

Kemet

LAPPING SYSTEMS & ACCESSORIES



WWW.KEMET.CO.UK

Kemet

Why Choose Kemet Flat Lapping Systems?

Kemet Flat Lapping and Polishing Systems offer the most efficient and reliable method of producing precision flat polished surfaces. Our flat lapping and polishing machines, and systems, are at the forefront of today's advanced lapping technology, especially when used with Kemet Diamond products.

Kemet Diamond quality and grading enables reliable precision lapping to be performed in production situations. Each Kemet Diamond product is a special blend of diamond powder with a specific grading and concentration in a chemical carrier to give optimum stock removal and surface finish, ease of cleaning, temperature resistance and lubricity to prevent drying out.

Kemet Diamond lapping generates less waste and is considered more environmentally friendly than conventional lapping methods.



Industries and Applications

Aerospace

Pumps & Valves
Turbine Parts
Engine Assemblies
Spacers

Medical Devices

Fibre Scopes
Surgical Instruments
Hip and Knee Joints
Pacemaker Parts

Tool and Die

Moulds and Inserts
Printing Plates
Slitter Knives
Extrusion Dies

Pumps & Valves

Fuel Pumps
Hydraulic Pumps
Mechanical Seals
Gate Valves

Data Storage

Disc Drive Heads
Tape Heads
CD Moulds
Laminations

Electro Optics

Plano Optics
Laser Rods and Prisms
Fibre Optics
Sensors
Sapphire
ALN

Technical Ceramics

Alumina - Zirconia
Silicon Carbide
Piezo Ceramics
Ferrite

Automotive

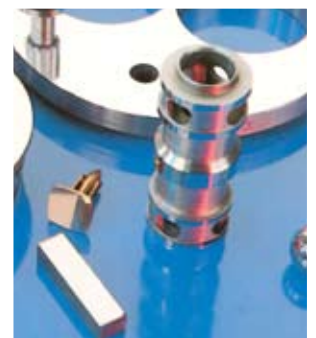
Diesel Injectors
Airbag Initiators
Piston Rings
Fuel Pumps



Benefits of Kemet's Advanced Lapping Technology

Kemet offers a complete range of lapping and polishing systems for industry. Special purpose machines can be developed for specific applications.

- Significant reduction in lapping costs
- Cleaner environment conditions
- Reduced inspection requirements
- One operation surface finish
- Semi skilled operation
- Faster material removal
- Faster polishing process
- Pre set parameters
- Reduced rejections
- Optimum geometry and surface finish
- Easier product cleaning
- Better utilisation of machine time

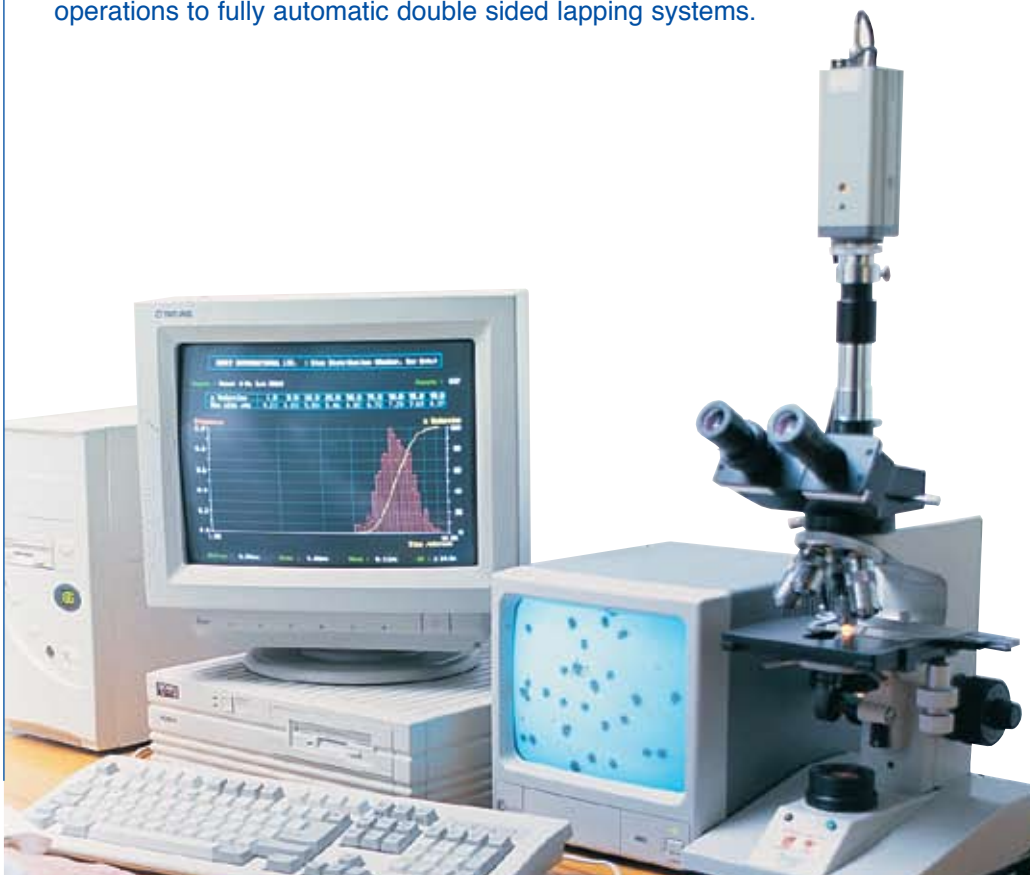


Kemet

Diamond Abrasives



Kemet International is one of the world's leading manufacturers of Diamond Abrasive Products used in research and industry. The wide range of standard formulations include liquids, pastes, suspensions, gels and sticks. Our laboratories have over 50 years experience and have developed special formulations for most lapping and polishing processes. These range from basic hand lapping operations to fully automatic double sided lapping systems.





