Kemet

Precision Lapping | Polishing | Cleaning | Materialography

PRODUCTS FOR THE TOOLROOM AND PRECISION ENGINEERING

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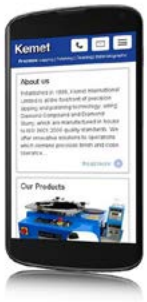


ISO 9001 Quality Management

British Chambers of Commerce Accredited

UK Distributors for

Gesswein
DIPROFIL
XEBEC
NAKANISHI
NGL
FinnSonic

Catalogue version: 1904

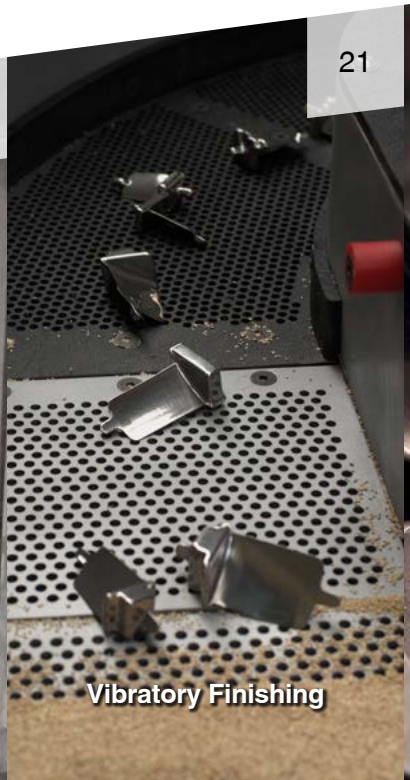
Products for the Toolroom and Precision Engineering

80 Celebrating 80 Years Of Precision Finishing 1938 - 2018

Since 1938, Kemet has been at the forefront of precision polishing technology, producing quality diamond pastes and composite lapping/polishing materials in our purpose built facilities. ISO 9001:2015 qualified, these products have long been the preferred choice for tool makers and now form a cornerstone to Kemet's comprehensive range of finishing equipment, accessories and consumables targeted at the precision engineering sector.

In short, Kemet offer a one stop shop for all your precision finishing and polishing requirements at highly affordable prices. A comprehensive range of abrasive materials and accessories, supplied from stock, is supported by a price competitive range of reciprocating, rotary and ultrasonic power hand tools for grinding, filing and polishing, along with a range of industrial ultrasonic cleaning machines and systems.

Now a truly international organisation, Kemet's activities span the world, spearheaded by subsidiary companies in six countries, all sharing the same commitment to customer support. This, along with more than 80 years' experience, means Kemet are here to provide you with the technical support to meet all your finishing and polishing challenges.



NEW!

Kemsonic Trio - Ultrasonic Polisher, Brushless Micromotors & Micromotor with Carbon Brushes

Ultrasonic polishing system

The KemSonic uses state-of-the-art ultrasonic technology. When switched on, the device seeks the optimum frequency, which can be adjusted to desired output. The combination of ceramic fibre file and ultrasonic system allows you to remove the hard erosion skin rapidly and cleanly so that an optimum initial surface for the subsequent processing stages is obtained. Includes LED spotlight which is powered via the control unit and is dimmable.

Brushless micromotors with up to 300 watts

The KemSonic works with a brushless micromotor with power up to 300 watts, allowing you to powerfully grind and polish. The 300 watt output is available in three speed ranges:

1,000 to 15,000 rpm \ 15,000 up to 30,000 rpm \ 30,000 up to 50,000 rpm

Depending on the tool size and task, you can select the appropriate speed range which will always work under optimum conditions. You can mount different heads on the micromotor.

PowerHand motors with brush

With the PowerHand series you have a complete micromotor system available which includes: angle heads, ‘swingHandy’ with a horizontal stroke, 2 powerful filing devices and a belt grinder.

Technical Data: PowerHand	
Speed:	1,000 - 30,000 rpm
Output:	100 watts max.
Sense of rotation:	reversible
Collets:	Ø 2.35 + 3.00 mm

Technical Data: Brushless micromotor	
Speed:	1,000 - 50,000 rpm
Output:	300 watts max.
Sense of rotation:	reversible
Collets:	Ø 2.35 + 3.00 mm

Technical Data: Control unit	
Connection:	90 - 240 V, 50/60 Hz
Output:	300 watts max.
Dimensions:	170 x 260 x 140 mm
Outputs:	Ultrasonic. Brushless Motor. Motor with Brush. Foot Switch. LED Lamp

Technical Data: Ultrasonic polishing system	
Output up to max.	45 watts
Strokes:	30,000/sec.
Stroke length:	3 - 40 µm
Frequency:	automatic adjustment
Control:	continuously variable

Kit Contents	Kemsonic Kit 1	Kemsonic Kit 2	Kemsonic Kit 3	Kemsonic Kit 4
KemSonic control unit	●	●	●	●
Ultrasonic handpiece	●	●	●	●
LED spotlight and tripod	●	●	●	●
each 1 holder flat 1.1 mm, flat 3.1 mm, round Ø 3.00 mm	●	●	●	●
Adapter M6 for Ultraform holders & tools	●	●	●	●
Foot switch	●	●	●	●
Set of keys	●	●	●	●
Handpiece rack	●	●	●	●
Rapid chuck handpiece with **Brushless micromotor**		●	●	●
Filing and polishing device with a tool receptacle of 6.35 mm, stroke length of 0 - 2 mm and a stroke of 700 - 7,000/min			●	●
KemCabinet, The perfect rack for handpieces and filing machines				●
Angle head 90 degree, with rapid chuck system, extra strong cog wheels, collet 3 mm				●
Product Code	339210	339211	339212	339213

Kemsonic Mono - Ultrasonic Polisher

NEW!

Introducing the new KemSonic Mono ultrasonic grinder/polisher with a touch screen that enables easy and convenient control. The KemSonic Mono comes complete with large ultrasonic handpiece, 230 V - 50 Hz, stroke length 4 up to 40 µm infinitely adjustable, output 45 watts, oscillation frequency 20-30 kHz, and an accessories kit.

The Kemsonic Mono automatically searches for the optimum frequency on start-up and all that's needed is for the power to be adjusted to the required level and you're ready to go.

With the standard, large ultrasonic handpiece, pressing the turbo button will boost the short term performance. The combination of Xebec ceramic polishing stones and the Kemsonic Mono ultrasonic system is unbeatable. With this system the hard skin can be eroded quickly and cleanly, to provide the optimal starting surface for subsequent processing steps.

The Kemsonic Mono standard package consists of:

- Intelligent control unit
- Ultrasonic Handpiece PSHG (M8)
- Handpiece tray
- 3 different tool holders
- Key set
- Footswitch
- Power cable
- Storage box

Technical Data:	
Output up to max.	60 watts
Strokes:	30,000/sec.
Stroke length:	3 - 40 µm
Frequency:	automatic adjustment
Control:	stepless
Tool size:	M8 (or M6 with adapter)
Dimensions:	170 x 260 x 140 mm
Weight:	2.1 kg
Product Code:	339221

Recommended range of ceramic stones for ultrasonic polishing

Xebec Ceramic Stone™ Heat-Resistant					
Size (mm)	**Grit 120**	**220**	**400**	**800**	**1200**
1.0 x 4 x 100	312744	312673	312854	312672	312671
1.0 x 6 x 100	312745	312676	312855	312675	312674
1.0 x 10 x 100	312705	312717	312856	312716	312715
2.0 x 4 x 100	312746	312679	312857	312678	312677
2.0 x 6 x 100	312747	312682	312858	312681	312680
2.0 x 10 x 100	312756	312706	312707	312708	312709

Xebec Ceramic Stone™ Diamond				
Size (mm)	**200**	**400**	**800**	**1200**
1.0 x 4 x 100	312687	312686	312685	312859
1.0 x 6 x 100	312690	312689	312688	312860
1.0 x 10 x 100	312693	312692	312691	312861

Full details of Xebec Ceramic Stones™ on page 25

Book a **FREE** Demonstration* 01622 755287

** Demonstrations available in the UK only*

Nakanishi (NSK) Espert 500

A precision power hand tool system with a wide range of attachments suitable for grinding, smoothing, polishing and deburring.

An exclusive new feature of the Espert 500 system, the FiXpeed® system allows the user to independently preset the speed of motor A and motor B. For example motor A can be set to maintain the speed set by the FiXpeed® system while motor B has variable control using a foot pedal. This function allows for unprecedented flexibility.

- Self Check Function (Maintenance Mode)
- Smooth Operation
- Operation Check Sound
- Highly Visible and easy to operate front panel
- 2-Digit Digital Display
- Error Code Display Function

Speed : 1,000~50,000 min^{-1}

Speed is steplessly variable from 1,000~50,000 min^{-1}. Smooth and powerful torque is delivered at both high and low speeds. The extremely high maximum speed of 50,000 min^{-1} allows high precision micro-machining.

Nakanishi (NSK) Smart Switch

The switch provides a click sensation and a confirmation tone is produced by the control unit when the switch is operated. The motor type is distinguishable by the switch colour.

2 Types of Motors

Very high torque from compact motors.

Compact Type (ENK-500C)	140W	Blue
Torque Type (ENK-500T)	200W	Grey

Simple Screw on Attachments

Excellent Durability

High performance brushless motor eliminates the need to change carbon brushes. NSK's internal load test has proven continuous use for more than 5,000 hours.

Wide Range of Collet Chucks Available

Collet sizes range from a tiny 0.3 mm up, with a wide variety of sizes available. Tools can be changed without the use of any wrenches.

Special Dust-Proof Mechanism

The handpiece has a patented built-in-dust protection system to prevent the infiltration of dust and debris into the front bearings. This NSK patented design assures long-term durability.

Model	Max. Output	Set	Standard Accessories		Code
ES50C-HR	140W	Standard	Handpiece (ENK50C-HR) : 1 pc.	• Control Unit (NE96) : 1 pc. • Collet Chuck ø3.0 mm (CHH-3.0), ø2.35 mm (CHH-2.35) : 1 pc. each • Handpiece Holder : 1 pc. Handpiece Stand : 1 pc. Spanner (7 x 5.1) : 1 pc. Pin Spanner : 1 pc. L-Spanner (9) : 1 pc.	340024
ES50T-HR	200W	Torque	Handpiece (ENK50T-HR) : 1 pc.		340002

Kemet are the authorised UK distributor for Nakanishi (NSK)

Nakanishi (NSK) Espert 500 System

Attachment Overview

Ring Type

340008	EHR-500

50,000 min⁻¹ Max. (✱1) 40,000 min⁻¹ Max. (✱2)

Lever Type

340035	EHL-401

50,000 min⁻¹ Max. (✱1) 40,000 min⁻¹ Max. (✱2)

6 mm Torque Type

340006	EHG-400

40,000 min⁻¹ Max. (✱1) 30,000 min⁻¹ Max. (✱2)

90° Angle Type

340014	EIC-300

40,000 min⁻¹ Max. (✱1) 20,000 min⁻¹ Max. (✱2)

50° Angle Type

340011	EKC-300

40,000 min⁻¹ Max. (✱1) 20,000 min⁻¹ Max. (✱2)

LUSTER (Reciprocating motion)

340010	ELS-100

30,000 min⁻¹ Max. (✱1)

MINI-LUSTER (Reciprocating motion)

340012	EML-8

30,000 min⁻¹ Max. (✱2)

FINE BELT SANDER

340026	EBS-101

40,000 min⁻¹ Max. (✱1) 30,000 min⁻¹ Max. (✱2)

90° Angle Torque Type

340009	ERA-270

40,000 min⁻¹ Max. (✱1) 20,000 min⁻¹ Max. (✱2)

Speed Reducer

- 1/4 Speed Reducer

340016	ERG-01B

40,000 min⁻¹ Max. (✱1) 30,000 min⁻¹ Max. (✱2)

May be connected between the motor and the spindle as the need of torque.

Motor

- Compact Motor and Cord

340005	ENK-500C

- Torque Motor and Cord

340007	ENK-500T

Control Unit

- Espert 500

340013 (120V)	NE96
339990 (230V)	

Nakanishi (NSK) Espert 500 - Attachments

Product (size mm)	Description	Description / Standard Accessories	Model	Code
	Espert 500 Control Unit	• Power Source : AC120/230V, 50-60Hz • Dimensions : W172 x D230 x H94 mm • Weight : 2.6 kg • Accessories : Handpiece Stand: 1 pc. Handpiece Holder: 1 pc.	NE96 120	340013
			NE96 230	339990
	Compact Type Motor	• Small, lightweight, high-speed brushless DC motor. • Incorporates the NSK Smart Switch for easy on/off operation. • Very low vibration noise and maintenance. • Weight : 115 g excluding cord • Output Power : 140W • Maximum Torque : 6.0 cN·m • Cord Length : 1.5 m	ENK-500C	340005
	Torque Type Motor	• High-power, high-torque, high-speed brushless DC motor. • Incorporates the NSK Smart Switch for easy on/off operation. • Very low vibration noise and maintenance. • Weight : 160 g excluding cord • Output Power : 200W • Maximum Torque : 8.7 cN·m • Cord Length : 1.5 m	ENK-500T	340007
	Ring Type Attachment	• Manufactured with micron level precision for high accuracy and high reliability. • Slim, lightweight design allows for fine finishing of delicate parts. • Ring Type one touch burr release. • Collet Chuck: Standard Size : ø3.0 mm (CHH-3.0), ø2.35 mm (CHH-2.35) : 1 pc. each • Spanner (7 x 5.1) : 1pc. Pin Spanner : 1pc. L Spanner (9) : 1pc. • Weight : 94 g 50,000 min-1 Max. (*1) 40,000 min-1 Max. (*2)	EHR-500	340008

✱ 1 : Maximum Allowable Speed, intermittent use.
✱ 2 : Maximum Allowable Speed, continuous use.

Nakanishi (NSK) Espert 500 - Attachments

Product (size mm)	Description	Description / Standard Accessories	Model	Code
	Lever type Attachment	• To attain more powerful grinding and fine polishing finish, attachment EHL-401 is designed to make it lightweight and fit to pen-grip type holding. • Simple lever turning for burr exchange. • Same chuck as used in EHR-500. • Collet Chuck: Standard Size : ø3.0 mm (CHH-3.0), ø2.35 mm (CHH-2.35) : 1 pc. each • Spanner (7 x 5.1) : 1 pc. • Weight : 70 g 50,000 min-1 Max. (*1) 40,000 min-1 Max. (*2)	EHL-401	340035
	Torque Type Attachment	• Torque type attachment used with ø6 mm chuck diameter as • standard and nicely fits in hand-grip. • Collet Chuck: Standard Size : ø6.0 mm (CHG-6.0) : 1 pc. • Spanner (10 x 10) : 1 pc. • Bar Wrench (K-212) : 1 pc. • Weight : 110 g 40,000 min-1 Max. (*1) 30,000 min-1 Max. (*2)	EHG-400	340006
	90˚Angle Attachment	• 90˚Angle Attachment with ø3 mm Collet. Chuck is conveniently small and equally suitable for polishing flat surfaces with rubber pad paper disk, corner work, and grinding the inside of a pipes. • Speed Reduction Ratio : 3/4 • Weight : 54 g • Collet Chuck: Standard Size : ø3.0 mm (CHC-3.0) : 1 pc. Chuck Wrench (K-231) : 1 pc. Spanner (20 x 24) : 1 pc. • Standard Accessories : Rubber Pad, Paper Disk (1 set) 40,000 min-1 Max. (*1) 20,000 min-1 Max. (*2)	EIC-300	340014
	90˚Angle Torque Attachment	• 90˚Angle type is suitable for the work of corner and the grinding of the inside of pipe. • Speed Reduction Ratio : 1/1.5 • Weight : 107 g • Collet Chuck: Standard Size : ø3.0 mm (CHS-3.0) : 1 pc. • Spanner (8 x 5), (7 x 5.1), (20 x 24):1 pc. each 40,000 min-1 Max. (*1) 20,000 min-1 Max. (*2)	ERA-270	340009
	50˚Angle Attachment	• 50˚Angle Attachment is suitable for working in corners, cavities, etc. • Reverse rotation against the motor • Speed Reduction Ratio : 3/4 • Weight : 54 g • Collet Chuck: Standard Size : ø3.0 mm (CHC-3.0) :1pc. • Standard Accessories : Rubber Pad, Paper Disk (1 set). Chuck Wrench (K-231) : 1 pc. Spanner (20 x 24) : 1 pc. 40,000 min-1 Max. (*1) 20,000 min-1 Max. (*2)	EKC-300	340011
	Mini-luster Attachment (Pencil-Type Reciprocating Polishing Finisher)	• Reciprocating Stroke (variable) : 0~10,000 times/min (Max.) • Stroke Range : 0.8, 0.4, 0.2 mm (3 different models) • Mountable tool shaft diameter : Max. shaft diameter ø3.2 mm, Screw clamp type. • Standard Accessories : 1 set. Allen Wrench (1.5 mm) : 1 pc. • Weight : 130 g 30,000 min-1 Max. (*2)	EML-8 (Stroke 0.8 mm)	340012
	Fine Belt Sander Attachment	• The angle of belt section is steplessly adjustable. • Width of Belt : 8 mm, 6 mm, 4 mm. 2 pcs. each • Allen Wrench (3 mm) : 1 pc • Weight : 355 g • Belt Speed : 0~940 m/min (Max.) 40,000 min-1 Max. (*1) 30,000 min-1 Max. (*2)	EBS-100	340026
	Extension Adaptor	• Emax EVOlution, ELECTER E-max and ROTUS attachments can be connected using these adaptors. • Speed Ratio 1 : 1 • Weight : 31 g 40,000 min-1 Max. (*1) 30,000 min-1 Max. (*2)	ECN-011	340018
	Luster Attachment (Reciprocating Motion Polishing Finisher)	• Reciprocating Stroke (variable) : 0~7,600 times/min (Max.) • Perfect for final finishing such as lapping and honing after grinding. Streamlines conventional hand-finishing of metal moulds. • Reciprocating type compact special polisher for ESPERT motor. • Stroke is adjustable from 0~6 mm. • Mountable tool shaft diameter : Max. shaft diameter ø6.4 mm, Screw clamp type. • Weight : 680 g • Standard Accessories : 1 set. Allen Wrench (2 mm) : 1 pc. Lubrication Oil. Lubrication Nozzle for Luster 30,000 min-1 Max. (*1)	ELS-100	340010

★ Maximum Allowable Speed, continuous use may change depending on the material being cut and other application variables.

