Mix Ratios	Contents	Code
KEP Epoxy	General purpose epoxy with very low shrinkage	10h at 25°C	Low	75 Shore D	Clear	2:1 by weight	1kg Resin & 500g Hardener	600410
KEPT Epoxy	Porous materials, coatings and electronic components	10h at 25°C	Low	75 Shore D	Clear	2:1 by weight	1kg Resin & 500g Hardener	600411

Vacuum Impregnation Units

Most mineralogical specimen have porosities, cavities and cracks and therefore need to be embedded under vacuum. Designed for embedding and impregnation of porous materials, these units remove the trapped air from the mounting material and eliminate any gaps between the specimen and resin.

- Self contained vacuum impregnation unit with gauge
- Incorporated vacuum pump and control circuit
- Compact and simple to use
- Efficient Impregnation
- Multi-specimen application
- Vacuum gauge



Sample impregnated with KEPT using KemVac

Model	Type	Code
KemVac	No compressed air supply required, Electrical: 220V-1 Phase-50Hz	345827
Vacumet	Compressed air supply required	345173

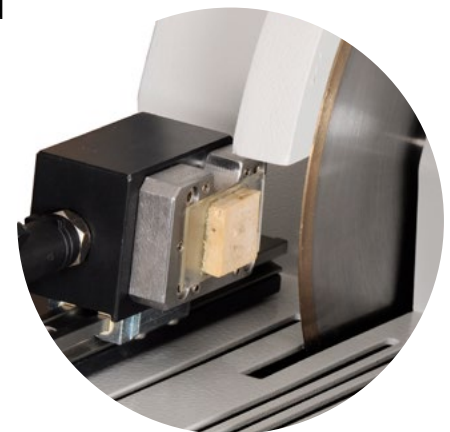
Geoform - Thin Section Cutting & Grinding



A precision thin section cutting and grinding machine, for fast and precise material removal on petrographic thin sections, the Geoform performs both the cutting and grinding processes. On the cutting module, the slide mounted specimen is fixed on a holder with vacuum and sectioned up to a thickness of 0.5mm. Water cooling during cutting avoids deformation and heat degradation. On the grinding module, a built-in digital micrometer ensures high precision, and the specimen is ground to a high standard of accuracy ready for examination or to maintain further lapping and polishing.

- The diamond cutting disc and grinding wheels share the same precisely aligned spindle, to maintain accuracy of finished samples.
- A dual, in-line filtering unit removes the moisture from the vacuum line and drains into the cutting chamber when the vacuum pump is turned off.
- Vacuum pump with gauge and filter
- Separate cutting and grinding compartments
- Micrometer for precise grinding of material
- Diamond cutting wheels up to 250 mm. diameter
- Vacuum chuck to hold 25 x 50mm slides
- Accessory kits available for larger slide sizes

Model	Geoform
Cutting Wheel & Grinding Stone Speed (rpm)	1400
Cutting Wheel Dia. (mm)	250
Grinding Wheel Dia. (mm)	175
Recirculating Tank (Optional) (l)	40
Glass Slide Dimensions (mm)	51 x 26
	76 x 26 *
	76 x 51 **
Digital Micrometer	Yes
Motor Power (HP)	550 W
Dimensions, WxDxH (cm)	53 x 75 x 42
Weight (kg)	83
Product Code	345198



Slide Accessory Kits	For slide sizes	Code
Includes sample holder and set of flanges ø73 mm	76 x 26 mm *	345718
	76 x 51 mm **	345719

Diamond Cup Wheels

Range of diamond cup grinding wheels for petrography, for use with the Geoform. Other grit sizes available on request.

Size	Micron	Code
Ø 175 mm	35	345201
Ø 175 mm	65	345200



Kemtech III - Geological Lapping Machine

The Kemtech III Geological Lapping Machine is able to accurately lap and polish thin sections mounted on glass slides down to 10 microns. Metered dosing of conventional and/or diamond abrasives is applied to the lapping plate using the aKu-Disp Geo peristaltic dispenser. The Kemet Lift Off Disc system allows quick transitions between the lapping and polishing stages.