Standard Kemet Liquid Diamond Products

Type K

An excellent, general purpose, low viscosity oil/water emulsion suitable for most applications.

Type W Series

Water soluble Liquid Diamond available in various viscosities. Recommended where lapping/polishing must be carried out in the absence of oil based materials.

Type O

Low viscosity oil soluble Liquid Diamond with enhanced cleaning properties.

Technical Data		
	Micron Size	
Final Polishing	1/10	Kemet Liquid Diamond is normally supplied in units of 400g, 2000g or 2500g. Special micron sizes, formulae, colour coding and other packaging sizes for specific applications are available.
	1/4	
	1/2	
	1	
	2	
Lapping & Pre-Polishing	3	
	6	
	8	
	10	
Rapid Stock Removal	14	
	25	
	45	

Features

- **Consistency of Performance**

Manufactured under a Quality System registered by BSI Cert No QO5919 ISO 9001:2008

- **Precise and Superfine Surface Finishes**

Available in an extensive range of different micron sizes, containing only virgin Diamond Powder, graded to closer tolerances than the internationally recognised standards

- **Efficiency and Economy**

Uniform suspension of Diamond Powders in specially formulated chemical carriers, ensures that the diamond cuts and polishes with maximum effectiveness

- **Reduction in Lapping Costs**

Suitable for dispensing with the Kemet Electronic System, thus eliminating wastage and reducing lapping costs

- **Easy Product Cleaning**

Specially formulated Liquid Diamond Products enable parts to be cleaned easily.

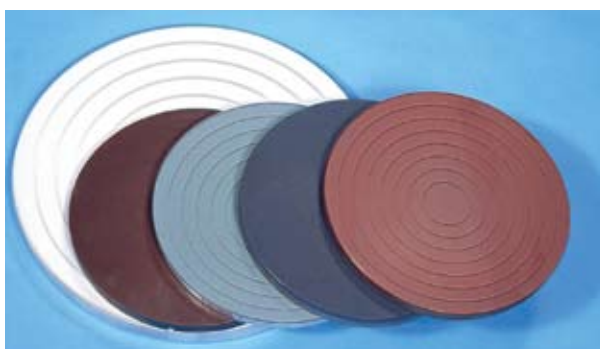
Kemet Lubricating Fluids

Specially developed to ensure that Kemet Liquid Diamond cuts and polishes with maximum efficiency. Two Lubricating Fluids are recommended – Type K, a mineral oil based lubricant, and Type W, a water based lubricant.

Kemet

Flat Lapping Plates

Kemet composite lapping plates are manufactured from a homogeneous mixture of synthetic resins, metal particles and other materials. The plates are ideal for today's advanced lapping technology, especially when used with Kemet Liquid Diamond.



Features

- Holds diamond particles firmly, ensuring both efficient stock removal and repetitive component surface finish.
- Ductile qualities cushion the diamond particles, preventing damage to the workpiece.
- Produced in varying hardness values so that even the softest material can, without impregnation, be safely lapped with diamond particles.
- Dissipates heat and prevents laminar flow of lapped surfaces.
- Easy control for optimum flatness.
- Lapping/polishing plates available to fit all makes of lapping machines with plate diameters up to 3000mm.
- Supplied with a cast iron backing plate for maximum stability.

Kemet Lapping Plates

Kemet Iron

The most commonly used plate. For general purpose stock removal and lapping operations

Kemet XP

Gives improved flat polished surfaces on many materials. Flat mirror surfaces can be produced on many hard materials

Kemet Copper

Used to lap softer materials where fine lapping and polishing are the primary requirements

Kemet Tin

One of the softest Kemet Plates used for mirror polishing with fine grades of Kemet Liquid Diamond.

Kemet Flat Lapping Plates

Standard Kemet Lapping Plates

These plates are normally supplied mounted on a cast iron backing plate for maximum stability. They are recommended for general and heavy-duty work where high precision flatness and surface finish are required.

Kemet Lift Off Disc System

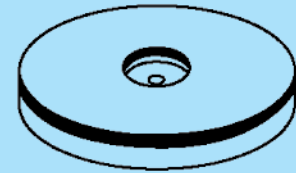
Kemet Lapping Plates are also available as Lift Off Discs, for machines up to 610mm (24") diameter. Discs are supplied mounted on an aluminium backing plate, which locates on to an aluminium drive plate by means of three pegs. Lift Off Discs can be easily changed and are recommended for light duty work where general flatness and precision finish are required.