★ 1 : Maximum Allowable Speed, intermittent use.
★ 2 : Maximum Allowable Speed, continuous use.

Nakanishi (NSK) Espert 500 - Attachments

Product (size mm)	Description	Description / Standard Accessories	Model	Code
	Speed Reducer (1/4)	• The speed is reduced to 1/4 but the torque is multiplied by 4 times. • mounting it in between the motor and the attachment. • Weight : 65 g 40,000 min-1 Max. (*1) 30,000 min-1 Max. (*2)	ERG-01B	340016
	Speed Reducer (1/4)	• Emax EVOlution, ELECTER E-max and ROTUS attachments can be connected using these adaptors. • The speed is reduced to 1/4 but the torque is multiplied by 4 times. • Weight : 62 g 40,000 min-1 Max. (*1) 30,000 min-1 Max. (*2)	ERG-01	340017

Parts

Product	Description	Specification	Model	Code
	Compact Motor Cord	Compact Motor Cord (1.5 m Long)	ENKCD-50C	340433
	Torque Motor Cord	Torque Motor Cord (1.5 m Long)	ENKCD-50T	340431
	Foot Pedal	Variable Speed Control Foot Pedal	FC-40	340428
	Espert 500 Handpiece Stand		K-274	340434

For more parts and attachments please visit kemet.co.uk/espert

* 1 : Maximum Allowable Speed, intermittent use.
* 2 : Maximum Allowable Speed, continuous use.

Nakanishi (NSK) Presto II

The PRESTO II is an ultra high speed 320,000 min^{-1} non-lubricated air turbine. It is most suitable for high precision processing, such as small precision parts, ceramic, correction of printed circuit board, etc. due to its non-lubricated handpiece. Flexible tubing ensures excellent workability reducing fatigue to the operator's hand for long continuous use.

Presto II Standard Set - Product Code: 339916

- Ultra-high speed non-lubricated air turbine handpiece ideal for delicate processing application.
- Built-in dust protection mechanism ensures long durability.
- Chip air blows away the cutting powder and cools the cutting tool.

Nakanishi (NSK) Emax Evolution

A precision power hand tool system with a wide range of attachments suitable for grinding, smoothing, polishing and deburring.

FiXpeed® system allows everyone to easily fix the speed of motor A and B independently prior to operation. For example motor A can be set to maintain the speed set by the FiXpeed® system while motor B has variable control using a foot controller. This function brings for unprecedented workability.

Emax Evolution Standard Set

Capable for wide range of applications. An excellent total balance in motor performance and dimension against required rotational speed. 1,000~40,000 min^{-1}

Emax Evolution Torque Set

For heavy duty and larger tools, Torque type promises to extend operation ranges. 1,000~25,000 min^{-1}

Model	Set	Standard Accessories	Code
EV410-120 (120V)	Standard	• Micro Grinder (IR-310+ENK-410S) : 1 pc. • Collet Chuck ø3.0 mm (CHH-3.0), ø2.35 mm (CHH-2.35) : 1 pc. each • Control Unit (NE249) : 1 pc. Handpiece Holder : 1 pc. Handpiece Stand : 1 pc. Power Supply Cord : 1 pc. Spanner (7 x 5.1) : 1 pc. Pin Spanner (K-233) : 2 pc. L Shaped Spanner : 1 pc.	340436
EV410-230 (230V)			339920
EV250-120 (120V)	Torque	• Micro Grinder (IR-310+ENK-250T) : 1 pc. • Collet Chuck ø3.0 mm (CHH-3.0), ø2.35 mm (CHH-2.35) : 1 pc. each • Control Unit (NE249) : 1 pc. Handpiece Holder : 1 pc. Handpiece Stand : 1 pc. Power Supply Cord : 1 pc. Spanner (7 x 5.1) : 1 pc. Pin Spanner (K-233) : 1 pc. L Shaped Spanner : 1 pc	340437
EV250-230 (230V)			339921

Nakanishi (NSK) Smart Switch

The switch provides a click sensation and a confirmation tone is produced by the control unit when the switch is operated. The motor type is distinguishable by the switch colour.

One Touch Tool Changing

Ring Type (IR-310 Code: 339937) Easy twist open/close chuck.

2 Types of Motors

Provides choice of various applications.
Standard Type Motor 1,000~40,000 min^{-1}(ENK-410S) Blue
Torque Type Motor 1,000~25,000 min^{-1}(ENK-250T) Green

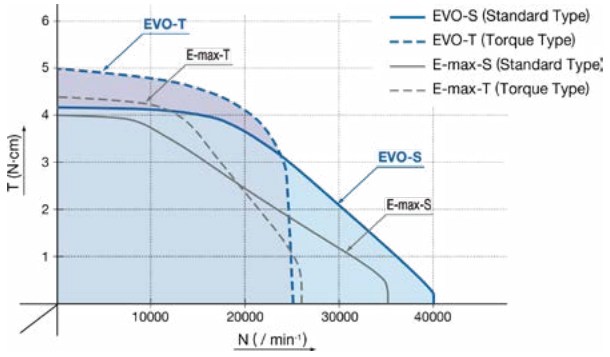
Emax EVOlution and Electer E-max have different motor cord pin configurations.

Emax EVOlution | Electer E-max

Excellent Durability

High performance brushless motor eliminates the need of changing carbon brushes. RPM variation is minimal even when load changes. Allowing difficult and stable cutting in stress free motion. Suitable performance for finish grinding.

Emax EVOlution vs Emax Torque Characteristic



17 Type of Attachments for All Type of Applications

Capable of infinite applications with 14 different handpieces and 3 types of intermediate attachments.

Kemet are the authorised UK distributor for Nakanishi (NSK)

Nakanishi (NSK) Emax Evolution System

Attachment Overview

Ring Type

339937	IR-310

40,000 min⁻¹ Max. (＊1) 40,000 min⁻¹ Max. (＊2)

Lever Type

340271	IH-300

40,000 min⁻¹ Max. (＊1) 40,000 min⁻¹ Max. (＊2)

Straight Type

340410	IG-400

40,000 min⁻¹ Max. (＊1) 40,000 min⁻¹ Max. (＊2)

6 mm Torque Type (＊3)

340242	HG-200

30,000 min⁻¹ Max. (＊1) 27,000 min⁻¹ Max. (＊2)

Long Type

340245	BMH-300

35,000 min⁻¹ Max. (＊1) 35,000 min⁻¹ Max. (＊2)

90° Mini Angle Type

340247	MFC-300S

15,000 min⁻¹ Max. (＊1) 15,000 min⁻¹ Max. (＊2)

90° Mini Angle Type (Very Small Head)

340248	MFC-300M

15,000 min⁻¹ Max. (＊1) 15,000 min⁻¹ Max. (＊2)

90° Angle Type

340272	IC-300

35,000 min⁻¹ Max. (＊1) 20,000 min⁻¹ Max. (＊2)

50° Angle Type

340273	KC-300

35,000 min⁻¹ Max. (＊1) 20,000 min⁻¹ Max. (＊2)

LUSTER (Reciprocating motion)

340251	LS-100

30,000 min⁻¹ Max. (＊1) 30,000 min⁻¹ Max. (＊2)

MINI-LUSTER (Reciprocating motion)

340252	ML-8

35,000 min⁻¹ Max. (＊1) 30,000 min⁻¹ Max. (＊2)

SWING-LUSTER (Right to left motion)

339878	SLS-16

35,000 min⁻¹ Max. (＊1) 24,000 min⁻¹ Max. (＊2)

Hammer Action Type

340750	HA-500

20,000 min⁻¹ Max. (＊1) 16,000 min⁻¹ Max. (＊2)

FINE BELT SANDER

340256	KBS-101

35,000 min⁻¹ Max. (＊1) 35,000 min⁻¹ Max. (＊2)

Exclusive use for Emax EVOlution

LUSTER (Reciprocating motion) Built-in Motor

340283	NLS-110

30,000 min⁻¹ Max. (＊1) 30,000 min⁻¹ Max. (＊2)

Speed Reducer - Extension Joint

Extension Joint

340260	CN-01

35,000 min⁻¹ Max. (＊1) 35,000 min⁻¹ Max. (＊2)

1/4 Speed Reducer

340258	RG-01

30,000 min⁻¹ Max. (＊1) 30,000 min⁻¹ Max. (＊2)

1/15 Speed Reducer

340259	RG-02

30,000 min⁻¹ Max. (＊1) 30,000 min⁻¹ Max. (＊2)

May be connected between the motor and the attachment when required increased torque.

Motor

Exclusive use for Emax EVOlution

- Standard Type Motor with Cord 1,000~40,000 min⁻¹

339923	ENK-410S

- Torque Type Motor with Cord 1,000~25,000 min⁻¹

339924	ENK-250T

ROTUS Series

- Air Motor with Hose 360° Twist-Free Joint Mechanism (P.40)

1004	IM-301	3,000~30,000 min⁻¹

See page 12 for more information on the NSK Rotus

Control Unit

Emax EVOlution Control Unit

340438 (120V)	NE249 120
339922 (230V)	NE249 230

★ When using Emax EVOlution, be careful for Maximum Allowable Speed.

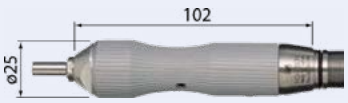
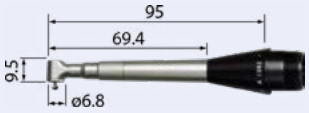
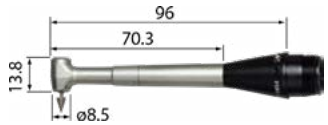
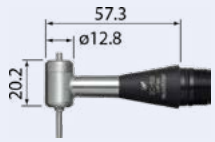
★ Never connect to Emax Series motor NK-351, NK-261 and NK-151.

★ 3 : Use 6mm torque Type HG-200 to connect ENK-250T

★ Maximum Allowable Speed, continuous use may change depending on the material being cut and other application variables.

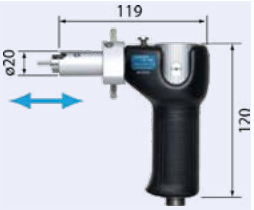
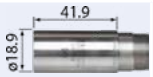
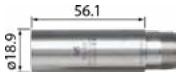
★ 1 : Maximum Allowable Speed, intermittent use.
★ 2 : Maximum Allowable Speed, continuous use.

Nakanishi (NSK) Emax Evolution - Attachments

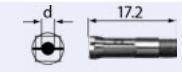
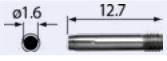
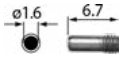
Product (size mm)	Description	Specification	Model	Code
	Emax EVOlution Control Unit	• Weight : 2.3 kg • Power Source : AC 120/230V, 50-60Hz • Dimensions : W130 x D254 x H97 mm	NE249 120 NE249 230	340438 339922
	Standard Type Motor with Cord	• Weight : 90 g (w/o Cord) • with Straight Cord 1.5m • Max. Torque 4.3 cN·m • Max. Power : 73W • Speed : 1,000~40,000 min-1 • Accessory : Pin Spanner (K-233) 1 pc.	ENK-410S	339923
	Torque Type Motor with Cord	• Weight : 147 g (w/o Cord) • with Straight Cord 1.5m • Max. Torque 4.8 cN·m • Max. Power : 76W • Speed : 1,000~25,000 min-1	ENK-250T	339924
	Ring Type Attachment	• Weight : 92 g • Collet Chuck : ø3.0mm (CHH-3.0), ø2.35mm (CHH-2.35) • Accessory : Spanner (7 x 5.1) 1 pc. Pin Spanner (K-233) 1 pc. L Shaped Spanner 1 pc. 40,000 min-1 Max. (*) 40,000 min-1 Max. (*2)	IR-310	339937
	Lever Type Attachment	• Weight : 62 g • Collet Chuck : ø3.0mm (CHH-3.0), ø2.35mm (CHH-2.35) • Accessory : Spanner (7 x 5.1) 1 pc. Pin Spanner (K-233) 1 pc. 40,000 min-1 Max. (*) 40,000 min-1 Max. (*2)	IH-300	340271
	Straight Type Attachment	• Weight : 55 g • Collet Chuck : ø3.0mm (CHH-3.0), ø2.35mm (CHH-2.35) • Accessory : Spanner (7 x 5.1) 1 pc. Bar Wrench (PCR-30) 1pc. 40,000 min-1 Max. (*) 40,000 min-1 Max. (*2)	IG-400	340410
	6 mm Torque Type Attachment	• Weight : 210 g • Collet Chuck : ø6.0mm (CHG-6.0) • Accessory : Spanner (10 x 10) 1 pc. Bar Wrench (K-212) 1 pc. • Pin Spanner (K-233) 1 pc. * Use 6mm torque Type HG-200 to connect ENK-250T 30,000 min -1 Max. (*) 27,000 min-1 Max. (*2)	HG-200	340242
	Long Type Attachment for Deep Hole Grinding ø13 mm	• Weight : 156 g • Collet Chuck : ø3.0mm (CHM-3.0) • Accessory : Spanner (7 x 5.1), (6 x 4.5) 1 pc. each Pin Spanner (K-233) 1 pc. 35,000 min-1 Max. (*) 35,000 min-1 Max. (*2)	BMH-300	340245
	90º Mini Angle Type Attachment for Chamfering Deep Hole (Very Small Head)	• Weight : 47 g • Collet Chuck : ø1.6mm (K-253) • Speed Reduction Ratio : 10/11 • Accessory : Chuck Wrench (K-232) 1 pc. • Pin Spanner (K-233) 1 pc. 15,000 min-1 Max. (*1) 15,000 min-1 Max. (*2)	MFC-300M	340248
	90º Mini Angle Type Attachment for Chamfering Deep Hole	• Weight : 50 g • Speed Reduction Ratio : 10/11 • Collet Chuck : ø1.6mm (K-252) • Accessory : Chuck Wrench (K-232) 1 pc. Pin Spanner (K-233) 1 pc. 15,000 min-1 Max. (*1) 15,000 min-1 Max. (*2)	MFC-300S	340247
	90˚ Angle Attachment	• Weight : 45 g • Collet Chuck : ø3.0mm (CHC-3.0) • Standard Accessories (Rubber Pad, Paper Disk) • Accessory : Standard Accessories 1 set. Chuck Wrench (K-231) 1 pc. Pin Spanner (K-233) 1 pc. 35,000 min-1 Max. (*1) 20,000 min-1 Max. (*2)	IC-300	340272
	50˚ Angle Attachment	• Weight : 45 g • Collet Chuck : ø3.0mm (CHC-3.0) • Standard Accessories (Rubber Pad, Paper Disk) • Accessory : Standard Accessories 1 set. Chuck Wrench (K-231) 1 pc. Pin Spanner (K-233) 1 pc. 35,000 min-1 Max. (*1) 20,000 min-1 Max. (*2)	KC-300	340273
	Mini-luster Attachment (Pencil-Type Polisher) (Reciprocating motion)	• Weight : 130 g • Max. tool shank diameter ø3.2mm, Screw clamp type. • Stroke range (fixed) : 0.8mm • Accessory : Standard Accessories 1 set 35,000 min-1 Max. (*1) 30,000 min-1 Max. (*2)	ML-8	340252
	Swing-luster Attachment (Pencil-Type Polisher) (Right to Left motion)	• Weight : 127 g • Reciprocating Stroke (Variable) : 0~9,000 times/min. • Stroke range (Variable) : 0~1.6mm • Max. tool shank diameter ø5.0mm, Screw clamp type. • Accessory : Standard Accessories 1 set 35,000 min-1 Max. (*1) 24,000 min-1 Max. (*2)	SLS-16	339878
	Fine Belt Sander Attachment	• Weight : 350 g • Belt Speed : 0~825 m/min. • Belt Width : 4, 6, 8mm • Accessory : 8, 6, 4mm Belts. Allen Wrench (3mm) : 1 pc. 35,000 min-1 Max. (*1) 35,000 min-1 Max. (*2)	KBS-101	340256

★ Maximum Allowable Speed, continuous use may change depending on the material being cut and other application variables.