Features & Benefits:

- aKu-Disp Geo accurate peristaltic dispensing system for metered dosing
- Capacity for up to 3 vacuum jigs
- Electronic digital timer with variable time ranges
- Sealed, maintenance free, reduction gearbox
- Integrated abrasive tank with stirrer
- Cast iron serrated Lift-Off-Disc or Aluminium Lift-Off-Disc
- Variable Speed up to 70 rpm
- Water trap and filter
- Stand-alone vacuum pump
- Connectors to suit Kemet vacuum jigs, which are available as an optional extra
- Rotated to ensure free unhindered rotation of jigs

Technical Specifications

Height	400 mm
Working Height	310 mm
Width	800 mm
Depth	650 mm
Nett Weight	90 Kg
No of jig stations	3
Main Motor	0.37 kW
Product code	359975



The Kemtech IV geological lapping machine has a 20" lapping plate with driven rings as an option. Vacuum jigs for slides up to 152 x 102 mm are available.



152 x 102 mm thin section of concrete

Kemet 300 LVAC - Lapping/Polishing Machine

The Kemet 300 LVAC is a smaller alternative to the Kemtech III geological lapping machine for lapping and polishing geological mounted samples within a single workstation.



Technical Specifications

Lapping Plate outside Diameter	300 mm
Lapping Plate Speed	0 - 130 rpm
Conditioning Ring inside Diameter	125 mm
Conditioning Ring Outside Diameter	140 mm
Standard Electrical Supply	220V-1 Phase-50Hz
Main Drive Motor	High Torque Motor (1 HP) 0.75 kW
Dimensions	420 x 730 x 350 mm
Weight	37 kg
Product code	345467

With a 300mm diameter plate, all drive elements are mounted on a heavy duty aluminium alloy cast base, giving vibration free operation and quiet running. A water inlet with control valve are standard features.

The control panel has a process timer, variable speed control and forward / reverse control switch and its own vacuum pump and connectors to suit Kemet vacuum jigs, which are available as an optional extra.

- Manual application of lapping or polishing slurries
- Automatic dispensing systems available on request

Precision Workholding and Sizing Fixture - Vacuum Jigs

Kemet Vacuum Jigs are precision workholding and sizing fixtures, suitable for accurately sizing geological thin sections, wafers, crystals and any precision parts where parallelism and a precision finish are required.

Any components and specimens can be held which can be located inside a diameter of 110mm and are under 6mm in thickness. Special versions for larger sizes are available on application. The jigs are supplied in protective wooden cases complete with rotary union and tubing suitable for a vacuum pump and have diamond faced stoppers.

The setting jig with dial indicator enables accurate size setting to a few microns.

A range of face plates are available making the jigs suitable for holding all popular glass slide sizes. Special holding profiles can be supplied to accommodate wafers crystals and precision parts.



Vacuum Jigs (to suit slides)	Code
4 x (76 x 26 mm) or 2 x (76 x 51 mm)	362072A
6 x (52 x 26 mm)	362072B
1 x (100 x 100 mm)	362072C
6 x (48 x 28 mm)	362072D
3 x (45 x 60 mm)	362072E
1 x (152 x 102 mm)	362072F

Vacuum Jigs Accessories	Code
Rotaid rotation assist post	362895
Setting stand	361986
Cast iron setting test block (127 mm diameter)	361773

Forcipol/Forcimat TS - Polishing and Grinding Machine



Optional aKu-Disp

The Forcipol Series of grinding and polishing machines offer practical and economical solutions to your sample preparation needs. Available as single wheel and dual wheel units (200/250/300 mm wheel size) with variable rotating speeds and a digital display enabling the setting of the optimum speed for each individual preparation process.

- Electronically controlled smooth speed variation.
- Drive elements on heavy duty aluminium alloy cast base.
- Wheels mounted on ball bearings for quiet/vibration free operation and the application of high pressures to prepare even large specimens.
- Water inlet and flexible water outlets with control valves for wet grinding.

The Forcimat-TS is a microprocessor controlled sample mover designed to be used with the Forcipol. It is an automatic head with low speed for thin section and petrographic sample preparation. The pneumatic force is individually applied and adjustable between 5 N (1.1 lb.) and 60 N (13.5 lb.) from the front panel and displayed on a gauge.

The Lubomatic optional extra is an adjustable and exchangeable drip lubricator, the dosing level carried out through an adjustable flow valve.