Grooving

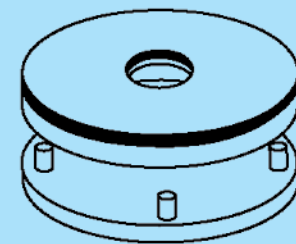
Kemet Lapping Plates can be supplied grooved to suit specific applications.

Kemet Annular Grooved Plates

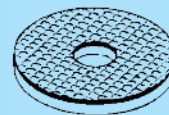
These plates are designed for precision shoulder lapping of a wide range of parts, such as fuel pump gear faces and pressure relief valve caps. Groove width and depth of plates need to be specified when ordering.



Standard Plate



Lift Off Disc Assembly



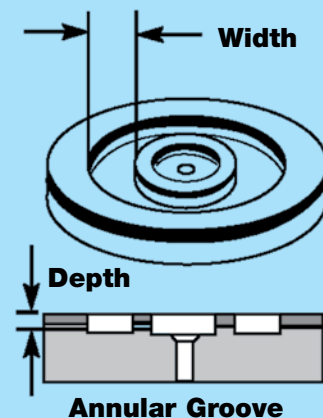
Square



Concentric



Spiral



Annular Groove

Kemet

Flat Lapping Machines

KEMET 15/20 MODELS

Bench Mounted Precision Diamond Flat Lapping and Polishing Machines

Both Kemet 15 and 20 models are bench mounted machines with rigid metal construction and height adjustable work tables.

The machines incorporate digital process timers and automatic Liquid Diamond Dispensing Systems.

Options

- Suitable for lift off disc system
- Fixed speed
- Pneumatic lift on model 20"

Other versions

- COL-K Chemical polishing version
- Clipper Blade sharpening machine

Features

- Variable speed
- Suitable for bench mounting
- Produces optically flat surfaces with high precision surface finish
- Reduces lapping costs – fully controllable Kemet Electronic Dispensing System accurately meters diamond abrasive onto the lapping plate
- Reduces waste – only small quantities of diamond abrasive and non-toxic fluids are used
- Built in abrasive system for conditioning Kemet plates
- Electrical System complies with EN 60 204
- Easy to adapt for special lapping applications
- Transportable



KEMET 15



KEMET 20

KEMET 24/36 MODELS

Both Kemet 24 and 36 machines have rigid welded tubular section steel frames, supporting the gearbox, drive motor and worktable. They also house a integral abrasive compound feed and waste tanks behind lift-off panels. The machines incorporate soft starting features, which smoothly accelerate the lapping plate from stand still to full speed, over a pre-determined time period.

Options

- Variable speed
- Temperature control
- Drop table
- Pneumatic lift or open face
- 3 or 4 ring versions
- COL-K Chemical Polishing versions
- Light beam guarding



Features

- Produces optically flat surfaces with high precision surface finish
- Reduces lapping costs – fully controllable Kemet Electronic Dispensing System accurately meters diamond abrasive onto the lapping plate
- Built in abrasive system for conditioning Kemet Plates
- Suitable for large parts or large volume production
- Electrical System complies with EN 60 204



Kemet

Flat Lapping Machines

Kemet Lapping Machine Capacity Chart

15 | 20 | 24 | 36 | 48 | 56 | 72 | 84

Components per conditioning ring based on typical loading of approximately 60% ring surface area.

KEMET MODEL		15	20	24	24	36	36	48	56	72	84
DIA OF PARTS MM IN		3 Ring	3 Ring	3 Ring	4 Ring	3 Ring	4 Ring	4 Ring	4 Ring	4 Ring	4 Ring
6	0.25	275									
7.5	0.29	175									
9	0.35	118									
10.5	0.42	86									
12	0.47	60	150	210	150						
13.5	0.53	50	114	165	114						
15	0.59	40	90	132	90						
18	0.71	27	63	87	63	204	156				
22	0.87	18	39	57	39	93	72	132	204		
26	1.00	12	33	42	33	93	72	132	204		
30	1.19	10	21	33	21	69	54	99	150		
34	1.31	8	17	24	17	60	39	75	117	204	
38	1.5	6	14	18	14	42	33	60	100	164	
42	1.62	5	10	15	10	33	25	48	76	132	185
46	1.81	4	9	13	9	29	33	39	62	108	152
50	1.97	3	7	10	7	24	20	33	52	92	129
54	2.12	2	6	9	6	21	15	29	44	78	109
60	2.37	2	5	7	5	17	12	24	35	62	88
70	2.75	2	3	5	3	12	10	17	26	44	63
80	3.12	1	3	4	3	10	8	14	20	35	47
90	3.31	1	2	3	2	7	5	12	16	26	38
100	3.94	1	2	3	2	6	5	8	12	21	30
110	4.31	1	1	2	1	5	3	7	10	18	24
120	4.72	1	1	2	1	4	2	5	8	16	20
130	5.12	1	1	1	1	3	2	5	8	14	17
140	5.5	1	1	1	1	2	2	4	6	10	15

The above data is for using standard loading procedures. It is often possible to extend the capacity of a machine utilising special workholding arrangements and fixtures.