★ 1 : Maximum Allowable Speed, intermittent use.
★ 2 : Maximum Allowable Speed, continuous use.

Product (size mm)	Description	Specification	Model	Code
	Hammer Attachment for Engraving and Ornament Processing Work	• Weight : 95 g • Stroke Times : 25~5,000 times/min. • Stroke Spring Pressure : 4.4~7.1N (Ring Adjustment Type) • Accessory : Spanner (7 x 5.1) 1 pc. Bar Wrench (K-212) 1 pc. Oil and nozzle, Hammer Bit (For replacement) 2 pcs. 20,000 min-1 Max. (*1) 16,000 min-1 Max. (*2)	HA-500	340750
	Luster Attachment (Pistol-Type Polisher) (Reciprocating motion) Built-in Motor	• Weight : 800 g • Max. Torque 17.2 cN·m • with Straight Cord 1.5m • Stroke Range : 0~6mm (variable) • Max. tool shank diameter ø6.4mm, Screw clamp type. • Reciprocating Stroke (variable) : 0~7,600 times/min • Accessory : Standard Accessories 1 set Lubrication Oil, Lubrication Nozzle for LUSTER 30,000 min-1 Max. (*1) 30,000 min-1 Max. (*2)	NLS-110	340283
	Luster Attachment (Pistol-Type Polisher) (Reciprocating motion)	• Weight : 680 g • Stroke Range : 0~6mm (variable) • Max. tool shank diameter ø6.4mm, Screw clamp type. • Reciprocating Stroke (variable) : 0~7,600 times/min • Accessory : Standard Accessories 1 set. Lubrication Oil, Lubrication Nozzle for LUSTER 30,000 min-1 Max. (*1) 30,000 min-1 Max. (*2)	LS-100	340251
	EXTENSION JOINT	• Weight : 83 g • Pin Spanner (K-233) : 1 pc. 35,000 min-1 Max. (*1) 35,000 min-1 Max. (*2)	CN-01	340260
	(1/4) Speed Reducer	• Weight : 68 g • Pin Spanner (K-233) : 1 pc. 30,000 min-1 Max. (*1) 30,000 min-1 Max. (*2)	RG-01	340258
	(1/15) Speed Reducer	• Weight : 93 g • Pin Spanner (K-233) : 1 pc. 30,000 min -1 Max. (*1) 30,000 min -1 Max. (*2)	RG-02	340259

Collet Chuck

Product	Fit to (Model)	Inside Diameter : ød mm	Model	Code
 CHC Group	IC-300, KC-300	ø1.6	CHC-1.6	340624
		ø2.35	CHC-2.35	340604
		ø3.0	CHC-3.0	340608
		ø3.175	CHC-3.175	340603
 CHG Group	HG-200	ø2.35	CHG-2.35	340611
		ø3.0	CHG-3.0	340620
		ø3.175	CHG-3.175	340610
		ø5.0	CHG-5.0	340634
		ø6.0	CHG-6.0	340612
		ø6.35	CHG-6.35	340617
		ø1.0 - ø6.35 available on request		
 CHH Group	IH-300, IR-310	ø1.5	CHH-1.5	340635
		ø2.35	CHH-2.35	340607
		ø3.0	CHH-3.0	340613
		ø3.175	CHH-3.175	340602
		ø1.0 - ø3.175 available on request		
 CHM Group	BMH-300	ø1.0	CHM-1.0	340636
		ø1.6	CHM-1.6	340637
		ø2.0	CHM-2.0	340638
		ø2.35	CHM-2.35	340609
		ø3.0	CHM-3.0	340615
		ø3.175	CHM-3.175	340630
	MFC-300S	ø1.6	K-252	340626
	MFC-300M	ø1.6	K-253	340924
	IG-400	ø2.35	NKM6-2.35	340632
		ø3.0	NKM6-3.0	340631
		ø3.175	NKM6-3.175	340633

Chuck Nut

IG-400
(for NKM6 Group)

Model: CHN-6
Code: 340639

For more parts and attachments please visit kemet.co.uk/emax

Parts

Product	Description	Model	Code
	Straight Cord : 1.5 m (with Switch)	ENKCD-250T (Standard Type Motor)	340044
		ENKCD-410S (Torque Type Motor)	Available on request
	Power Supply Cord	K-269	340762
	Foot Control (ON-OFF and speed change can be accomplished.)	FC-64	340749
	Handpiece Holder	K-273	340726
	Handpiece Stand	K-274	340434

★ Maximum Allowable Speed, continuous use may change depending on the material being cut and other application variables.

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Nakanishi (NSK) Impulse

Ultra Precision, High Accuracy

Ideal for high precision grinding, the IMPULSE has smooth rotation without vibration, even at high speed.

High-Power-High-Torque

A special vane air motor ensures the motor speed remains stable, even under varying loads.

On/Off Ring

Easy to switch on/off and adjust motor speed by turning right and left.

Exchangeable Chuck Collet

- Standard size: ø 3.0mm
- Special size: ø0.8mm - ø3.0mm in 0.1mm increments and ø2.35, ø3.175mm

Easy tool change

Cutting tools easily changed with a spanner.

Excellent Endurance

High precision components used in the IMPULSE provide excellent endurance and micron accuracy.

Excellent Silencer

Grinder features a silencer on the exhaust air hose to keep operation noise low.

Connecting Part To Air Line Kit

Built in air filter in air inlet coupling (included in the connection to air line kit).

Product (size mm)	Standard Accessories / Equipment	Model	Code
	• Weight : 165 g • Spanner (8x5) : 1pc. • Bar Wrench (K-212) : 1pc. • Hose (K-213) : 1.5m • Silencer (K-208) : 1pc. • **Speed 60,000 min^{-1}**	NSP-601	340417
	• Weight : 210 g • Spanner (8x5) : 1pc. • Bar Wrench (K-212) : 1pc. • Hose (K-213) : 1.5m • Silencer (K-208) : 1pc. • **Speed 40,000 min^{-1}**	NA45-400	340418
	• Weight : 190 g • Special Grindstone Axis (NCH-01) : 1pc. • Spanner (8x5) : 1pc. • Bar Wrench (K-212) : 2pcs. • Hose (K-213) : 1.5m • Silencer (K-208) : 1pc. • Allen Wrench (1.5mm) : 1pc. • Standard Accessories : 1 set • **Speed 23,000 min^{-1}**	NA90-230	340420
	• Weight : 190 g • Special Grindstone Axis (NCH-01) : 1pc. • Spanner (8x5) : 1pc. • Bar Wrench (K-212) : 2pcs. • Hose (K-213) : 1.5m • Silencer (K-208) : 1pc. • Allen Wrench (1.5mm) : 1pc. • Standard Accessories : 1 set • **Speed 23,000 min^{-1}**	NA45-230	340419
	• Weight : 2.2 kg • Can supply the smooth air flow and automatic lubrication for a long life and the stable power. • By adjustment of auto lubrication & air flow, this will extend the lifetime of air grinder. • Best for grinding and polishing processes, AL-H1206 air line kit has a compact body with a carrying handle and holder to put the IMPULSE in. • **Standard Equipment** : Air Pressure Gauge, Air Regulator, Air Filter Lubricator, Air ON-OFF Valve • **Accessories** : Hose for Piping (K-275) : 2m, Lubrication Oil (K-211) : 1pc	AL-H1206	340210

Collect Chuck

Product	Inside Diameter : Ø d	Model	Code
	ø2.35	CHS-2.35	340616
	ø3.0	CHS-3.0	340614
	ø3.175	CHS-3.175	340605
	ø0.8 - ø2.9 available on request		

Nakanishi (NSK) Rotus

This high performance air motor features minimal power loss from load fluctuation has excellent grinding stability. Moreover, the motor has minimal air consumption, runs quietly and the energy-saving mechanics makes it possible to operate with a 0.75KW (1 hp) air compressor.

- Lightweight and compact design. 130 g (w/o hose)
- 17 types of attachments for all types of applications
- ON/OFF, FWD./REV. Rotation Direction and Motor Speed can be controlled using just the Ring Switch. Foot controller is available : used as an ON/OFF switch as well as a variable speed control
- Air cooling system generates no heat even with continuous operation
- The silencer (attached to the end of the exhaust air tubing) allows the motor to be operated extremely quietly
- Twist-Free Joint mechanism is installed in IM-301 to prevent the hose twisting

Product (Size mm)	Description	Specification	Model	Code
	ROTUS AIR MOTOR (with Twist-Free Joint Mechanism)	Air Motor with 360° Twist-Free Joint Mechanism. Adapted Twist-Free Joint mechanism between the motor and the hose prevents the hose twisting. Weight : 130 g 3,000 ~ 30,000 min-1	IM-301	340217
	ROTUS AIR MOTOR (with Chip Air Mechanism)	Air Motor IM-300 with Chip Air mechanism blows away the cutting dust with clean air coming through the top end of the attachment. The hand-held cutting work remains cool by the Chip air for comfortable operation. Weight : 130 g 3,000 ~ 30,000 min-1 This is only with the attachment IH-300.	IM-300	340218
	RING TYPE ATTACHMENT	High precision and high reliability is realised by micron precision. Slim, lightweight design allows for fine finishing of delicate parts. One-touch ring type burr replacement. 40,000 min-1 Max. (*1) 40,000 min-1 Max. (*2)	IR-310	339937
	MINI-LUSTER ATTACHMENT (Pencil-Type Polisher)	Due to pencil type grip, this is the most suitable for polishing narrow groove, details, etc. Reciprocating Stroke (Variable) : 0~7,600 times/min. Mountable tool : Max. shaft diameter ø3.2 mm, Screw clamp type. Weight : 130 g 35,000 min-1 Max. (*1) 30,000 min-1 Max. (*2)	ML-8 Stroke (0.8mm)	340252
	AIR LINE KIT	Ensures a smooth operation and long life by supplying stable, conditioned air to the air motor. Three functions : air filter, regulator, mist lubricator can also be used to adjust motor speed. Weight : 2.2 kg Filter Mesh : 5 µm	AL-H1207F	340216
	SILENCER	The silencer (attached to the end of exhaust air tubing) significantly reduces operation noise.	K-209	340488
	FOOT CONTROL	Designed to depress from any direction. Fine adjustment of speed control is possible.	AFC-45	340214
Rotus Standard Set	Select from a variety of attachments depending on the application. • Air Grinder (IM-301+IR-310) : 1 pc. • Chuck Collet ø3.0, ø2.35mm • Air Line Kit (AL-H1207F) : 1 pc. • Foot Control (AFC-45) : 1 pc. • Accessories : Piping Hose ü 2 m (K-275) : 1 pc., Lubricating Oil (K-211) : 1 pc. • Pin Spanner (K-233) : 2 pc. • Spanner (7x5.1) : 1 pc. • L Shaped Spanner : 1 pc The new ring type IR-310 is a standard attachment for ROTUS standard set R301-IR.	***ROTUS-IR***	***340215***

* Maximum Allowable Speed, continuous use may change depending on the material being cut and other application variables.

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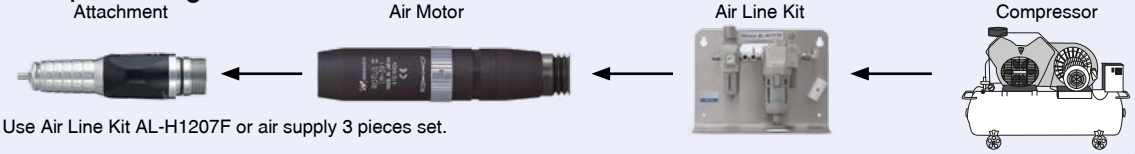
Set-up Drawing



Use Air Line Kit AL-H1207F or air supply 3 pieces set.

Flexible Drive System

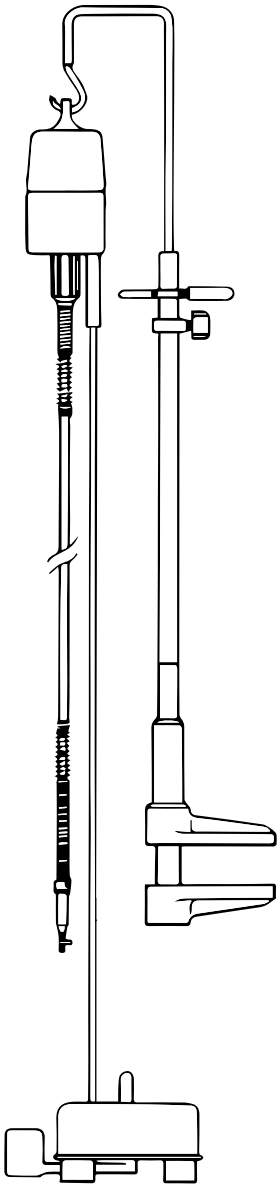
A heavy duty electric motor with high torque, even at low speeds, the KFD has a robust construction for long and continuous service giving quiet running and vibration free operation. Maximum speed - 22,000 rpm. Input voltage - 230 volt (for 110/120 volt use G.F.D.). Power output - 300 watts.

The Flexible Drive Shaft has high flexibility and resistant to looping and twisting with double ball races at the tool holder end. A slip joint is provided for the attachment of handpieces for rotating tools and also the Diprofil hand filing machine. The foot control has built-in variable speed electronic system giving speed range 0-22,000 rpm, with increased torque at low speeds. The bench stand is simple to use, has variable height adjustment with a free moving centre fulcrum, providing infinite variable motor drive positioning.

KFD. Kit 3E. Flexible Drive Kit for rotary action comprising:

- Motor, Variable Speed Foot Control Unit
- 6mm Stainless Steel Flexible shaft
- TH-SZ Handpiece with two collets 3/32” and 1/8”
- Supplied with Bench Stand. Input voltage of 230 volt. (For input of 110/120 volts model G.F.D. available)
- Utility belt to hold controller, hand-piece, battery and consumable items
- Product code for kit: 321001

Product	Code
KFD Kit 3K. Electric Motor, Foot Controller and Flexible Shaft	321003
Electric Motor, 230V	322086
Flexible Drive Shaft, 5mm	322011
Foot Control, 230V	322032
Bench Stand	325001
Support Cradle (alternative to bench stand)	322014



K.F.D. Handpieces

Product		Specification	Model	Code
	Flexible-shaft driven machine	The FXK-N, FXS-N and FXH-N models are driven by an electrical motor with speed control and a flexible-shaft with slip-joint (European standard) or ball-joint connection (US standard) e.g. Diprofil type DSE-47. Corresponding motors of other brands may also be used.	FXK-N	332041
			FXH-N Square Hole	332042
			FXS-N Key hole	332043
	Flexible Shaft Driven Machine	These models are driven by an electrical motor with speed control and a flexible shaft with slip-joint (European standard) or ball-joint connection (US standard) e.g. Diprofil type DSE-47. Corresponding motors of other brands may also be used.	FPK/R	331018
			FPH/R Square Hole	332065
			FPS/R Key hole	331033

Handpiece		Code	Description	Collet					
				3/32”	1/8”	1/4”	2.35mm	3mm	6mm
	TH-SZ	322005	The TH-SZ straight is supplied with 1/8” and 3/32” diameter collets.	325007	325010	325011	325007	325008	325009
	VTN	322003	This head can be readily swivelled and telescopically extended. Supplied with 1/8” and 3/32” diameter collets.	325018	325013	-	325020	325012	-
	VTN-S	322004	Similar to VTN, but larger construction without swivelling or telescopic facility. A 1/4” diameter collet is supplied as standard.	325007	325010	325011	325007	325008	325009

Kemet Portable Grinder Polisher (PGP)

- Lightweight battery pack and motor controller for Nakanishi brushless motor and right-angled hand-piece (1000rpm-25,000rpm)
- Includes 4:1 reduction gear for higher torque
- Battery life - 2-5 hours constant use (charger included)
- Visual LED bar-graph display of RPM, load indication and battery level
- Utility belt to hold controller, hand-piece, battery and consumable items
- Packing dimensions: 600 x 470 x 300 mm
- Weight: 8kg
- Product code for full kit: 339098

Consumables included with kit

Disc Holders	Code
32mm rubber holders (Pk 3)	340724
32mm Abrasive Discs	**Code**
Grit 80 (Pk 100)	362441
Grit 120 (Pk 100)	362442
Grit 240 (Pk 100)	362443
Grit 400 (Pk 100)	362444
Grit 600 (Pk 100)	362445
Grit 1200 (Pk 100)	362472

32mm Polishing Cloths	Code
HS Green (Pk 25)	340722
HS Blue (Pk 25)	340725
MBL (Pk 25)	341889
Polishing Compounds	**Code**
1-OS-C2 (5g)	114006
6-OS-C2 (5g)	114013

Other compounds and polishing cloths available to suit customer specific processes

Portable & Digital Microscope

Each microscope comes complete with capture software including measurement features. The microscope is a USB Digital Microscope with Built-In LED illumination. Using a colour CMOS sensor it has a frame rate of up to 30fps.