Model	Forcimat-TS
Motor Power, Watt	100
Head Speed (rpm)	50 - 150
Sample Capacity	1 - 6
Force (N)	5 - 60
Compressed Air	6 bar
Dimensions, mm	230 x 430 x 250
Weight, kg	16
Voltage	230V-1phase-50Hz
Product Code	345285

Models	Forcipol 1V	Forcipol 2V	Forcipol 300 - 1V
No. Of Stations	1	2	1
Motor Power, HP	0.75	0.75	1
Disc Speed (rpm)	50 - 600	50 - 600	50 - 600
Disk Diameter (mm)	Ø 200 / 250	Ø 200 / 250	Ø 300
Dimensions (mm)	380 x 690 x 340	700 x 690 x 340	420 x 730 x 350
Weight (kg)	30	40	37
Voltage	230V-1phase-50Hz		
Product Code	345130	345140	345100

Geological Samples Holders	Code	Geological Samples Holders	Code
FORCIMAT specimen mover, 3 x Ø 60 mm	345411	LAP-TS special specimen holder with Boron Carbide stops for lapping of thin sections, Ø 60 mm.	345808
FORCIMAT specimen mover, 6 x Ø 40 mm	345127		
Set of insert rings for 30 mm	345128	POL-TS special specimen holder for polishing of thin sections, Ø 60 mm.	345287
Set of insert rings for 25 mm	345279		



aKu-Disp - Peristaltic Dispenser

The aKu-Disp is designed to work in conjunction with the Forcipol and Kemtech machines. It links to the machine's main timer system and the stirrer function operates as soon as power to the unit is turned on. It has manually operated variable speed controls for both the pump and stirrer.

Product	Code
aKu-Disp	345751
Spare Peristaltic Head Unit with Tube	362520
aKu-Disp Feedarm	362514
Spare Tubing (1 meter)	363109

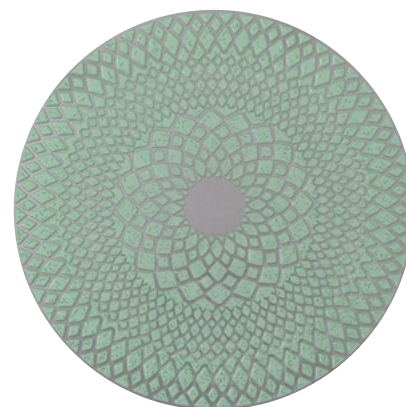


Diamond Grinding Discs

The diamond grinding discs are resin bonded.

- High and consistent stock removal while achieving perfect flatness
- Maintain flatness while providing excellent surface finish
- Suitable for magnetic mounting

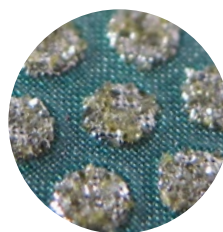
Diamond Grinding Discs			Diameter Size (mm)		
Grit	Micron	Colour	200	250	300
120	107	Yellow	343581	343577	343573
220	76	Green	343582	343578	343574
600	30	Blue/Black	343583	343579	343575



Diamond Grinding - Diaflex

Kemet Diaflex is a self-adhesive, flexible diamond material which combines the long life and aggressive cutting action of diamond with the flexibility of cloth. It is supplied in a variety of diameters, and a wide range of grit sizes. The diamond is nickel bonded and suitable for grinding delicate structures.

Grade	Grit	Micron	Diameter Size (mm)		
			200	250	300
Black (N)	120	125	342002	342026	342027
Red (N)	200	74	342005	342028	342029
Yellow (N)	400	40-50	342007	342030	342031
White (N)	800	20-30	342008	342033	342034



Close-up of nickel bonded Diaflex

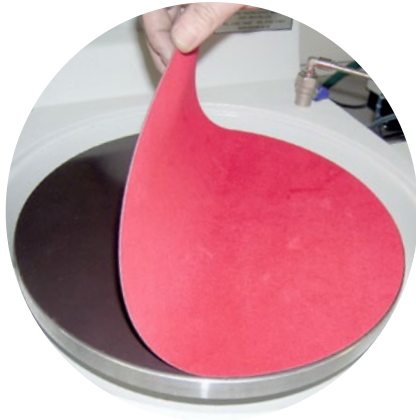
Can be supplied as plain backed.

Kemet Polishing Pads

Polishing pads enable flat polished surfaces to be produced on many softer materials. Kemet offer a wide range of self-adhesive and metallic backed polishing pads.