Kemet Machine Specifications

15 | 20 | 24 | 36 | 48 | 56 | 72

KEMET m/c MODEL	15		20	24	36	48	56	72
LAPPING PLATE OUTSIDE DIAMETER	mm	381	508	610	914	1218	1422	1828
	in	15	20	24	36	48	56	72
LAPPING PLATE SPEED	70rpm		70rpm	58rpm	58rpm	48rpm	48rpm	30rpm
NO OF CONDITIONING RINGS	3		3	3 or 4	3 or 4	3 or 4	3 or 4	4
CONDITIONING RING INSIDE DIAMETER	mm	140	191	248 209	368 322	505 432	578 530	692
	in	5.5	7.5	9.75 8.25	14.5 12.69	19.9 17	22.7 20.9	27.25
HEIGHT OF OPEN FACE MACHINE	mm	670	648	940	940	991	991	914
	in	26.5	25.5	36	37	39	39	36
HEIGHT OF PNEUMATIC LIFT MACHINE	mm	-	-	1630	2000	2350	2768	2820
	in	-	-	64.2	78.75	92.5	109	111
WORKING HEIGHT	mm	310	310	940	940	1000	1000	912
	in	12.2	12.2	37	37	39.4	39.4	36
WIDTH OF MACHINE	mm	760	883	1220	1600	1422	2057	2120
	in	30	34.75	48	63	56	81	83.5
DEPTH OF MACHINE	mm	620	686	1350	1620	2000	2184	2667
	in	24	27	53.2	63.7	78.7	86	105
STANDARD ELECTRICAL SUPPLY	220v-1Ph-50Hz or 380v or 415v 3Ph-50Hz		220v-1Ph-50Hz or 380v or 415v 3Ph-50Hz	220v or 380v or 415v 3Ph-50Hz	220v or 380v or 415v 3Ph-50Hz	220v or 380v or 415v 3Ph-50Hz	220v or 380v or 415v 3Ph-50Hz	220v or 380v or 415v 3Ph-50Hz
MAIN DRIVE MOTOR	0.37kW		0.75kW	1.5kW	4.1kW	7.5kW	11kW	15kW
ABRASIVE PUMP MOTOR	0.2kW		0.05kW	0.18kW	0.18kW	0.18kW	0.18kW	0.18kW
GROSS WEIGHT OPEN FACE EXPORT PACKED	156kg		388kg	730kg	1220kg	3800kg	4000kg	6650kg
NETT WEIGHT OPEN FACE	116kg		195kg	555kg	1000kg	2845kg	3700kg	5359kg
GROSS WEIGHT PNEUMATIC LIFT EXPORT PACKED	-		-	997kg	1880kg	3570kg	5573kg	9876kg
NETT WEIGHT PNEUMATIC LIFT	-		-	700kg	1530kg	3145kg	5273kg	7930kg

NOTE:- Metric/Imperial conversions are approximate. All dimensions are for machines fitted with KEMET Electronic Spray Systems. In the interests of development we reserve the right to change specifications without notice.

Kemet

Spherical Lapping and Polishing System

Capabilities

To lap and polish pre-machined spherical balls and cups to a mirror finish with roundness usually better than 3 microns.

System Features

- 6 motors all with independent variable speed to provide complete control.
- Lapping and Polishing pressures applied pneumatically.
- Simple change from ball to cup polishing action.
- Average process time less than 5 mins.
- Low running costs.
- Manual and Jogging facility provided for setting up.
- Fully guarded with auto lifting door access.
- Dual process timers.
- Single button process start.
- Lighting provided.
- Smooth and silent running.
- Comes complete with initial tooling set
- CE marked.
- Full manual and training provided.
- Size: 1600mm (W) x 820mm (D) x 2500mm (H)
- Electrical: 230.1.50 supply
- Air: 3 Bar Max.



Kemet

Dispensing Systems

The Kemet Electronic Dispenser distributes Kemet Liquid Diamond and Lubricating Fluid by means of touch sensitive settings. The digital display shows dispensing intervals, durations and air pressure at a glance. Dispensing is achieved to an accuracy of 0.2 gm, eliminating wastage and simplifying cost control.

The Kemet Liquid Diamond Stirrer Unit maintains a consistent distribution of diamond particles within the slurry by using a small non-contaminant plastic coated paddle magnet, which ensures even diamond suspension. The Kemet Dual Dispensing Bar can be positioned to dispense Liquid Diamond and Lubricating Fluid accurately on to the plate without spray bounce.

Features

- Supplied as standard with Kemet Flat Lapping and Polishing Machines and Plates
- Easily fitted to existing conventional Flat Lapping Machines to improve productivity
- Fully controlled metering of Kemet Liquid Diamond and Lubricating Fluid using independent pressure and time settings
- Easy to install and operate
- Electrical system complies with EN 60 204.

Kemet Electronic Dispenser

Dispenses Kemet Liquid Diamond and Lubricating Fluid automatically at pre-set intervals in conjunction with a lapping and polishing machine cycle timer.