- 10 - 50X & 200X USB2 1.3MP pixels
- **Laptop required for viewing**
- Product code: 362617

Head Magnifying Glass

Head magnifying glass for precision work. Ideal for the control of machined surfaces. Has three magnifying glasses suited for different applications. LED lighting moves both horizontally and vertically.

- Lens Size: 89 x 29 mm, Ø: 29 mm
- Diopter: 1.5 - 3 - 8.5 - 10
- Protected by crack-free rigid coating
- Diopter: 1.5 - 3 - 8.5 - 10
- Weight: 148 g
- Product Code: 363071

Flexible Magnifier Lamp

Flexible magnifier lamp which moves both horizontally and vertically with a diopter of 3 or 5. Equipped with round lens of 127 mm with semi-circular LED along the glass lens for very good visibility and accurate viewing (LED lamp Life: 50,000 hours under normal use).

- Excellent optics
- LED lighting provides very accurate view
- Product Code: 363088

Di-PRO® Filing Machines

The Di-PRO® machine is the flagship of the Diprofil family. With its low levels of potentially harmful vibrations it is the natural choice when operating the machine for long hours. It is ideal for a wide variety of applications such as filing, lapping, honing, de-burring and polishing.

- Stroke length: 0 - 6 mm. (recommended 0.5 - 3 mm). NOTE! At stroke lengths exceeding 4 mm a maximum speed of 5,000 rpm is recommended. Available for/with a wide variety of drive sources
- Very low levels of potentially harmful vibrations
- Includes an extension pipe for longer tools
- Speed (maximum): 7,000 rpm
- Noise level: Not exceeding 75 dB(A) at 7,000 rpm
- Applied feed force: 2-12N (depending on inserted tool type and dimension)
- Weight of inserted tool: Maximum 34 g. Recommended 1-15 g
- Tool holder: Ø 6.4 mm. (suitable for tool shanks Ø 2 - Ø 6.4 mm)

DiPro Set - Contents of set	Model	Code
Di-Pro machine type FXM-N with 6.4 mm tool-holder, TPU-20-220V power unit and brushless rotary hand-Piece type C-HPM-BL2	FXM-N SET-L	333806

Classic Diprofil Machines

The Classic polishing/filing machines, which have been the preferred choice for tool- and mould-makers for more than 60 years, are now available in Mark II editions incorporating a new tool-holder to improve ergonomics and flexibility. The Classic machine with its rigid and ergonomic design facilitates any filing, lapping, honing or polishing application. With its reciprocating movement, the Classic machines are an excellent alternative and compliment to rotary hand-pieces.

- Speed (maximum): 8,000 strokes/min
- Speed (recommended): 5,000 - 6,000 strokes/min
- Stroke length: 0 - 6 mm
- Stroke length (recommended): 0.5 - 3 mm
- Tool holder: Ø 6.4 mm. (suitable for tool shanks Ø 2 - Ø 6.4 mm)
- Weight of inserted tool: Maximum: 26 g. Recommended: 1-15 g
- Applied feed force: 2-12 N (Depending on inserted tool type and dimension)
- Noise level: Not exceeding 70 dB(A) at 7,000 strokes/min. According to ISO 15744

Air Drive Machine	Specification	Model	Code
	This model is driven by com-pressed and oil mist lubricated air. • Oil consumption: Minimum 30mm^3/min at maximum speed (about 2 drops/min.) • Air pressure: 4bar (58psi). • Air consumption: Approx. 65 l/ min at 8,000 strokes/min. • Weight: Approx. 740g	FPL/R	331008

Flexible Shaft Driven Machine	Specification	Model	Code
	This model is driven by an electrical motor with speed control and a flexible shaft with slip-joint (European standard) or ball-joint connection (US standard) Weight: Approx. 575 g	FPK/R	331018

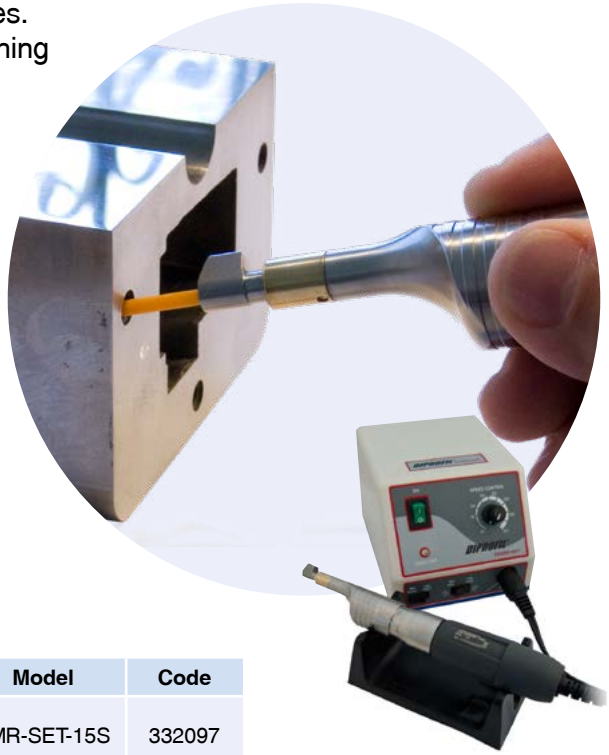
Product		Specification	Model	Code
	Tool Holder	Possible to use very long tools without the need for putting your fingers on moving tools and/or machine parts. The extension pipe can easily be cut to the desired length to fit different tools and applications.	FXA-T/P	332089

Ball-rods, lapping rings and accessories for diprofil machines available (visit www.kemet.co.uk)

Kemet are the authorised UK distributor for Diprofil

Dipromini

The natural choice when working in narrow and confined spaces. The compact and handy dimension makes it excellent for polishing and finishing applications on small and hard to reach surfaces. Using the Dipromini gives you total control even when working in the narrowest spaces on a delicate work-piece. For lowest possible vibration levels, we recommend using light weight tools and tool-holders such as the THFS-1 and the THPS-3 (see page 33).



- Tool holder: max Ø 3.6 mm
- Speed: max 12,000 rpm
- Speed: recommended: 5,000 - 11,000 rpm
- Dimension: Ø 24 mm
- Weight: approx. 120 g
- Noise: < 70 dB(A) at 9,000 rpm
- Vibrations: stroke 0.5 mm: <2.5 m/s², stroke 1.0 mm: 1.5 - 3 m/s², stroke 1.5 mm: 1.5 - 4 m/s²
- Frequency weighed hand/arm vibration, principally in accordance with ISO 28927-8

Dipromini Set - Contents of set	Model	Code
Dipromini machine with 1.5 mm stroke length, micro-motor type HPM-B1 and power unit type DPU-3.	FMR-SET-15S	332097

Diprofil Power Unit and Rotary Handpieces

Product		Specification		Model	Code
	Diprofil Power Unit (DPU-3)	This compact and ergonomic Power Unit is designed for use together with dedicated rotary hand-pieces and micro-motor driven reciprocating Diprofil polishing/filing machines with carbon brush motors. It has high torque and electrical feedback circuitry. Other features include continuously variable speed, forward / reverse switch and automatic overload protection. Supplied with foot control type DPU-3-FC for optional speed adjustment.		DPU-3	331012
		Technical data • Power: max. 100 W • Dimensions: W115 x D147 x H96 mm	• Input: AC 110/220 V at 50/60 Hz • Output: DC 0 - 32 V, 1.2 A • Weight: 1.7 kg. Foot control: 585 g		
	Brushless Rotary Hand-piece	For use together with twin power unit TPU-20 (see website for details). Features a quick change design for both the collet and the tool and is supplied with 3.0 mm collet. Optional 2.35 mm collet available. Micro-motor driven rotary hand-piece with brushless motor. • Speed: max. 40,000 rpm • Torque: 8.5N cm • Consumed power: max. 230 W • Weight: 350 g	• Dimensions: L159 x Ø27 mm • Noise: < 70 db(A) at 40,000 rpm • Vibrations: < 2.5 m/s²	C-HPM-BL1	332084
	Rotary Hand-piece	Micro-motor driven high speed rotary hand-piece with carbon brush motor for use together with power unit DPU-3 or twin power unit TPU-20 (see website for details). Features a quick change design for both the collet and the tool and is supplied with 3.0 mm collet. Optional 2.35 mm collet available.	• Dimensions: L159 x Ø29.5 mm • Speed: max. 38,000 rpm • Consumed power: 100 W • Torque: 4.0N cm • Weight: 285 g • Noise: < 70 db(A) at 38,000 rpm • Vibrations: < 2.5 m/s²	C-HPM-B1	334093

Rotary Micromotor System Set - Contents of set
This affordable rotary micro motor system performs a wide range of grinding, deburring and polishing operations. The system consists of a Hand piece, Controller and Foot rheostat. The lightweight hand piece has variable speed up to 38,000 rpm and is supplied with a 3mm quick release collet. Speed and direction of rotation is adjusted by a compact controller, which is switchable for 110/220 volt. If preferred the speed can be controlled by the rheostat Foot control which is easily connected to the controller. The whole system is also compatible with the range of Gesswein Power Polishing hand pieces available from Kemet. Hand piece, 150mm long x 30mm dia. (tapers to 12mm dia. at nose). Weight 300 grams. Controller, 115mm wide x 146mm depth x 95mm high. Weight 1.4 Kg. **DPU-SET-S with 3mm collet - 332034**

Product	Code	Product	Code
Optional 3.175mm (1/8") collet	332037	Replacement 3mm collet	332035
Optional 2.35mm (3/32") collet	332036		

Welding System - Kemwelder IV

The Kemwelder IV is a welding system for rapid and reliable repairs in tool making and mould building. The welder works by gently touching the spot of the welding point with the electrode tip. After 2 seconds, the control unit triggers welding and at the same time an electromagnet draws the electrode back. You can precisely position the electrode for subsequent points which can then be triggered every second. For safety, the shutter of the microscope closes with each weld. **NOTE: Kemwelder IV requires argon (shielding) gas.**

The 10x magnification microscope has a built in integrated LED light uniformly which illuminates the entire welding area. The visual field is of adequate size with a diameter of 20 mm. When using the handpiece and welding filler, you can very accurately determine the spot where you wish to weld using the thin, pointed electrode. Using the hydraulic swivel arm, you can quickly position the microscope to exactly where needed.

The integrated LCD vision protection filter closes the beam path during the welding time. The whole process takes place in milliseconds. For safety, your eyes are effectively protected.

- Pre-set welding parameters for variety of materials (e.g. Steel & Aluminium) of up to Ø 0.8 mm and even up to 1.0 mm under certain conditions.
- Electronically controlled hand piece - The welding process starts only if all requirements are complied
- Ability to program bespoke welding operations
- Shielding gas process
- Package includes microscope (10x magnification). Supplied with a green, translucent protection shield.
- Welding kit is small and portable
- Product Code: 339102

Technical Data	
Supply voltage	~230 V 50 ~60 Hz, +/-10%
Fuse	T 3,15 A
Power input	400 VA
Load voltage	30 - 43 V
No-load voltage	43 V
Duty cycle	80%
max. Charge time	0.8 s
Shielding gas	ARGON 4.6
Gas pressure	2 bar
Protection gas	I
Insulation class	B
Safety class	IP 21S
Dimensions LxWxH	320 x 155 x 320 mm
Weight	8.2 kg

Contents Include:

- Control unit with touch screen
- Hand piece with cable 2 m
- Fixing hand piece
- Earth cable 1.50 m with magnet
- Flowmeter
- Brass brush
- Foot switch
- 5 m gas hose
- 1 each collet Ø 0.6, Ø 0.8 and Ø 1.0 mm
- 1 each fine welding ceramic nozzle Ø 3 and 4 mm
- Stereo microscope 10 x magnification with electronic shutter LED lighting, hydraulic swivel arm, switchable magnet (1,200 N)
- 10 special electrodes Ø 1.0 mm x 200 mm
- 10 each special electrodes Ø 0.6 mm and Ø 0.8 mm with 1 diamond grinding disk
- 1 Electrode Grinder / Sharpener
- Green transparent protection shield

Book a **FREE** Demonstration* 01622 755287

** Demonstrations available in the UK only*

Welding Rods & Accessories for the Kemwelder

Only the right welding rods will ensure good results. You will get good results if the composition of the welding rod corresponds to your material. The rods are 333 mm long with a minimum weight of 100 grams. Coils available on request.

Please contact us if you do not find the right rod for your application. Wires with a diameter of 0.8 mm welds the Kemwelder without any problems, and with good conditions even up to 1 mm.

Spares & Accessories		Code
Handpiece		339111
Handpiece with longer cable (2.5 m), magnetic earth cable (2.5 m) and 2 x extension cables (microscope, 2 m)		339112
Electrode grinding motor complete with diamond grinding disc and T-plug		339106
Fine welding nozzle Ø 3 mm		339113
Collet for electrodes	0.6 mm	339114
	0.8 mm	339115
Electrodes 50 mm ground on both sides, Contents = 10 pieces + 1 diamond grinding disc on shank	0.6 mm	339116
	0.8 mm	339117
Gas hose Ø 6 mm		339118
Fine welding nozzle Ø 3 mm		339119
Protection Shield		339104

Welding fillers (length 333 mm, Ø 0.4 mm)

Hardness	For	Al	C	Ci	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Si	Ti	Zn	Zr	Code
Soft	1.2311, 1.2312, 1.2162, **1.2738**		0.1				#		1.1	0.5		0.6				339108
42 - 46 HRc	1.2082, 1.2083, 1.2343, 1.2367-1.2606, **1.2767**		0.25		5.0		#		0.7	4.0		0.5	0.6			339109
53 - 58 HRc	1.2082, 1.2083, 1.2343, 1.2344, 1.2367-1.2606, **1.2767**		0.35		7.0		#		1.2	2.0		0.3	0.3			339110
53 - 58 HRc	1.2082, 1.2083, 1.2311, 1.2312, **1.2343**. 1.2344, 1.2367-2606, 1.2767, 1.2842		0.35		7.0		#		1.2	2.0		0.3	0.3			339120
54 - 60 HRc	1.2379, **1.2436**, 1.2601		0.5		9.5				0.5			3.0				339121
54 - 60 HRc	2.4060, 2.4061, **2.4066**, 2.4068			0.1			#		3.5		55.0		+			339122
54 - 60 HRc	GG (grey cast iron) and GGG (globular grey cast iron) materials, miscellaneous types of cast iron			0.1			#		3.5		55.0		+			339123
54 - 60 HRc	connections of various different materials. 1.2316			0.10	30		#		1.6			0.4				339124
220 HB	Cu-Al **multi-alloy bronzes**, platings on cast and steel materials	7.5				#	2.5		13.0		2.5					339125
140 HB	Cu-Al multi-alloy bronzes, platings on cast and # steel materials, in addition to mixed joins of different materials	8				#	2.0		2.2		2.2					339126
140 HB	aluminium	#					<0.4		<0.2			5.0				339127
140 HB	aluminium	#					0.2					12				339128
140 HB	ALMg2,7Mn, AKLMg4,5Mn, ALMg5, **ALMgSi0,7**, ALMgSi1, ALMgSiCu, ALZn4,5Mg1, G-ALMg3, G-ALMg5	#			0.05 - 0.25	0.05	0.40	4.5 - 5.2	0.7 - 1.1			0.25	0.15	0.25	0.1 - 0.2	339129

- Remainder
Other Ø sizes available on request (0.2 - 1.0 mm)

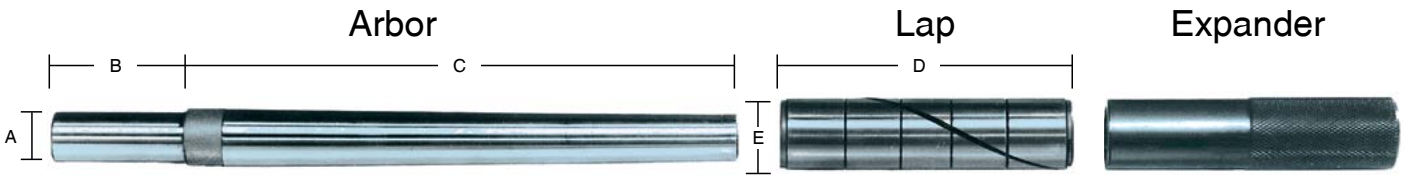
Helilaps

Internal Helilaps are used wherever there is a requirement for accurate sizing and / or straightening of bores. Additionally, they are frequently used for correcting of roundness or straightness in manufactured components. Laps can be machined down to meet preceding diameters shown in the tables below.