Name	Type	Description	Use with Recommended Diamond Micron size	Diameter (mm)			Colour
				200	250	300	
PSU-M	Chemo-textile These are manufactured to the highest standards with accurately controlled uniform thickness. Non woven pads manufactured specially for polishing processes.	These medium and hard chemo-textile cloths are for smoothing and polishing operations.	15 micron and finer	341008	341009	341010	
PSU-MM (Magnetic)				341811	341812	341813	
PAD-K (Plain)	The ultra-hard chemo-textile cloth used where fast cutting is needed.	The ultra-hard chemo-textile cloth used where fast cutting is needed.	15 micron and finer	341017	341028	341039	
PAD-K (Perforated)				341058	341029	341030	
LIL-Plus	Nap Cloths For final polishing stages of preparation, Kemet nap type cloths are available with a range of softness and nap length. They give a more gentle polish, and are ideal for softer specimens and components. All cloths are self-adhesive unless marked 'plain'.	A long nap synthetic cloth.	3 micron and finer	341611	341610	341609	
LIL Plus-M (Magnetic)				341289	341290	341251	
MRE	Synthetic flock on a flexible waterproof carrier. A more heavy duty cloth.	Synthetic flock on a flexible waterproof carrier. A more heavy duty cloth.	6 micron and finer	341712	341716	341714	
MRE-M (Magnetic)				341815	341816	341817	

All Polishing Pads supplied in packs of 10. Other sizes available on request.



Magnetic Polishing Pad System

The Kemet magnetic disc system is suitable for Kemet's range of magnetic polishing pads, diamond grinding and fine grinding discs, and any magnetic consumable from other suppliers.

- Easy to change and cloths last longer
- No adhesive breakdown problems
- Faster and cleaner cloth changes
- No metal disc involved so safe to use

Magnetic Disc	Code
Ø 200 mm	345770
Ø 250 mm	345771
Ø 300 mm	345772

Abrasive Lapping Powders

Kemet offer a wide range of abrasive lapping powders and pastes suited for lapping.



Silicon Carbide Powder		
For lapping of Petrographic Material.		
Grit	Size	Code
180	5kg	361541
220	5kg	361531
320	5kg	361617
400	5kg	361512
600	5kg	361563
1000	5kg	361535

Water soluble pastes are also available.

Aluminium Oxide Powder		
For smoothing operations.		
Micron	Size	Code
3	5kg	361607
5	5kg	361618
9	5kg	361555
12.8	5kg	361510
17	5kg	361619
23	5kg	361554
29	5kg	361620

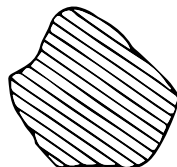


Liquid Diamond

- Precision graded diamond particles in a fluid carrier.
- General purpose, low viscosity, water based slurry for general purpose lapping where oils and emulsions can not be used.
- Alcohol based slurry available - ideal for polishing specimens which must not come into contact with water.
- Chemical composition of the carrier fluids is carefully controlled to ensure that they are compatible both with the Kemet composite lapping plate and the components being lapped.
- Fast stock removal and superfine surface finishes.
- Suitable for dispensing by Kemet aKu-Disp and most other dispensing systems.

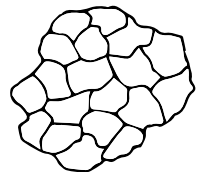
Monocrystalline:

This diamond has tough resilient crystal structure that gives sustained cutting power. It is the type of diamond used most commonly in Kemet Diamond Compounds and Slurries.



Polycrystalline:

Structure is 'raspberry-like', i.e. each particle is in fact a number of very small particles of microcrystallites bonded together. Stock removal and surface finish is better due to the many cutting points of the polycrystalline crystal.



Diamond Suspension



Low viscosity, high concentration, water based suspension.

- Uniform suspension of diamond particles
- No agitation required
- Suitable for dispensing by Kemet aKu-Disp and most other dispensing systems
- Supplied in 400g bottles with trigger spray
- Other sizes available upon request

TYPE WM		TYPE WP	
Water Based Monocrystalline		Water Based Polycrystalline	
Micron	Code	Micron	Code
1/10	219001	1/10	220001
1/4	219002	1/4	220002
1/2	219003	1/2	220003
1	219004	1	220004
3	219006	3	220006
6	219008	6	220008
9	219009	9	220009
15	219011	15	220011
25	219012	25	220012
45	219013		



Lubricating Fluids

- Assists Kemet Diamond Products to cut and polish more effectively by absorbing frictional heat and diluting the lapping residue
- Lubricant performance remains stable even when under high pressure
- Manufactured from high purity chemicals
- Oil based is available for processes where water based is unsuitable