Height	150mm	Air requirements	1 Bar min 5 Bar max	Adjustable duration of spray	1-9 seconds
Width	230mm	Air pressure	Dual circuit	Adjustable intervals of spray	1-999 seconds
Depth (exc. air filter)	150mm	Air pressure display	Bar or psi	Spray memory	Standard
Nett Weight	3.74kg			Manual override	Standard
CODE	360499			Electrical supply	110V or 220V - 240V 50Hz or 60Hz (self adjusting for supply voltage & frequency)

Kemet Dual Dispensing Bar & Bottles

Supplied complete with two bottles and plastic tubing. Fully adjustable head for vertical and radial positioning.

	Standard	Long
Length	340mm	495mm
Reach	260mm	415mm
Adjustable height	100mm	100mm
Section of head	20mm x 20mm	
Bottle capacity	400ml	400ml
CODE	360511	360510

Kemet Single Spray Head

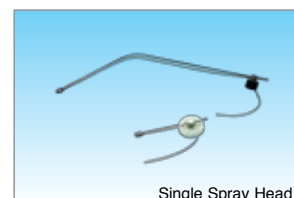
Supplied with bottle, cap and plastic tubing.

	Standard	Long	Extra Long
Length	130mm	250mm	380mm
CODE	360517	360514	360512

Kemet Liquid Diamond Stirrer Unit

Quiet electric unit has fully variable speed control and is provided with a magnetic stirrer paddle.

Height	120mm	
Width	90mm	
Depth	215mm	
Electrical supply	50Hz or 60Hz 230V	110V
CODE	360534	360536



Kemet

Flatness Measuring Equipment

For use with Kemet Flat Lapping and Polishing Systems, Kemet Flatness Measuring Equipment is designed to assist in the measurement and maintenance of surface flatness.

Optical Flat Light Box Stands are available for use with large Optical Flats.

Kemet Monochromatic Light

Produces clear flatness readings when used with Kemet Optical Flats. The compact designed Light is easily transportable and uses a sodium long-life light source. Supplied with a flatness reading interpretation chart.



Kemet Monochromatic Light		CODE
Monochromatic Light	230V 50Hz or 60Hz	361201
	110V 50Hz or 60Hz	361211

Kemet Monochromatic Light

Kemet Flatness Gauges

The Flatness Gauges are used to monitor lapping plate flatness, which, in turn, gives an indication of component flatness. Available for most machine sizes, in metric calibration, the gauges are supplied in a case with a master setting block. Full instructions are provided.



9" Flatness Gauges

Kemet Flatness Gauge		CODE METRIC
Type L	Suitable for Lapping Plates 380mm (15") dia and above	361304



Flatness Reading Wall Charts are available upon request

Kemet Optical Flats

Produced from Quartz, Kemet Optical Flats are available in single and double sided, standard sizes from 25mm up to 300mm diameter. They are supplied with Certificate of Conformity together with full instructions. National Physical Laboratory Certificates are also available. Special optical flats are available on request. Kemet offers an optical flat reconditioning and calibration service.

Kemet Optical Flats			CODE	CODE
Diameter mm	in	Accuracy Light Bands	Single sided	Double sided
25	1	1/4	361220	361237
25	1	1/10	361221	361238
50	2	1/4	361222	361215
50	2	1/10	361223	361239
75	3	1/4	361224	361705
75	3	1/10	361225	361240
100	4	1/4	361226	361210
100	4	1/10	361227	361241
125	5	1/4	361228	361242
125	5	1/10	361229	361214
150	6	1/4	361123	361216
150	6	1/10	361231	361243
200	8	1/4	361232	361219
200	8	1/10	361233	361244
250	10	1/4	361234	361217
250	10	1/10	361235	361245
300	12	1/4	361218	361246
300	12	1/10	361236	361247

Larger Optical Flats on request.



Kemet Optical Flats

Hand Lapping Kits

Kemet Portable Hand Lapping Kits

Leaking pumps, valves and seals cause many problems, leading to wastage, poor performance, unnecessary costs, even health hazards. Kemet Portable Lapping Kits enable refurbishment to be carried out on site, reducing expensive downtime. Components manufactured from ceramics, tungsten carbide, stellite, brass, steel, silicon carbide, ni-resist etc, can be lapped and/or polished by hand in minutes rather than hours. The kits are also ideal for low volume production, where it is not economical to purchase a lapping or polishing machine.



Type L Kit for lapping

Contains:

- Kemet Iron Plate (for lapping), 348mm dia., with concentric grooving.
- 1 x 10g Kemet Diamond Compound Application Stick - 25 micron
- 1 x Kemet OS Lubricating Fluid
- 1 x Case with operating instructions.

Type P Kit for polishing

Contains:

- Kemet XP Plate (for polishing), 348mm dia., with concentric grooving.
- 1 x 10g Kemet Diamond Compound Application Stick - 3 micron
- 1 x Kemet OS Lubricating Fluid
- 1 x Case with operating instructions.

3 Lap Kit for lapping and polishing

Contains:

- Kemet Iron Plate (for lapping), 150mm dia., with non skid backing
- Kemet XP Plate (for smoothing), 150mm dia., with non skid backing
- Kemet Tin Plate (for polishing), 150mm dia., with non skid backing
- 1 x 10g Kemet Diamond Compound Application Stick – 25 micron
- 1 x 10g Kemet Diamond Compound Application Stick – 8 micron
- 1 x 10g Kemet Diamond Compound Application Stick – 3 micron
- 1 x Kemet OS Lubricating Fluid
- 1 x Case with operating instructions.