Helilap Puller

Lap Expansion (size)		Lap Size (in)	Arbor
in	mm		
0.046 - 0.055	1.168 - 1.397	3/64	4/0
0.062 - 0.076	1.574 - 1.930	1/16	3/0
0.077 - 0.091	1.956 - 2.311	5/64	3/0
0.093 - 0.108	2.362 - 2.743	3/32	2/0
0.108 - 0.122	2.743 - 3.099	7/64	2/0
0.124 - 0.137	3.149 - 3.479	1/8	0
0.139 - 0.153	3.530 - 3.886	9/64	0
0.155 - 0.170	3.937 - 4.318	5/32	0
0.170 - 0.184	4.318 - 4.673	11/64	0
0.186 - 0.201	4.724 - 5.105	3/16	1
0.202 - 0.215	5.130 - 5.461	13/64	1
0.218 - 0.233	5.537 - 5.918	7/32	2
0.233 - 0.246	5.918 - 6.248	15/64	2
0.249 - 0.264	6.324 - 6.705	1/4	3
0.265 - 0.276	6.731 - 7.010	17/64	3
0.280 - 0.289	7.112 - 7.340	9/32	3
0.296 - 0.302	7.518 - 7.670	19/64	3
0.312 - 0.327	7.924 - 8.305	5/16	4
0.327 - 0.339	8.305 - 8.610	21/64	4
0.343 - 0.351	8.712 - 8.915	11/32	4
0.358 - 0.364	9.093 - 9.245	23/64	4
0.374 - 0.388	9.499 - 9.855	3/8	5
0.390 - 0.401	9.906 - 10.185	25/64	5
0.405 - 0.414	10.287 - 10.515	16/32	5
0.421 - 0.427	10.693 - 10.845	27/64	5
0.436 - 0.450	11.074 - 11.430	7/16	6
0.452 - 0.464	11.480 - 11.785	29/64	6
0.467 - 0.476	11.861 - 12.090	15/32	6
0.483 - 0.489	12.268 - 12.420	31/64	6
0.499 - 0.515	12.674 - 13.081	1/2	7

Lap Expansion (size)		Lap Size (in)	Arbor
in	mm		
0.515 - 0.531	13.081 - 13.487	33/64	7
0.530 - 0.546	13.462 - 13.868	17/32	7
0.546 - 0.560	13.868 - 14.224	35/64	7
0.561 - 0.574	14.249 - 14.579	9/16	7
0.577 - 0.588	14.655 - 14.935	37/64	7
0.593 - 0.602	15.062 - 15.290	19/32	7
0.608 - 0.614	15.443 - 15.595	39/64	7
0.624 - 0.640	15.849 - 16.256	5/8	8
0.640 - 0.654	16.256 - 16.611	41/64	8
0.655 - 0.667	16.637 - 16.941	21/32	8
0.671 - 0.681	17.043 - 17.297	43/64	8
0.686 - 0.694	17.424 - 17.627	11/16	8
0.702 - 0.709	17.830 - 18.008	45/64	8
0.718 - 0.725	18.237 - 18.415	23/32	8
0.733 - 0.739	18.618 - 18.770	47/64	8
0.749 - 0.763	19.024 - 19.380	3/4	9
0.764 - 0.777	19.405 - 19.735	49/64	9
0.780 - 0.792	19.812 - 20.116	25/32	9
0.796 - 0.807	20.218 - 20.497	51/64	9
0.811 - 0.821	20.599 - 20.853	13/16	9
0.827 - 0.836	21.005 - 21.234	53/64	9
0.843 - 0.851	21.412 - 21.615	27/32	9
0.858 - 0.865	21.793 - 21.971	55/64	9
0.874 - 0.889	22.199 - 22.580	7/8	10
0.889 - 0.903	22.580 - 22.936	57/64	10
0.935 - 0.919	22.987 - 23.342	29/32	10
0.921 - 0.934	23.393 - 23.723	59/64	10
0.936 - 0.948	23.774 - 24.079	15/16	10
0.952 - 0.962	24.180 - 24.434	61/64	10
0.968 - 0.976	24.587 - 24.790	31/32	10
0.983 - 0.990	24.968 - 25.146	63/64	10



Laps			Corresponding Arbors					Expanders		Pullers	
Nominal Lap dia 'E' (in)	Length 'D' (in)	Code	Arbor No.	Shank Dia 'A' (in)	Shank Length 'B' (in)	Taper Length 'C' (in)	Code	Expander No.	Code	Size	Code
3/64	1/2	303101	4/0	1/8	3/4	1 1/2	303401	4/0	303201	Extra Small	303301
1/16	5/8	303102	3/0	1/8	3/4	1 1/2	303402	3/0	303216		
5/64		303103									
3/32	3/4	303104	2/0	1/8	3/4	1 5/8	303403	2/0	303202		
7/64		303105									
1/8	7/8	303106	0	1/8	3/4	1 3/4	303404	0	303203		
9/64		303107									
5/32		303108									
11/64		303109									
3/16	1 3/8	303110	1	3/16	1	2 3/4	303405	1	303204	Small	303302
13/64		303111									
7/32	1 3/4	303112	2	3/16	1	3	303406	2	303205		
15/64		303113									
1/4	2	303114	3	3/16	1	4	303407	3	303206		
17/64		303115									
9/32		303116									
19/64		303152									
5/16	2	303117	4	7/32	1	4	303408	4	303207		
21/64		303153									
11/32		303154									
23/64		303118									
3/8	2 1/2	303119	5	9/32	1 1/2	5	303409	5	303208		
25/64		303120									
13/32		303121									
27/64		303122									
7/16	2 1/2	303123	6	5/16	1 1/2	5	303410	6	303209		
29/64		303124									
15/32		303125									
31/64		303166									
1/2	3 1/4	303126	7	3/8	1 1/2	6	303411	7	303210		
33/64		303127									
17/32		303155									
35/64		303156									
9/16		303157									
37/64		303174									
19/32		303128									
39/64		303168									
5/8	3 1/4	303129	8	13/32	1 1/2	6	303412	8	303211	large	303303
41/64		303170									
21/32		303130									
43/64		303175									
11/16		303131									
45/64		303132									
23/32		303133									
47/64		303171									
3/4	3 1/2	303134	9	1/2	2	7	303413	9	303212		
49/64		303158									
25/32		303135									
51/64		303167									
13/16		303136									
53/64		303159									
27/32		303160									
55/64		303161									
7/8	3 1/2	303172	10	9/16	2	7	303414	10	303213		
57/64		303176									
29/32		303144									
59/64		303162									
15/16		303137									
61/64		303177									
31/32		303138									
63/64		303165									

Vibratory Finishing Machines & Media

With machines available to process parts in batches or continuously, we can offer the optimum finishing solution for your needs, providing cost effectiveness without impacting on the environment. Manufacturers in a variety of industries have benefited from this expertise in developing finishing solutions that meet stringent requirements, reduce processing times and provide repeatable quality.

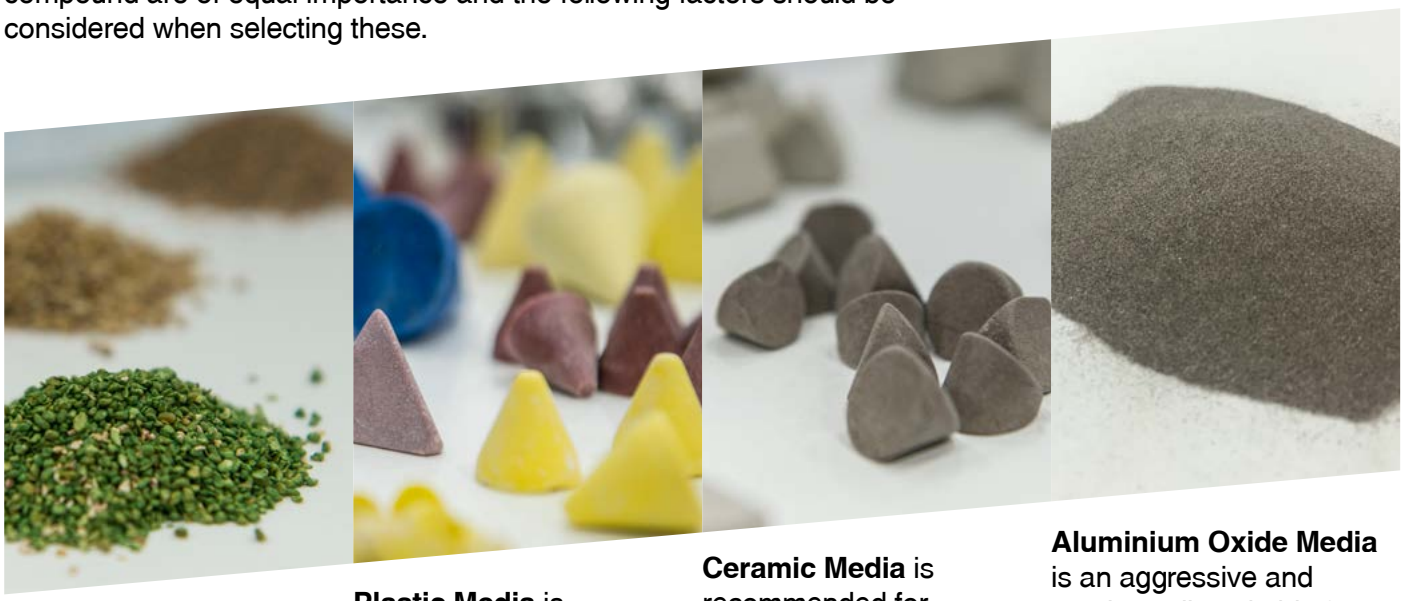
Vibratory Bowl - Bench mounted

These machines are ideally suited for small batch work and are capable of deburring, burnishing, radiusing, descaling, polishing, cleaning and surface improvement.

Capacity		Overall dimensions in mm/ inch			Chamber dimension in mm/ inch after lining		Max Motor Rating (kW)	Separation System
Cu. Ft.	Litres	Length	Width	Height	Width	Height		
1	28	730 / 28.7	630 / 24.8	600 / 23.6	150 / 5.9	230 / 9.1	0.18	No
1	28	730 / 28.7	700 / 27.5	600 / 23.6	150 / 5.9	230 / 9.1	0.18	Yes

Selecting the suitable media for your application

The process to achieve the required surface finish involves using the correct machinery but the media and compound are of equal importance and the following factors should be considered when selecting these.



Agro Media can be used for surface brightening or final finish refinement. The Pre-treated Media is recommended for achieving a high lustre or mirror finish on components. All of our Agro and Pre-Treated Medias are bovine free and the use of a dust extractor to collect fine dust resulting from using Maizorb in a drying process is recommended.

Plastic Media is lightweight and is manufactured out of soft bonding agents, which allow it to remove burrs without rolling the burr onto the part. Suitable for obtaining a very smooth surface finish or a bright or matte finish on components made from softer materials, plastic media can be used for a long time as it maintain its shape even if it wears down and does not chip.

Ceramic Media is recommended for removing burrs, edge radiusing, burnishing and quickly removing polishing lines on components made from harder materials. Faster cut Medias are designed to be softer to continuously expose fresh cutting surfaces. Polishing Medias are harder but contain no abrasives and are used for burnishing.

Aluminium Oxide Media is an aggressive and tough media suitable for different applications such as general blasting, surface finishing, grinding, polishing, matte finishing and edge rounding, it is also used for cleaning and preparing the component surface prior to plating or painting. This media can be recycled a number of times making it a cost effective media to deburr parts made from hard metals and sintered carbide.

Ultrasonic Cleaning

The Kemet range of systems can clean mould/forming tools, removing plastic/rubber residues, release agent build up, non-ferrous mould debris and more.

Normally cleaning is a manual process, sometimes involving abrasives. Not only is this manual labour time consuming, but abrasion can damage precision edges, profiles and surfaces.

Kemet's cleaning systems use an aqueous process which 'searches' the intricate areas of the tooling. No solvents are used, making the process kinder to the environment and personnel. Rinsing and Dewatering units can be specified and supplied to complete and complement the Cleaning process.

At our factories in Kent and the Netherlands we have demonstration and test facilities to develop a process tailored to the customer's requirements.

Benchtop Ultrasonic Cleaners

Top of the range digital generator operates piezo-ceramic transducer elements giving a powerful cleaning effect. 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 and hygienic. A drip protector guides any unwanted water droplets away from the operating panel and the internal control circuitry is protected against water splash.

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 parts

Technical information	Kemet 3	Kemet 6	Kemet 12	Kemet 30	Kemet 45
Tank service volume (l)	1.9	4.3	9	20.6	45
Internal tank dimensions (mm)	240 x 137 x 100	300 x 150 x 150	300 x 240 x 200	505 x 300 x 200	500 x 300 x 300
Internal basket dimensions (mm)	198 x 106 x 50	255 x 115 x 75	250 x 190 x 115	455 x 250 x 115	455 x 270 x 194
External dimensions (mm)	300 x 179 x 214	365 x 186 x 264	365 x 278 x 321	568 x 340 x 321	615 x 370 x 467
Ultrasonic power nom/peak (W)	80/160	150/300	200/400	300/600	400
Ultrasonic frequency (kHz)	38	38	38	38	38
Heating power (W)	200	400	800	1200	1600
Voltage	230V - single phase - 50Hz				
Product Code	359480	359482	359484	359486	359488

Corus - Tool & Mould Ultrasonic Cleaning Tanks

NEW!

Ultrasonic cleaning in the maintenance of moulds reduces manual input and wear, resulting in large cost savings. The technique is perfect for plastic, rubber and die cast moulds and tools.

- The Corus units are intended for general maintenance cleaning applications
- Tank dimensions are based on Euro pallet standard
- Each unit is an independent module
- Modules can be placed next to each other to form a line with washing and rinsing stages
- System can be further complemented with storage tanks, filtration, ergo station, chain hoist etc.