Type	Description	Soluble in	Colour	450ml Trigger spray	1 Litre	2.5 Litres	5 Litres
Blue	Alcohol based. Improves cutting and polishing performance.	Water	Blue	301200	301158	301156	301159
GW2	For use with Kemet Diamond Suspension.	Water	Light green	301514	301105	301108	301107
R OS2	For use where water is not permitted.	Oil	Red	301513	301511	301512	301141

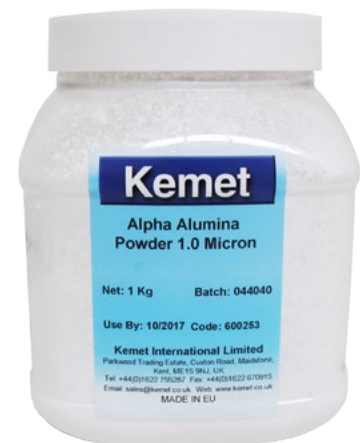


Polishing Abrasives

Kemet manufacture a wide range of conventional and CMP polishing suspensions.

Polishing Suspensions for special applications				
Description	Micron	Use	Size	Code
Col-K NC Non crystallising Colloidal Silica Suspension	0.06	Final Polishing Stage	5 litres	600199
	0.06		20 litres	600202
Col-K (std) Colloidal Silica Suspension	0.06	Final Polishing Stage	5 litres	600212
	0.06		20 litres	600204
Alumina Suspension No.1	0 - 1	Steel & Hard metals	1 litre	600711
Alumina Suspension No.2	0 - 0.7	Semi-hard metals	1 litre	600712
Alumina Suspension No.3	0 - 0.3	Soft metals	1 litre	600713
Alumina Suspension	0.05	Soft metals	1 litre	343591

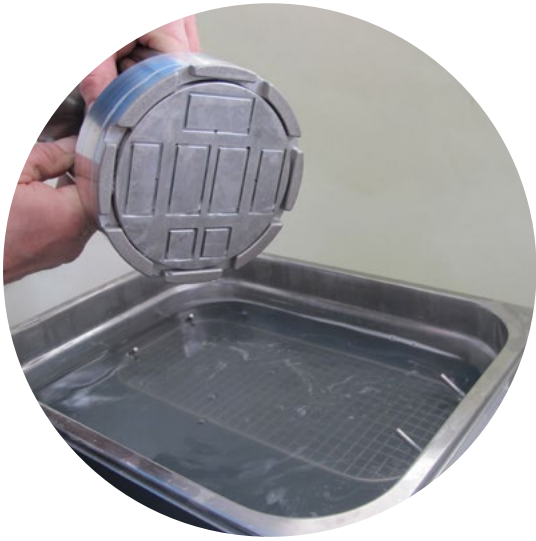
Polishing Alumina for polishing most materials (Powder)			
Micron	Use	Size	Code
Gamma 0.04	Super finishing of soft metals such as copper, lead, aluminium	1kg	600251
Alpha 0.3	Final polishing of copper alloys, nickel, brass, bronze, aluminium	1kg	600252
Alpha 1.0	Fine pre-polishing of all metals	1kg	600253



* ZERO Volatile Organic Compounds (VOC) - not classified as an atmospheric pollutant and offer health and safety benefits. VOCs are organic chemicals that have a high vapour pressure at ordinary room temperature, some of which can be dangerous to human health and/or cause harm to the environment.

Kemet Ultrasonic Cleaners

Kemet ultrasonic units feature a top of the range digital generator driving piezo-ceramic transducer elements to provide optimal cleaning. The Booster function, for extra power, can be used for the most difficult cleaning tasks. Distribution of the ultrasonic energy is achieved by the frequency sweep to give precision cleaning throughout the tank.



All models are equipped with thermostatically controlled heating to ensure optimum cleaning temperature. Manufactured from DIN 304 stainless steel, both internally and externally, they are easy to keep clean. A drip protector guides any unwanted water droplets away from the operating panel and the internal control circuitry is protected against fluid splashes.