Kemet Hand Lapping Kits	CODE
TYPE L KIT	352216
TYPE P KIT	352208
3 LAP KIT	352206

Kemet Polishing Pads



Kemet Polishing Pads

Flat polished surfaces can only be produced on many softer materials with the use of polishing pads. These are available to suit most flat lapping machines. Kemet offer the widest range of self-adhesive and metallic backed polishing pads, of which there are three general types:

Synthetic Silk Pads

A range of synthetic silk pads with a durable woven structure that produces flat mirror surfaces on stainless steels, stellite and many other metals.

ASFL - for optimum flat mirror polishing of many metals. This pad is available with adhesive resistance to oil or water, to suit the polishing abrasive being used.

ASF - this silk pad has a self-adhesive cloth backing which is resistant to water. It produces mirror surfaces, but is more suitable for cosmetic finishes on products, such as jewellery, where flatness is not crucial.

Chemo Textile Pads

Non woven pads manufactured specially for polishing processes.

PSU - available in medium and hard. Used with Diamond and Non Diamond abrasives. A good general purpose pad with a relatively long life.

CHEM-H - for use with **COL-K** polish for chemical mechanical polishing processes, which are required for many specialised materials, such as titanium and cobalt chrome.

Nap Cloths

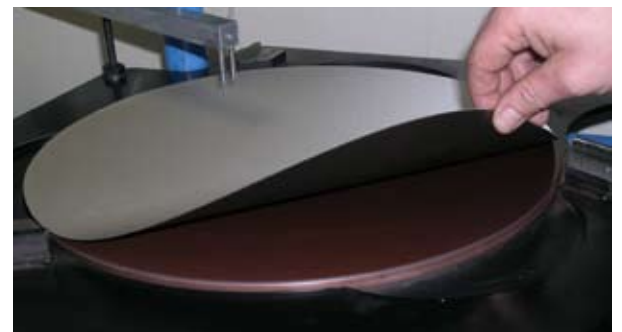
Particularly suitable for the softer materials and metals.

MRE - Synthetic flock on a flexible waterproof carrier. A more heavy duty cloth for use with 6 micron Kemet Diamond Slurry and finer. Colour: Red.

Kemet Polishing Pads - Self Adhesive		
Pad Type	380mm (15")	610mm (24")
ASFL	341112	341113
ASF	341109	341145
PSU-M	341011	341012
PSU-H	341055	341068
CHEM-H	341865	341786
MRE	341715	P.O.A.

Kemet Polishing Pads - Metallic Fibre Backed Pads			
Pad Type	380mm (15")	610mm (24")	916mm (36")
ASFL-M	341178	341179	N/A
CHEM-HM	341854	341856	341855
PSU-MM	341814	341837	341838
NSH-BM	341264	341265	341266
MRE-M	341818	341819	341828

Kemet Polishing Pads - Magnetic Backing Discs			
Pad Type	380mm (15")	610mm (24")	916mm (36")
Magnetic Disc	345185	345197	345196



KEMET MAGNETIC CLOTH SYSTEM

Advantages of the Kemet Magnetic Cloth System

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

Kemet

Consumables, Spares and Accessories



Kemet Abrasive Products

KEMET supply the widest range of Abrasive Products, including Liquids, Pastes, Suspensions and Powders. Aluminium Oxide and Silicon Carbide are available in all grit sizes.

Kemox

A range of suspension treated abrasives where the abrasive and carrier are pre-mixed in the correct proportions, resulting in a cleaner and more efficient Lapping Process. Other abrasive types are available.

Description	Size	Code	Details
Kemox 0-950	5 Ltr	300102	Oil Based Aluminium Oxide. Finer surface finish on soft components
Kemox 0-800S	5 Ltr	300112	Oil Based. General Aluminium oxide lapping where a scratch free matt lap is required
Kemox 0-400S	5 Ltr	300111	Oil Based. General Aluminium oxide lapping where good stock removal and a matt lap is required
Kemox W-950	5 Ltr	300152	Water based Aluminium Oxide where oil can't be used. Finer surface finish on soft components
Kemox W-800	5 Ltr	300143	Water based fine Aluminium Oxide
Kemox W-400	5 Ltr	300141	Water based medium Aluminium Oxide

Col-K

A liquid polish used on KEMET CHEM CLOTH to produce the ultimate in high quality mirror polishes on polishing machines. A part abrasive part chemical polishing action makes COL-K well suited to polishing difficult materials such as Stellite and Cobalt Chrome.