Technical information	Corus 120HD	Corus 240HD	Corus 360HD	Corus 480HD	Corus 600HD	Corus 720HD	Corus 840HD	Corus 1200HD
Max mould recommended size dim. (WxDxH) (mm)	250 x 400 x 400	450 x 300 x 450	600 x 400 x 600	800 x 400 x 600	1000 x 400 x 800	1200 x 400 x 900	1000 x 700 x 800	1200 x 700 x 900
Tank effective dim. (WxDxH) (mm)	340 x 645 x 484	654 x 449 x 603	724 x 473 x 758	924 x 473 x 758	1200 x 500 x 1000	1400 x 500 x 1100	1200 x 800 x 1000	1400 x 800 x 1100
Wash basket internal dim. (WxDxH) mm	300 x 538 x 435	604 x 400 x 516	668 x 400 x 658	868 x 400 x 658	Lifting beam			
Displacement reserve (l)	14	48	80	100	140	180	220	270
Liquid volume (l)	135	286	410	500	840	1100	1300	2200
Load capacity (kg)	100	200	300	500	1000	1300	1600	2000
Heating power (kW)	3	5	9	9	18	18	27	36
Ultrasonic Power nom/ peak (kW)	1.2 / 2.4	2.4 / 4.8	3.6 / 7.2	4.8 / 9.6	6 / 12	7.2 / 14.4	8.4 / 16.8	12 / 24
Connected load (kW)	5	8.3	13.6	14.8	24	26	36	48
Voltage (VAC)	380/220 - 415/240 3-phase, neutral and ground							

Genius Ultrasonic Technology

- Automatic adaptation of generator parameters - constant maximum power
  - Measurement of the load
  - Frequency regulation (/30 sec)
  - Power regulation
  - Operating in optimal point puts the power into cleaning and minimises energy losses.
- Fully digital technology - extremely controllable and energy efficient
- Advance diagnostics - performance monitoring and service capabilities

Options

- Baskets, single lifting point with gripper
- Lifting beams, same support points as for basket
- Rim lip ventilation channel and fan
- Lift off, hinged and pneumatic operated lids
- Closed loop circulations
- VG140HD with vertical pump
- Noise suppression kit 85 > 71dB
- Chain hoists

Loading concept

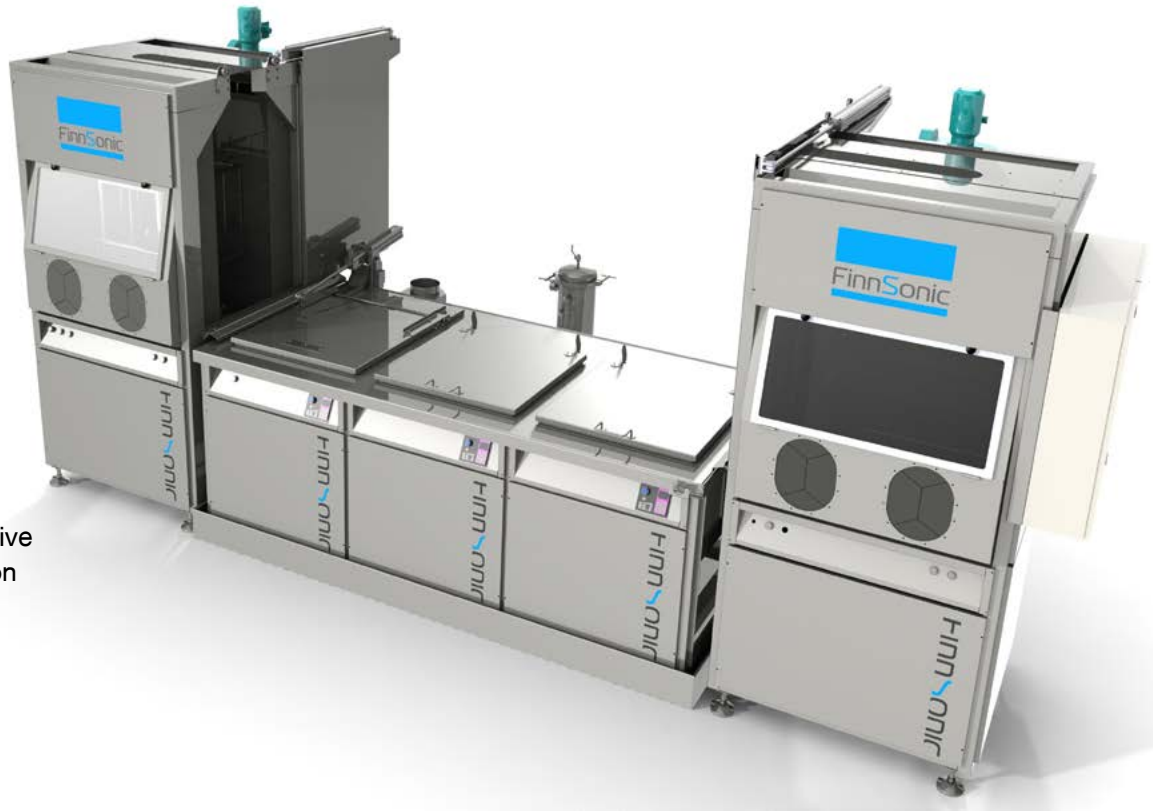
- Basket supports at tank edge
- Lifting beam
- Manual/hoist basket

Ergo station

- Inspection, flushing and air blast
- Safe and ergonomic

Construction

- Each module is an independent unit
- Modern and cost effective sheet metal construction
- Raised lip at tank edge
- Valves at the back



Ultrasonic Cleaning Fluids

Kemet are a distributor of NGL with more than 300 high performance formulations providing a solution to most cleaning challenges. The finest in biodegradable cleaning fluids, these are specially formulated concentrated detergents available in neutral, alkaline and acid types. The detergents work by reducing surface tension, intensifying ultrasonic cavitation, dissolving and binding the contaminants that have been loosened by the ultrasonics.

- Environmentally aware process development to offer ecological solutions.
- Compatible with Kemet range of ultrasonic cleaners.
- Free consultations and trials to adapt formulations to specific requirements and optimise cleaning processes
- Physiochemical and physical wastewater treatment systems to comply with environmental legislation

Kemet recommend that any cleaning fluid should be tested on a sample of the component to be cleaned to ensure it does not damage the material and offer free trials to establish the optimum process.

C70 Solvent Cleaning Fluid

A versatile and highly efficient cleaning and degreasing fluid with a fast evaporation rate for removing grease, oil and residues from all metals and ceramics. Supplied in a pressurised container, complete with detachable extended spray tube for reaching into the most difficult areas, C70 contains **no** ozone depleting substances.

Size	Container	Code
500ml	Aerosol	302114
500ml	Aerosols (Pk 12)	302115

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.

- C70 and CO-42 are **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

Free Cleaning Trials & Technical Support

At Kemet, we pride ourselves on finding the ideal cleaning solution for each customer based on their individual needs. If you would like to arrange cleaning trials with us please call **+44(0) 1622 755287**

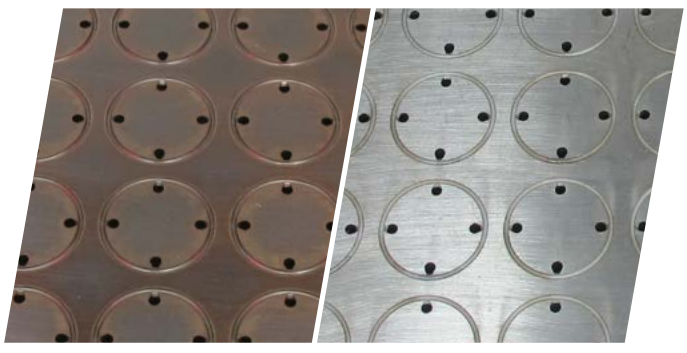
Below are a few examples of our **FREE** cleaning tests.

Before After

Die Cast Mould cleaned

Before After

Injection Mould Plate cleaned



Polishing Consumables

Xebec Ceramic Stone™ Meister Finish

- Excellent for mould polishing and deburring
- Uniform finishing attained by uniform fibre diameter
- High strength, not easy to break or tear
- Simple removal of troublesome fine burrs
- Higher finishing efficiency due to crystal structure of alumina fibres
- No dropping of abrasive grain particles that could create linear scratches
- Highly efficient finishing of coarse electro-discharge machining surfaces

Profile	Size (mm)	Red Grit 1200	White Grit 1000	Blue Grit 800	Black Grit 600	Orange Grit 400	Light Brown Grit 300	Dark Brown Grit 220	Purple Grit 120
	0.3 x 4 x 100	312862	312757	312943	312758	313024	313064	313105	-
	0.4 x 4 x 100	312863	312903	312944	312984	313025	313065	313106	-
	0.5 x 4 x 100	312610	312611	312612	312613	312614	312615	312616	-
	0.5 x 4 x 150	312864	312904	312945	312985	313026	313066	313107	-
	0.5 x 6 x 100	312617	312618	312619	312620	312621	312622	312623	-
	0.5 x 6 x 150	312865	312905	312946	312986	313027	313067	313108	-
	0.5 x 10 x 100	312866	312906	312947	312987	313028	313068	313109	-
	0.5 x 10 x 150	312698	312699	312700	312701	312702	312703	312704	-
	0.8 x 4 x 100	312624	312625	312626	312627	312628	312629	312471	-
	0.8 x 4 x 150	312718	312719	312720	312721	312722	312723	312724	-
	0.8 x 6 x 100	312630	312631	312632	312633	312634	312635	312636	-
	0.8 x 6 x 150	312867	312907	312948	312988	313029	313069	313110	-
	0.8 x 10 x 100	312637	312638	312639	312640	312641	312642	312643	-
	0.8 x 10 x 150	312868	312908	312949	312989	313030	313070	313111	-
	1 x 1 x 100	312869	312909	312950	312990	313031	313071	313112	-
	1 x 2 x 100	312870	312910	312951	312991	313032	313072	313113	313142
	1 x 4 x 100	312644	312645	312646	312647	312455	312452	312449	312740
	1 x 4 x 150	312725	312726	312727	312728	312729	312730	312731	313143
	1 x 6 x 100	312648	312649	312650	312651	312456	312453	312450	312741
	1 x 6 x 150	312871	312911	312952	312992	313033	313073	312752	313144
	1 x 8 x 100	312652	312653	312654	312655	312656	312657	312658	312742
	1 x 8 x 150	312872	312912	312953	312993	313034	313074	313114	313145
	1 x 10 x 100	312659	312660	312661	312662	312663	312454	312451	312743
	1 x 10 x 150	312873	312913	312954	312994	313035	313075	312465	313146
	1.5 x 1.5 x 100	312874	312914	312955	312995	313036	313076	313115	-
	1.5 x 4 x 100	312875	312915	312956	312996	313037	313077	313116	313147
	1.5 x 4 x 150	312876	312916	312957	312997	313038	313078	313117	313148
	1.5 x 6 x 100	312877	312917	312958	312998	313039	313079	312755	313149
	1.5 x 6 x 150	312878	312918	312959	312999	313040	313080	312734	313150
	1.5 x 10 x 100	312879	312919	312960	313000	313041	313081	313118	313151
	1.5 x 10 x 150	312880	312920	312961	313001	313042	313082	313119	313152
	2 x 2 x 100	312881	312921	312962	313002	313043	313083	313120	-
	2 x 4 x 100	312882	312922	312963	313003	312464	313084	313121	313153
	2 x 4 x 150	312883	312923	312964	313004	313044	313085	313122	313154
	2 x 6 x 100	312884	312924	312965	313005	313045	313086	313123	313155
	2 x 6 x 150	312885	312925	312966	313006	313046	313087	312753	313156
	2 x 10 x 100	312886	312926	312967	313007	313047	313088	313124	313157
	2 x 10 x 150	312887	312927	312968	313008	313048	313089	313125	313158
	3 x 4 x 100	312888	312928	312969	313009	313049	313090	313126	313159
	3 x 4 x 150	312889	312929	312970	313010	313050	313091	313127	313160
	3 x 6 x 100	312890	312930	312971	313011	313051	313092	313128	313161
	3 x 6 x 150	312891	312931	312972	313012	313052	313093	312754	313162
	3 x 10 x 100	312892	312932	312973	313013	313053	313094	313129	313163
	3 x 10 x 150	312893	312933	312974	313014	313054	313095	313130	313164

Profile	Size (mm)	Pink Grit 3000	Cream Grit 2000	Yellow Grit 1500
	1 x 1 x 100	313165	313167	313169
	1 x 2 x 100	313166	313168	313170
	1 x 4 x 100	-	-	313175
	1 x 6 x 100	-	-	313176
	1 x 10 x 100	-	-	313173

Xebec Ceramic Stone™ Meister Finish continued

Profile	Size (mm)	Red Grit 1200	White Grit 1000	Blue Grit 800	Black Grit 600	Orange Grit 400	Light Brown Grit 300	Gray Grit 220
●	Ø 1 x 50	312894	312934	312975	313015	313055	313096	313131
	Ø 1 x 100	312895	312935	312976	313016	313056	313097	313132
	Ø 1.5 x 50	312896	312936	312977	313017	313057	313098	313133
	Ø 1.5 x 100	312897	312937	312978	313018	313058	313099	313134
	Ø 2 x 50	312898	312938	312979	313019	313059	313100	313135
	Ø 2 x 100	312899	312939	312980	313020	313060	313101	313136
	Ø 2.34 x 50	312900	312940	312981	313021	313061	313102	313137
	Ø 2.34 x 100	312901	312941	312982	313022	313062	313103	313138
	Ø 3 x 50	312466	312467	312474	312468	312473	312469	312470
	Ø 3 x 100	312664	312665	312666	312667	312668	312669	312670
	Ø 3 x 150	312902	312942	312983	313023	313063	313104	313139
	Ø 6 x 50	-	-	-	-	-	-	313140
	Ø 6 x 100	-	-	-	-	-	-	313141

Xebec Ceramic Stone™ Heat-Resistant

The Heat-Resistant range of Xebec Ceramic Stones offer resistance to temperatures up to 200°C. Having the same performance as the MEISTER range of ceramic stones and are most suitable for removing EDM scales. The Heat-Resistant range has been developed for prolonged use with Ultrasonic Machines.

- Same performance as Xebec Meister Finish ceramic stones (Doesn't break, doesn't crack, excellent sharpness)
- Heat resistant up to 200°C
- Ideal for prolonged use with ultrasonic tools
- Suitable for removing EDM scales
- Can lap deep slits for ribs

Profile	Size (mm)	Purple Grit 120	Brown Grit 220	Orange Grit 400	Blue Grit 800	Red Grit 1200
▬	1 x 4 x 100	312744	312673	312854	312672	312671
▬	1 x 6 x 100	312745	312676	312855	312675	312674
▬	1 x 10 x 100	312705	312717	312856	312716	312715
■	2 x 4 x 100	312746	312679	312857	312678	312677
■	2 x 6 x 100	312747	312682	312858	312681	312680
■	2 x 10 x 100	312756	312706	312707	312708	312709

Xebec Ceramic Stone™ Diamond

- Efficiently and cleanly polishes materials harder than HRC57 such as cemented carbide and hardened steel (SKD, DC, STAVAX, HPM, ASP etc)
- Suitable for removing EDM scales, polishing ribs and deburring from edges and corners
- Both the Stick and the Rod types can be used to polish with the tip or the sides of the tools
- More efficient than electroplated diamond files and hand lappers
- Can polish efficiently wet or dry
- Can be used even more efficiently when attached to tools (electric, air or ultrasonic)
- Can be processed into the desired shape, such as a thinner tip

Profile	Size (mm)	Purple Grit 200	Brown Grit 400	Blue Grit 800	Red Grit 1200
▬	1 x 4 x 100	312687	312686	312685	312859
▬	1 x 6 x 100	312690	312689	312688	312860
▬	1 x 10 x 100	312693	312692	312691	312861
●	3 x 50	-	312696	-	-
	3 x 100	-	312697	-	-

Xebec Ceramic Stone™ Soft

- Rubber binder allows soft contact and fits into a workpiece

Profile	Size (mm)	Grit 1200
■	2 x 6 x 100	
●	3 x 100	

Kemet Super Stones

Super Stones are made of long ceramic fibres that will not break or dull under the most strenuous conditions even when dressed to a very fine point. Economical: solid ceramic so 100% of the stone is available for use. Each grit size is colour coded. Very good for working in Ultrasonic Machines. Excellent for removing fine spark erosion and small detailed work.

Profile	Size (mm)	Grit 300	600	800	1000	1200
	4 x 0.8 x 100	312825	312812	312814	312801	312846
	4 x 1 x 100	312802	312811	312813	312819	312805
	4 x 1.5 x 100	312826	312830	312834	312843	312851
	4 x 2 x 100	312804	312821	312835	312840	312849
	6 x 1 x 100	312810	312806	312800	312839	312847
	6 x 2 x 100	312822	312823	312836	312841	312850
	10 x 1 x 100	312820	312829	312833	312815	312848
	10 x 2 x 100	312827	312831	312837	312842	312852
	Ø 1 x 50	313177	312807	313178	313179	313180
	Ø 3 x 50	312824	312808	312803	312844	312853

Kemet Super Extra Stones

Similar to Super Stones but with slightly more rapid exposure of the ceramic strands and a coarse grade, they have higher stock removal.