Features

- Tank made from stainless steel (DIN 304)
- High quality stainless steel mesh basket
- Boost, Sweep and Degassing function
- Easy setting of time, temperature and special functions
- Dry run heating protection and automatic switch off after 12 hours of operation
- Glass beaker system available for cleaning small samples

Technical information	Kemet 3	Kemet 6	Kemet 12	Kemet 30
Tank service volume (l)	1.9	4.3	9	20.6
Internal tank dimensions (mm)	240 x 137 x 100	300 x 150 x 150	300 x 240 x 200	505 x 300 x 200
Internal basket dimensions (mm)	198 x 106 x 50	255 x 115 x 75	250 x 190 x 115	455 x 250 x 115
External dimensions (mm)	300 x 179 x 214	365 x 186 x 264	365 x 278 x 321	568 x 340 x 321
Ultrasonic power nom/peak (W)	80/160	150/300	200/400	300/600
Ultrasonic frequency (kHz)	38	38	38	38
Heating power (W)	200	400	800	1200
Product Code	359480	359482	359484	359486

Kemet Cleaning Fluids



Ultrasonic Cleaning Fluids

Kemet offer the finest in biodegradable cleaning fluids. These are specialist formulated concentrated detergents available in neutral, alkaline and acid types. Kemet are a distributor of NGL Nordic A/S with more than 300 high performance formulations providing a solution to most cleaning challenges.

Dasty Industrial Degreaser

For hand cleaning, this product is extremely effective for thoroughly degreasing all parts as well as large surfaces and perfect for cleaning lapping residue. Thanks to its ultra-concentrated formula, Dasty easily removes grease, mineral oil, scale, etc. and is biodegradable, safe for shipping and contains no ozone depleting chemicals.

Size	Code
1 Litre	362936
Box of 12	362962



CO - 42 Cleaning Fluid

Designed for cold use and applied by spray, brush, cloth or full immersion, CO42 is a highly efficient degreasing fluid similar in performance to 1.1.1 Trichloroethane, but without the ozone depleting properties.

- CO-42 is **NOT** approved for use at elevated temperatures or in ultrasonic cleaning machines.

Size	Container	Code
450ml	Trigger Spray	302103
5 Litres	Metal	302102
25 Litres	Metal	302101
200 Litres	Metal	302105



Polarising Microscopes

Our range of polarising microscopes include; transmitted (bottom) light, incident (top) light and both dual illuminated. More advanced models have waveplate inserts and Bertrand Lenses for additional analysis such as conoscopy.



Type/Head	Eyepieces and Objectives	Model
Monocular Transmitted	10X FN18 Eyepiece, 4X, 10X, 40X DIN Achromatic Objectives.	GXM-JPL135
Binocular Transmitted	10X Widefield FN18 Eyepieces, 4X, 10X, 40X & 100X oil Achromatic Objectives. Optional Objectives: 20X & 40X	GXM-JPL1350HBG
Trinocular Transmitted	10X Widefield FN20 Eyepieces, 4X, 10X, 20X & 40X Achromatic Objectives. Optional Objectives: 60X & 100X oil	GXM-JPL1350HTG
	10X Widefield FN20 Eyepieces, 4X, 10X, 40X & 60X Plan Achromatic Objectives. Optional Objectives: 20X, 80X, 100X	GXM-XPL1500
	10x WF Eyepieces 4 Infinity Corrected, Plan Achromatic Objectives 5X, 10X, 40X, & 60X	GXM-XPL3200
Trinocular Reflected	10X Widefield FN20 Eyepieces, 5X, 10X, 40X & 60X Plan Achromatic Objectives strain-free optics	GXM-XPL1503
Trinocular Reflected & Transmitted	10X Widefield FN20 Eyepieces, 5X, 10X, 40X & 60X Plan Achromatic Objectives	GXM-XPL1530
	10x WF Eyepieces 4 Infinity Corrected, Plan Achromatic Objectives 5X, 10X, 40X, & 60X	GXM-XPL3230

All Models above have

- 360° rotatable stage and condenser 30mm x 40mm travel, centerable
- Transmitted Light - 6V 20W Halogen Illumination
- Coarse/Fine focus mechanism, tension adjustment

Technical Support

Our expertise is available to you through our in-house technical specialists, a team of technical representatives in the UK, and an extensive network of overseas subsidiary companies and distributors.

Kemet provide continuous technical support for both prospective and current customers, and to ensure that any problems are correctly and quickly resolved.

Installation and full training is available both in the UK and overseas.

Process Development

We regularly assist customers by developing new products and processes. Customers' samples are evaluated, free-of-charge and comprehensive reports are issued covering all aspects of the process.

Tutorial Videos



Technical articles and videos on mounting samples, cutting and grinding samples, polishing and/or lapping samples

www.kemet.co.uk/blog/petrography



Kemet



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