Description	Micron	Size	Code
Col-K Colloidal Silica Suspension for use on most materials at polishing stage.	0.06	5 Litres	600199
		20 Litres	600202

Abrasive Pastes

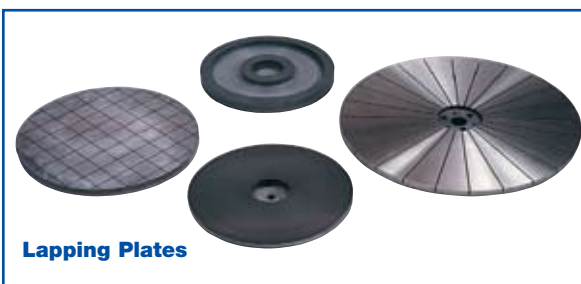
Kemet manufacture a wide range of abrasive lapping pastes. Our range of Silicon Carbide and Aluminium Oxide pastes have many applications but are particularly suited to the lapping of mechanical seals and valve seats. The pastes are water soluble and safe to use

Silicon Carbide Paste		
Micron Size	Fepa Grit Size	Code
75	F180	361549
36.5	F280	361538
29.2	F320	361558
22.8	F360	361548
17.3	F400	361551
9.3	F600	361514
4.5	F1000	361552
3	F1200	361547

Aluminium Oxide Paste		
Micron Size	Fepa Grit Size	Code
22.8	F360	361542
12.8	F500	361546
9.3	F600	361543
6.5	F800	361545
3	F1200	361544

Lapping Plates

We offer a part exchange service for all worn Kemet Lapping Plates. Cast iron and soft metal plates are available for most machines.



Conditioning Rings

Conditioning Rings wear naturally as part of the lapping process. Replacements are available to fit most flat lapping machine models.



Kemet can supply Kemet lapping plates for all lapping machine models including segmented plates for 48 inch machines and larger. Ceramic or Plastic faced rings are available for use on polishing cloths.

Kemet

Industrial Cleaning Systems

Industry and manufacturers with lapping processes increasingly require more efficient and environmental methods of cleaning precision parts.

Kemet can supply ultrasonic cleaning systems from 3 to 3,000 litres for use with Aqueous ultrasonic detergents.

There is also a range of Rinse / Dryer / Dewatering / Filtration equipment to tailor a system to achieve the required cleaning standard.

Fully 'automatic' systems are also available. In applications where only solvent will achieve the required performance, we have fully enclosed solvent systems available.

Selection of the popular Si (Semi-Industrial Range)

Model	Si-25	Si-40	Si-80, 12	Si-120	Si-160, 24
Tank Volume / litres	25	40	80	120	160
External Dimensions / mm	540L x 400W x 500H	640L x 390W x 540H	760L x 460W x 720H	740L x 580W x 745H	1340L x 460W x 770H
Tank Dimensions / mm	385L x 280W x 250H	475L x 265W x 300H	585L x 330W x 400H	585L x 450W x 450H	1180L x 330W x 400H
Basket Dimensions / mm	345L x 240W x 195H	420L x 225W x 225H	540L x 290W x 340H	540L x 400W x 390H	1110L x 280W x 300H
Load /kg	5	5	20	35	40
Ultrasonic Frequency / kHz	30	30	30	30	30
Ultrasonic Power / W	300	600	1200	1200	2400
Heating Power / W	1000	1500	2000	4000	6000
Voltage Frequency / V / Hz	230/50	230/50	230/50	400/50	400/50
Connected load / W	1300	2100	3200	5200	8400



Kemet Programme:

- Full range available from laboratory to heavy industrial
- Automatic or manual systems
- Aqueous or solvent systems
- Full design, technical, testing and support Programme
- Comprehensive range of fluids to suit most applications
- See more details at www.kemet-cleaning.co.uk



Kemet Sub Contract Lapping and Polishing

If your components require optimum flatness to perform to specification, if they are difficult to lap, or you have a particularly tight deadline to meet, Kemet's Sub Contract Service is the answer. We're renowned for our service, reliability and quality, and we specialise in fast turnaround times.

Our expertise is wide and varied: it includes the lapping and polishing of mechanical seals, valves, compact disc mirror blocks, flat plastic mould inserts, comparator stages, spacers, cutter discs, and aircraft pump components.



Machine Details	Our machines are equipped with both standard and special lapping plates to enable us to process most types of components. We are able to lap and/or polish components up to 530mm dia (approx 21").
Capability	We can process most materials to a specific surface finish or flatness. Shouldered components, ie those with a raised centre or shaft, are also able to be lapped.
Quality	All work is returned with a Certificate of Conformity covering the generated surface finish and flatness, relative to the customer's drawing or specification.
Service	Our reputation has been built on service, reliability and quality. Fast turnaround times are our speciality.



Kemet

The Kemet Technical Centre

Process development, training and technical support services are offered in our fully equipped Technical Centre.

Process Development

We regularly assist customers by developing new products and processes, utilising the very latest in precision flat lapping technology. Customers' samples are evaluated, free-of-charge. Comprehensive reports are issued covering all aspects of the process, including details of abrasive, lapping plate, workholding, inspection, cleaning and the likely consumable costs involved.

Training

Tailor-made training courses are delivered regularly in our Technical Centre or at customers' premises.

Typical subjects are:

- Theory of Lapping and Polishing
- Setting Up and Operating Machines
- Flatness Control and Measurement
- Types of Abrasive
- Lapping Plate Types
- Workholding Methods
- Product Cleaning and Inspection.

On completion of a course, participants are awarded a certificate, stating date and subjects covered.

Kemet After Sales Service and Support

Our team of Technical Representatives works in partnership with our Technical Centre Team to provide continuous technical support for both prospective and current customers, and to ensure that any problems are correctly and quickly resolved.