Profile	Size (mm)	Grit 220	300
	4 x 1 x 100	312449	312452
	6 x 1 x 100	312450	312453
	10 x 1 x 100	312451	312454
	Ø 3 x 50	312470	312469

Kemet Super Diamond Stones

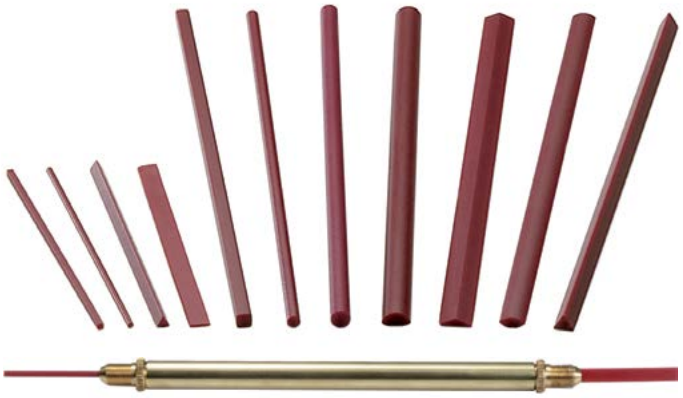
Similar to Super Stones available in a range of impregnated diamond grits; being diamond these have the ability to cut the hardest materials. The abrasive is granular, so they will also cut on the sides.

Profile	Size (mm)	Grit 200	400	600
	4 x 1 x 100	312480	312483	312486
	6 x 1 x 100	312481	312484	312487
	10 x 1 x 100	312482	312485	312488
	Ø 3 x 50	NLA	312490	NLA

Full list of Stones and Sets at www.kemet.co.uk/stones

Kemet Ruby Stones

Kemet Ruby Stones are made from sintered crystals of synthetic ruby, and are extremely hard and resistant to wear. They have outstanding ability to maintain shape which is particularly important for the highest quality finishing of work with intricate detail. Ruby Stones are suitable for use in Ultrasonic Polishing Machines. Also used for gentle edge honing of Tungsten Carbide tools.



Profile	Size (mm)	Shape	Code
	1.2 x 1.2 x 50	Square	312502
	2 x 2 x 100	Square	312505
	Ø 1.2 x 50	Round	312503
	Ø 1.2 x 100	Round	312506
	Ø 3.2 x 100	Round	312507
	Ø 4 x 100	Half Round	312509
	2 x 2 x 2 x 50	Triangle	312504
	3.2 x 3.2 x 3.2 x 100	Triangle	312511
	3.2 x 0.25 x 50	Flat	312508
	5 x 1.52 x 100	Barrette	312510
	4.75 x 1.59 x 100	Crossing	312514

Kemet Ruby Assorted Kit
Contains all 11 of the Ruby Midget stones (above) plus one double-ended holder with two collets. (Holder is available only with this kit and not separately.) 312512

Gesswein Abrasive Stones

Gesswein Abrasive Stones are designed to be used directly after machining, or spark eroding, in the preparation of surfaces for final polishing. All stones are manufactured to high standards from a liquid mix of the abrasive and the bonding agent, which is then fired in a thermostatically controlled kiln to ensure uniform distribution of the abrasive particles in each stone.

The stones are cut after firing and ground to size when cold, this process yields consistent quality and performance. Care should be taken in use and storage to prevent contamination from one grit, or type, to another. It is recommended that Kemet Stoning Oil is used as a lubricant with the stones.

Surface Type	Diemaker	EDM	EDM Blue	Oil Treated	Premium White	RA	GP	Mould-maker	Mould-maker Plus	Super Fine	Ultra Soft	Rough Out
All Tool Steels	•	•	•	•	•	•	•	•	•			•
Heat Treated Tool Steel	•					U						
EDM Surface		U	•	•		•	•					
Machined Surface	•			U	•		•					
Stainless Steel	•			•				U	•			
Aluminium								•	•	•	U	•
Non-Ferrous								•	•	•	U	•
High Polishing										U	•	
Rough Grinding												U

U - *indicates the most commonly used for each application.*

Gesswein DF Diemaker

- Medium-hard aluminium oxide stones combine the characteristics of fast cutting and moderate breakdown.
- Ideal for general purpose stoning on hard and soft tool steels such as H-13, P-21, SS420 and pre-finishing.

Profile	Size (mm)	Grit 150	220	320	400	600	800	900	1200
	6 x 1.6 x 100	-	DF2210	DF2310	DF2410	DF2610	-	DF2910	DF4010
	13 x 1.6 x 150	DF2100	DF2200	DF2300	DF2400	DF2600	-	DF2900	DF4000
	6 x 3 x 150	DF2101	DF2201	DF2301	DF2401	DF2601	DF2801	DF2901	DF4001
	13 x 3 x 150	DF2103	DF2203	DF2303	DF2403	DF2603	DF2803	DF2903	DF4003
	25 x 3 x 150	-	-	DF2311	DF2411	DF2611	-	-	-
	13 x 6 x 150	DF2104	**DF2204**	**DF2304**	**DF2404**	DF2604	DF2804	DF2904	DF4004
	19 x 6 x 150	DF2109	-	DF2309	DF2409	DF2609	-	DF2909	-
	25 x 6 x 150	DF2112	DF2212	DF2312	DF2412	DF2612	-	-	-
	25 x 13 x 150	DF2107	DF2207	DF2307	DF2407	DF2607	-	DF2907	-
	4 x 4 x 100	DF0010	DF0020	DF0030	DF0040	DF0060	DF0080	DF0090	DF4080
	6 x 6 x 150	DF2102	**DF2202**	**DF2302**	**DF2402**	DF2602	DF2802	DF2902	DF4002
	9.5 x 9.5 x 150	DF2108	DF2208	DF2308	DF2408	DF2608	DF2808	DF2908	DF4008
	13 x 13 x 150	DF2105	DF2205	DF2305	DF2405	DF2605	DF2805	DF2905	DF4005
	25 x 25 x 150	DF2106	DF2206	DF2306	DF2406	DF2606	-	-	-
	6 x 6 x 6 x 150	DF2192	DF2292	DF2392	DF2492	-	-	-	-
	9.5 x 9.5 x 9.5 x 150	DF2198	DF2298	DF2398	DF2498	-	-	-	-
	Ø 6 x 150	DF3102	DF3202	DF3302	DF3402	DF3602	-	DF3902	-
	Ø 9.5 x 150	DF3108	DF3208	DF3308	DF3408	DF3608	-	-	-
	Ø 13 x 150	DF3105	DF3205	DF3305	DF3405	DF3605	-	-	-
	6 x 6 x 150 (hybrid)	DF2123	DF2223	DF2323	DF2423	DF2623	DF2823	DF2923	DF4023
DF Diemaker Introductory Kit		Kit contents marked in blue for the above stones (2 of each)							311248
DF Diemaker Pencil Kit		Kit contains 4x4x150mm in Grits 220, 320, 400, 600 (4 of each) & Type A Holder							311414

The stone codes are identified by the last 4 digits on the stone

Gesswein EDM Stones

- Remove the tough, hard scale left by the EDM process much faster than any of our other finishing stones.
- Contains extra-sharp premium-grade aluminium oxide for fast cutting action.
- Special clay bond enables the EDM stones to hold their shape well for working small details and sharp corners.
- Breaks down slowly, cuts fast and resists loading.

Profile	Size (mm)	Grit 120	180	220	320	400	600
	6 x 1.6 x 100		EDM6110	EDM6210	EDM6310	EDM6410	EDM6610
	13 x 1.6 x 150	EDM6120	EDM6180	EDM6200	EDM6300	EDM6400	EDM6600
	6 x 3 x 150	EDM6121	EDM6181	EDM6201	EDM6301	EDM6401	EDM6601
	13 x 3 x 150	EDM6123	EDM6183	EDM6203	EDM6303	EDM6403	EDM6603
	13 x 6 x 150	**EDM6124**	**EDM6184**	**EDM6204**	EDM6304	EDM6404	EDM6604
	25 x 13 x 150	EDM6127	EDM6187	EDM6207	EDM6307	-	-
	4 x 4 x 100	EDM0610	EDM0620	EDM0622	EDM0630	EDM0640	EDM0660
	6 x 6 x 150	EDM6122	**EDM6182**	EDM6202	**EDM6302**	EDM6402	EDM6602
	9.5 x 9.5 x 150	EDM6128	EDM6188	EDM6208	EDM6308	-	-
	13 x 13 x 150	EDM6125	EDM6185	EDM6205	EDM6305	EDM6405	EDM6605
	25 x 25 x 150	EDM6126	EDM6186	EDM6206	EDM6306	-	-
	6 x 6 x 6 x 150	EDM6192	EDM6292	-	EDM6392	-	-
	9.5 x 9.5 x 9.5 x 150	EDM6198	EDM6298	-	EDM6398	-	-
	Ø 6 x 150	EDM0122	EDM0182	EDM0222	EDM0302	EDM0402	EDM0602
	6 x 6 x 150 (hybrid)	EDM0123	EDM0183	EDM0223	EDM0323	EDM0423	EDM0623
EDM Introductory Kit		Kit contents marked in blue for the above stones (2 of each)					311783
EDM Pencil Kit		Kit contains 4x4x100mm in Grits 120, 180, 320 (4 of each) & Type A Holder					311415

Gesswein EDM Blue Stones

- Harder than our regular EDM Stones and designed to remove the tough, hard scale left by the EDM process.
- Breaks down slowly and cuts fast. Maintains shape, saving you time.
- Contains extra-sharp premium-grade aluminium oxide for fast cutting action plus a small amount of cobalt blue for added hardness.
- Resists breakage and specifically designed for use in reciprocating profilers.

Profile	Size (mm)	Grit 120	180	220	320	400	600
	13 x 1.6 x 150	EDM6120BL	EDM6180BL	EDM6200BL	EDM6300BL	EDM6400BL	EDM6600BL
	6 x 3 x 150	**EDM6121BL**	**EDM6181BL**	EDM6201BL	EDM6301BL	EDM6401BL	EDM6601BL
	13 x 3 x 150	**EDM6123BL**	**EDM6183BL**	EDM6203BL	**EDM6303BL**	EDM6403BL	EDM6603BL
	13 x 6 x 150	EDM6124BL	EDM6184BL	EDM6204BL	EDM6304BL	EDM6404BL	EDM6604BL
	4 x 4 x 100	EDM6010BL	EDM6020BL	EDM6022BL	EDM6030BL	EDM6040BL	EDM6060BL
	6 x 6 x 150	EDM6122BL	EDM6182BL	EDM6202BL	EDM6302BL	EDM6402BL	EDM6602BL
	Ø 6 x 150	EDM0122BL	EDM0182BL	-	EDM0302BL	-	-
EDM Blue Introductory Kit		Kit contents marked in blue for the above stones (2 of each)					311790
EDM Blue Pencil Kit		Kit contains 4x4x100mm in Grits 120, 180, 320 (4 of each) & Type A Holder					311791

Don't Forget your stone Holder!

(see page 33)

Gesswein Mouldmaker Stones

- Resists loading.
- Ideal for blending, detailing radii and following contours.
- Suitable for working on all types of steels as well as roughing out nonferrous metals.
- Medium-soft stone with silicon carbide abrasive designed to break down rapidly and expose fresh edges.

Profile	Size (mm)	Grit 100	150	220	320	400	600
	6 x 1.6 x 100	MF0100	MF0150	MF0200	MF0300	MF0400	MF0600
	6 x 3 x 150	MF1101	MF1151	MF1201	MF1301	MF1401	MF1601
	13 x 3 x 150	MF1103	MF1153	MF1203	MF1303	MF1403	MF1603
	13 x 6 x 150	MF1104	MF1154	**MF1204**	**MF1304**	**MF1404**	MF1604
	4 x 4 x 100	MF1000	MF1001	MF1002	MF1003	MF1004	MF1006
	6 x 6 x 150	MF1102	MF1152	**MF1202**	**MF1302**	**MF1402**	MF1602
	13 x 13 x 150	MF1105	MF1155	MF1205	MF1305	MF1405	MF1605
	25 x 25 x 150	MF1106	MF1156	MF1206	MF1306	MF1406	MF1606
	Ø 6 x 150	MF0102	MF0152	MF0222	MF0322	MF0422	MF0622
	6 x 6 x 150 (hybrid)	MF0023	MF0123	MF0223	MF0323	MF0423	MF0623
Mouldmaker Introductory Kit		Kit contents marked in blue for the above stones (2 of each)					311145

Gesswein Mouldmaker PLUS Stones

- A premium complement to the Mouldmaker Series.
- Produces a silky matte finish on all prehardened tool steels, from 28Rc SAE 4130 through 60Rc A2 and M2. Can also be used to rough out aluminium, beryllium copper and kirksite.
- General-purpose, premium-grade green silicon carbide stones.
- A good choice for stoning contours and radii.
- Medium stone with slower breakdown characteristics than our standard Mouldmaker stones.

Profile	Size (mm)	Grit 100	150	220	320	400	600	800	1200
	6 x 3 x 150	MFP1101	MFP1151	MFP1201	MFP1301	MFP1401	MFP1601	MFP1801	MFP2001
	13 x 3 x 150	MFP1103	MFP1153	MFP1203	MFP1303	MFP1403	MFP1603	MFP1803	MFP2003
	13 x 6 x 150	MFP1104	MFP1154	MFP1204	MFP1304	MFP1404	MFP1604	MFP1804	MFP2004
	4 x 4 x 100	-	MFP1015	MFP1020	MFP1030	MFP1040	MFP1060	MFP1080	MFP1200
	6 x 6 x 150	MFP1102	MFP1152	MFP1202	MFP1302	MFP1402	MFP1602	MFP1802	MFP2002
	13 x 13 x 150	MFP1105	MFP1155	MFP1205	MFP1305	MFP1405	MFP1605	MFP1805	MFP2005
	25 x 25 x 150	MFP1106	MFP1156	MFP1206	MFP1306	-	-	-	-

Gesswein General Purpose Stones

- Cuts well, holds their shape and resists loading.
- Made of extra-sharp pure white aluminium oxide grains in a specially formulated bond & a proprietary treatment.
- Suitable for use on both EDM and machined surfaces of all tool and hardened steels.
- Polishers will notice the special treatment provides a lubricating effect.

Profile	Size (mm)	Grit 150	180	220	320	400	600
	6 x 3 x 150	GP6151	GP6181	GP6201	GP6301	GP6401	GP6601
	13 x 3 x 150	GP6153	GP6183	GP6203	GP6303	GP6403	GP6603
	13 x 6 x 150	GP6154	GP6184	GP6204	GP6304	GP6404	GP6604
	4 x 4 x 100	GP0315	GP0318	GP0320	GP0330	GP0340	GP0360
	6 x 6 x 150	GP6152	GP6182	GP6202	GP6302	GP6402	GP6602
	Ø 6 x 150	GP0152	GP0182	GP0222	GP0322	GP0402	GP0602
	6 x 6 x 150 (hybrid)	GP1523	GP1823	GP1223	GP1323	GP1423	GP1623

The stone codes are identified by the last 4 digits on the stone

Gesswein RA Stones

- Aluminium oxide abrasive bonded together with a unique organic resin bond gives these stones great resiliency.
- Retain their shape and have a flexing capability, making them resistant to breakage even during heavy use.
- Leave a finer finish with less stock removal than other stones of the same grit.
- Can be used by hand, in a profiler or in an ultrasonic polisher on all mould and die steels.
- Ideal for finishing slots, deep ribs and other hard-to-reach mould areas and can also be used to remove EDM scale.

Profile	Size (mm)	Grit 90	120	180	220	320	400	600
	13 x 1.6 x 150	RA4090	RA4120	RA4180	RA4200	RA4300	RA4400	RA4600
	6 x 3 x 150	RA4091	RA4121	RA4181	RA4201	RA4301	RA4401	RA4601
	13 x 3 x 150	RA4093	RA4123	RA4183	RA4203	RA4303	RA4403	RA4603
	13 x 6 x 150	**RA4094**	RA4124	**RA4184**	RA4204	**RA4304**	RA4404	RA4604
	4 x 4 x 100	-	-	RA0410	RA0420	RA0430	RA0440	RA0460
	6 x 6 x 150	**RA4092**	RA4122	**RA4182**	RA4202	**RA4302**	RA4402	RA4602
	Ø 4 x 100	-	-	-	-	RA0033	-	-
RA Introductory Kit		Kit contents marked in blue for the above stones (2 of each)						311633
RA Pencil Kit		Kit contains 4x4x100mm in Grits 180, 220, 320, 600 & Ø4x100mm in Grit 320 (3 of each) & Type A Holder						311416

Gesswein Oil Treated Stones

- Excellent for machined surfaces.
- Fine cutting ability.
- Medium-hard stone with white aluminium oxide soaked with oil. Can be used without additional lubrication.
- Holds shape well for finishing mould details.
- Moderate breakdown.
- Often used for EDM removal. Special oil treatment prevents loading.