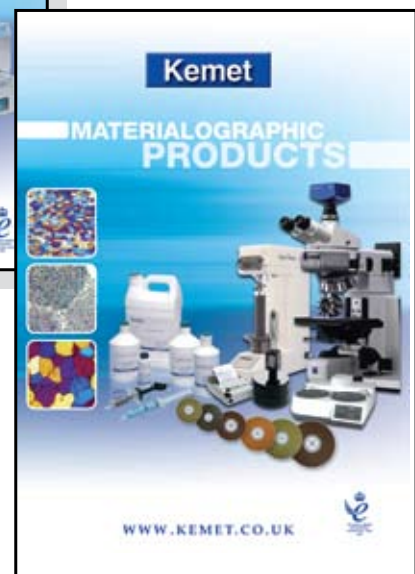




PRODUCTS FOR
THE TOOLROOM
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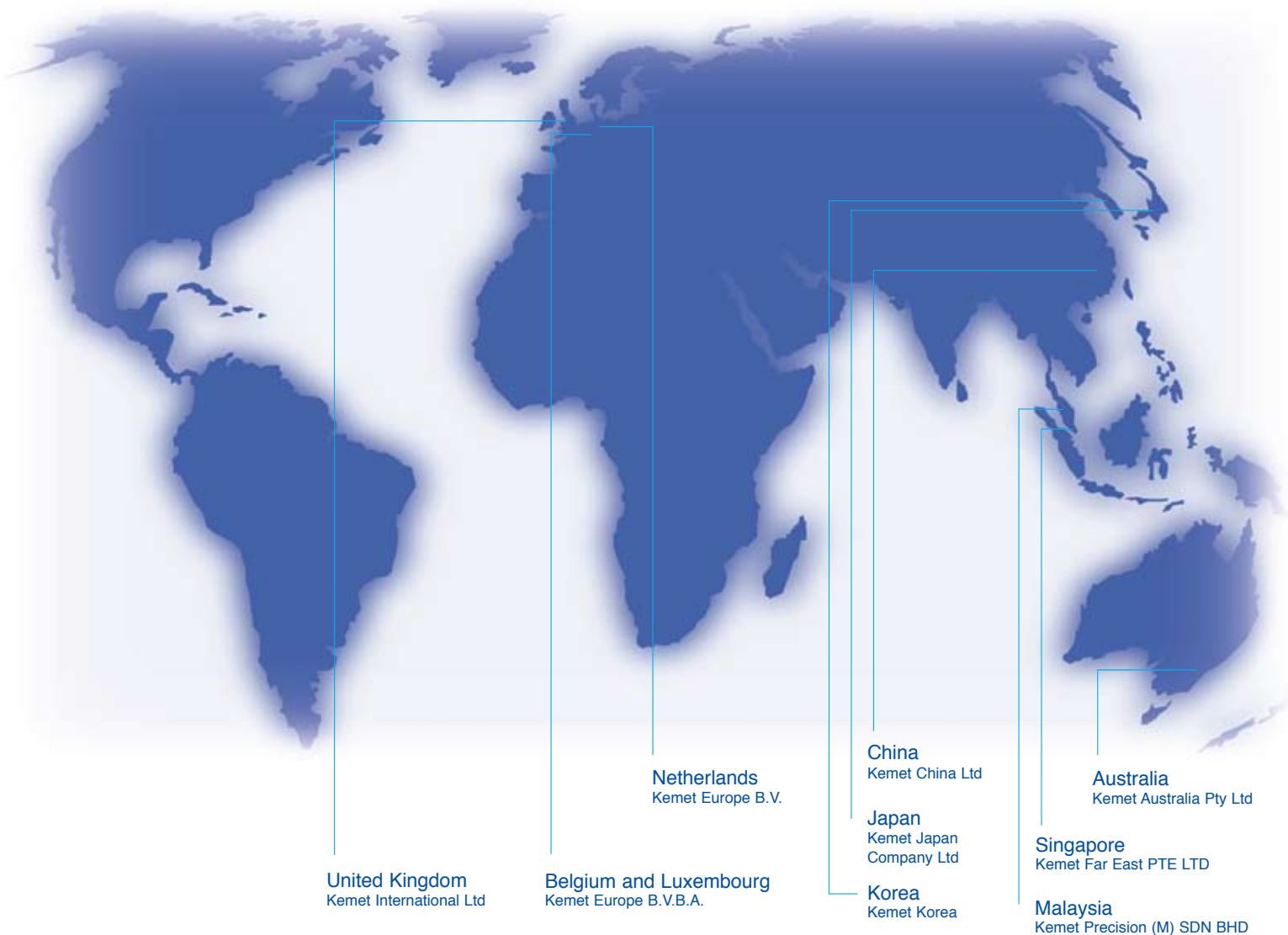
KEMET CLEANING
SYSTEMS



METALLOGRAPHIC
CONSUMABLES

**TRAINING COURSES ARE
AVAILABLE FOR ALL
KEMET PRECISION PROCESSES**

Kemet International Ltd. Subsidiary Companies



Kemet Products are available through a Worldwide Network of Authorised Distributors in

**Europe
Asia**

**Africa
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