Profile	Size (mm)	Grit 120	180	220	320	400	600	800	1200
	6 x 3 x 150	OT5101	OT5001	OT5201	OT5301	OT5401	OT5601	OT5801	OT5901
	13 x 3 x 150	OT5103	OT5003	OT5203	OT5303	OT5403	OT5603	OT5803	OT5903
	6 x 6 x 150	OT5102	OT5002	**OT5202**	**OT5302**	**OT5402**	OT5602	OT5802	OT5902
	13 x 6 x 150	OT5104	OT5004	OT5204	**OT5304**	**OT5404**	OT5604	OT5804	OT5904
	4 x 4 x 100	OT0510	OT0518	OT0520	OT0530	OT0540	**OT0560**	OT0580	OT0590
	Ø 6 x 150	OT0122	OT0182	OT0222	OT0302	OT0402	OT0602	OT0802	OT0902
	Hybrid 6 x 6 x 150	OT5123	OT5023	OT5223	OT5323	OT5423	OT5623	OT5823	OT5923
Oil Treated Introductory Kit		Kit contents marked in blue for the above stones (2 of each)							311823
Oil Treated Pencil Kit		Kit contains 4x4x100mm in Grits 220, 320, 400, 600 (4 of each) & Type A Holder							311418

Gesswein Rough Out Stones

- Large, coarse, relatively soft stones containing aluminium oxide.
- Cuts fast with rapid breakdown.
- Quickly remove rough scratches and machine tool marks.
- A good choice for roughing surfaces of larger moulds and dies.

Profile	Size (mm)	Grit 80	100	150	220
	13 x 6 x 150	-	ROX8004	-	-
	25 x 6 x 200	ROX8080	ROX8100	ROX8150	ROX8200
	25 x 13 x 200	ROX8081	ROX8101	ROX8151	ROX8201
	38 x 19 x 200	ROX8082	ROX8102	ROX8152	ROX8202
	6 x 6 x 200	-	ROX8002	-	-

Gesswein Premium White Stones

- Pure white premium-grade aluminium oxide stones.
- Specially formulated to be load-resistant.
- Moderate breakdown, retain their shape wells.
- Can be used in a profiler or ultrasonic polisher.
- Can be used on all steels, from the hard A2, D2 and M2 to the softer P20, 420SS, M13 & S7.

Profile	Size (mm)	Grit 100	180	220	320	400	600
	6 x 1.6 x 100	-	-	PW5210	PW5310	PW5410	-
	13 x 3 x 150	PW5103	PW5153	PW5203	PW5303	PW5403	PW5603
	6 x 3 x 150	PW5101	PW5151	PW5201	PW5301	PW5401	PW5601
	13 x 6 x 150	PW5104	PW5154	PW5204	PW5304	PW5404	PW5604
	4 x 4 x 100	-	-	PW5002	PW5003	PW5004	PW5006
	6 x 6 x 150	PW5102	PW5152	PW5202	PW5302	PW5402	PW5602

Gesswein Ultra-Soft Stones

- Aluminium oxide abrasive with a special bonding agent designed for very rapid breakdown.
- Cuts fast without loading; easily shaped for contours.
- Formulated for soft metals, stainless steel, aluminium,brass, beryllium and kirksite.

Profile	Size (mm)	Grit 120	220	320	400	600	1200
	13 x 3 x 150	US7103	US7203	US7303	US7403	US7603	US7003
	13 x 6 x 150	US7104	US7204	US7304	US7404	US7604	US7004
	25 x 13 x 150	US7107	-	US7307	-	US7607	US7007
	6 x 6 x 150	US7102	US7202	US7302	US7402	US7602	US7002
	25 x 25 x 150	US7106	-	US7306	-	US7606	US7006

Gesswein Super Fine Stones

- One of our “softest” stones for finishing P20 and 420SS steel surfaces. Breaks down very rapidly and does not scratch.
- Contain levigated (finely powdered) alumina.
- Good choice for finishing details.
- Not quite as soft as our Ultra-Soft stones.

Profile	Size (mm)	Grit 1200
	6 x 3 x 150	SF9001
	13 x 3 x 150	SF9003
	13 x 6 x 150	SF9004
	4 x 4 x 100	SF0120
	6 x 6 x 150	SF9002

India stones

These sharpening stones are made of synthetic aluminium oxide abrasive graded to a consistent particle size, blended with select bonding agents, moulded to shape and finished to exacting surface configurations. Preferred for imparting durable, smooth cutting edges and finishing to close tolerances.

Profile	Size (mm)	Grit 100	240	320
	6 x 100	311942	311943	311944
	25 x 150	311919	311920	311921
	6 x 6 x 6 x 100	311945	311946	311947
	13 x 13 x 13 x 100	311922	311923	311924
	Ø 6 x 100	311939	311941	311948
	Ø 13 x 100	311925	311933	311926
	Ø 6 x 100	-	311927	311928
	Ø 13 x 100	311929	311934	311930

Kemet Stoning Oil

Safer than kerosene and with much less odour. It is formulated to promote clean, free cutting and greatly assists in the prevention of loading. Can be used with most kinds of stones and is environmentally friendly.

Size	Code
2.5 Litres	321512
5 Litres	321513

Stone Holders

Holder Type		Description		Code
	LT	An economically priced, lightweight, double-ended stone holder made of durable plastic with a black non glare finish. One end holds 3x6mm stones, and the other holds 3x13mm and 6x6mm stones. Measures 140mm long.		311505
	Screw-Lock (Type E)	Screw-type lock holds the stone securely. Designed for comfortable use. Holds 13x6mm stones. Measures 181mm long.		311504
	Pencil (Type A)	Push-button holder for easy loading. Holds 4mm square stones. Measures 133mm long.		311501
	Double Enders (Type B)	Will accommodate pencil stones as well as small round and square stones up to 6x6mm. Available in three colours (blue, black and red) that may be used to distinguish one grit or grade of stone from another. Set of three (Code: 311506) contains one of each colour. Measure 181mm overall length.		Blue - 311503 Black - 311507 Red - 311508
	Round Holder	For handheld work with ceramic stones. Available in 1, 2, 4, 6 and 10mm flat sizes, 3mm round or 0.5mm and 0.9mm square sizes. Measures approximately 336mm long.	3mm	311509
	Square Holder		0.5mm	311510
			0.9mm	311511
	Flat Holder 1-10mm		1mm	311512
			2mm	311513
			4mm	311514
			6mm	311515
			10mm	311516
	Super Stone Holder Kit	Set of 3 for Super Stones. 4, 6 and 10mm wide and from 0.8 - 2mm thick.		321511
	Economy Adjustable	The Economy Adjustable Stone Holder accommodates stones up to 14mm thick. Plastic serrated jaw holds stones securely. Surface is black and non reflecting. Made of steel (except serrated jaw and shank housing) with a 3mm shank.		311517
	ST-38	Allows you to secure square, round, and rectangular stones in reciprocating handpieces. Adjustable hinge lets you change the angle of the stone to fit your application. Made of durable plastic with serrated jaws and set screw for tightening stone into place. Accepts round stones up to 13mm in diameter, rectangular stones up to 9.5mmH x 13mm(W) and square stones up to 9.5mm. 3mm steel shank. Complete with allen wrench.		337209
	THFS-1 Super Stone holder	Tool-holder made of hardened steel for use together with ceramic fibre stones (Super stones) and lapping-/polishing tools with a thickness of 1 mm. Shank Ø: 3mm Shank length: 18mm Total length: 31.5mm Width: 8mm Weight: 4.3 g		332068
	THFS-3 Universal tool holder	Tool-holder made of hardened steel for use together with polishing stones and lapping-/polishing tools with a thickness of 3mm. Shank Ø: 3mm Shank length: 18mm Total length: 31.5mm Width: 8mm Weight: 3.9 g		332069
	Universal tool holder	Tool holder for Super Stones, Super Grinders and Polishing Stones to be used together with the Diprofil Polishing/Filing Machines. Stainless hardened shank Ø 3.0 mm. Shank length approx. 35 mm. Maximum tool thickness 6 mm.		311520

Mounted Stone Kits

Kit Type	Contents	Code
Comprehensive	100 piece Kemet Gesswein Mounted Stone Comprehensive Kit. 10 each of B44, B52, B96, B123, W144, W152, W162, W170, W175 & W200	312129
Introductory	Kemet Gesswein Mounted Stone Introductory Kit. 1 each of B44, B55, B71, B96, B105, B123, W142, W144, W149, W152, W163, & W176	312128
Dressing Block	For shaping mounted stones	312130

Mounted Grinding Stones/Points

Kemet can supply a wide range of mounted grinding points for specialist applications. These are available in a variety of shapes, sizes, grits and bonds. Available in 3mm Shank size.

Blue

Greatest strength and rigidity required for fast stock removal and longer life. 3mm Shank.

Style	Grit	Code
B41	120	312329
B42	120	312331
B43	120	312274
B44	120	312133
B45	120	312273
B51	120	312334
B52	120	312132
B53	120	312198
B54	120	312336
B55	120	312197
B96	120	312183
B97	120	312131
B98	120	312338
B103	120	312340
B105	120	312199
B121	120	312283
B122	120	312143
B123	120	312194
B124	120	312269
B125	120	312275
B131	120	312290
B135	120	312342
W142	120	312196
W144	120	312148
W145	120	312134
W146	120	312343
W153	120	312163
W154	120	312345
W162	120	312260
W163	120	312145
W165	120	312270
W168	120	312192
W169	120	312349
W170	120	312135
W171	120	312361
W175	120	312190
W176	120	312140
W178	120	312363
W182	120	312144
W185	120	312261
W186	120	312318
W187	120	312366
W210	120	312368
W211	120	312460
W215	120	312142
Blue 100 Piece Set - 1/8" Shank*		*312129*
Blue 48 Piece Set - 1/8" Shank*		*312462*

Purple

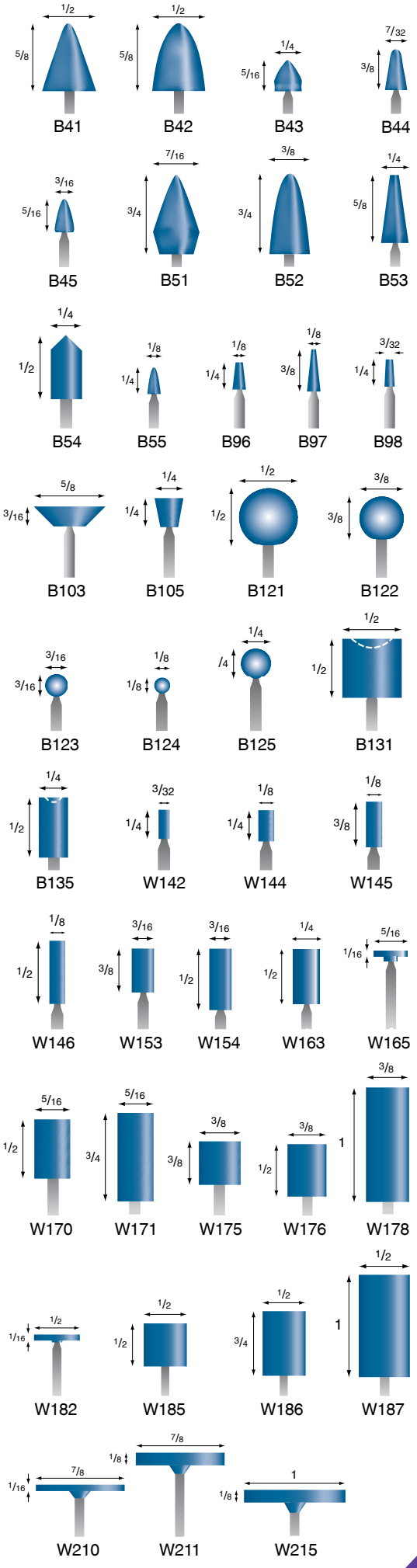
Used on high nickel alloys for the aerospace industry, as well as many common varieties of steels and alloys. 3mm Shank.

Style	Grit	Code
B42	80	312539
B44	100	312541
B45	100	312543
B52	80	312545
B53	120	312547
B54	80	312549
B55	120	312551
B96	120	312553
B97	120	312555
B98	120	312557
B121	80	312559
B122	80	312561
B123	120	312563
B131	80	312565
B132	80	312567
B135	80	312569
W142	120	312571
W144	120	312573
W145	120	312575
W146	120	312577
W153	80	312579
W154	80	312582
W163	80	312584
W170	100	312586
W171	100	312588
W176	80	312590
W182	100	312592
W185	80	312594
Purple 48 Piece Set - 1/8" Shank*		*312595*

Light Blue

Provides exceptional durability and cut rates in grinding mild, high-carbon and stainless steel as well as many nonferrous alloys. 3mm Shank.

Style	Grit	Code
B44	120	312230
B52	120	312232
B53	120	312228
B55	120	312234
B96	120	312235
B97	120	312530
B123	120	312173
B124	120	312533
B125	120	312535
W144	120	312172
W145	120	312171
W163	120	312537
Light Blue 12 Piece Set - 3mm Shank		*312170*



** Set only available in 1/8" shank*

SiliKem - Surface Finish Inspection For Slots & Holes

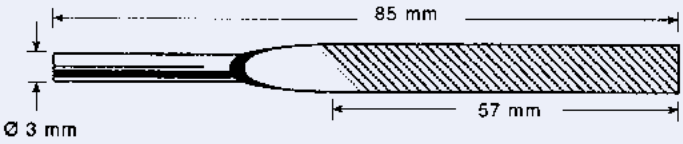
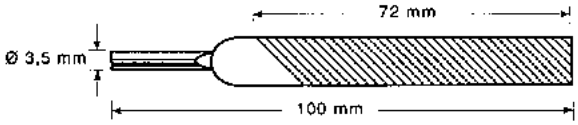
NEW!

The SiliKem compound is used to inspect the visual appearance of those hard to reach mould tool areas. Great results and peace of mind in minutes. SiliKem displays the surface with an accuracy of 0.1µm, showing the smallest of scratches. SiliKem is elastic, so it can be easily removed from the mould and is used successfully for undercuts. Maximum of 3 minutes from mixing to the finished sample. SiliKem is non-hazardous substance and does not generate heat during curing

Product		Code
SiliKem Resin Cartridge (includes 6 nozzles)		339803
Dispensing Gun		339802
Mixing nozzles	10 Pack	339801
	12 Pack	339804
Nozzle tips (For use in hard to reach areas)	50 Pack	339806

Precision Steel Files

Diprofil precision steel files for use in soft and semi-hard steel as well as other materials of low to medium hardness.

Profile / Shape		Size (mm)	Cut 00	Cut 1
		5 x 1.5	334046	334037
		Ø 3	333820	333691
		5 x 2	334045	334038
		5 x 2	334011	334057
		3.5	334058	333677
		2.5	334059	333676
		10 x 2.5	333360	333679

Valitan Needle Files

The Valtitan execution is standard for some of our needle, precision files with tang and rifflers. Certified quality management to ISO 9001 / EN 29001. **Other cut sizes available on request**.

- A surface hardness of 72 HRc
- Longer file life and performance
- No clogging
- Resistance to corrosion

Lengh 180mm	Shape		Size (mm)	Cut 2	Set
		Pillar	6 x 1.3	333871	
		Halfround	5.9 x 2	333872	
		Warding	6 x 1.2	Available in set only	
		Three square	4.2	333874	
		Square	2.6	333875	
		Round	3.2	333876	
Set of 6 files pouched				*333877*	

Vallorbe Needle files

Precision Files are made from special chrome steel hardened to 66 HRC. They are used by jewellers, toolmakers and gunsmiths, and increasingly by the electronic and textile machinery industries. **Other cuts available on request**.

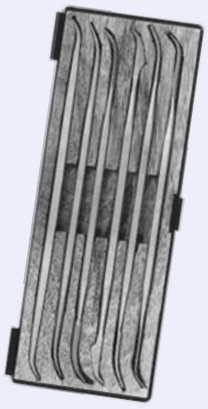
- Made from chrome steel
- Hardness 66 HRC
- Certified quality management to ISO 9001 / EN 29001

Needle files with round handle (Cut 2)	Shape		Size (mm)	Length (mm)		
				140	160	
		Pillar	5.4 x 1.2	333836	333850	*
		Halfround	5.6 x 1.7	333837	333851	*
		Crossing	5.1 x 2	-	333852	
		Knife	5.4 x 1.5	-	333853	
		Warding	5.4 x 1.2	333840	333854	*
		Three square	3.8	333841	333855	*
		Square	2.4	333842	333856	*
		Oval	3.9 x 2.5	-	333857	
		Round	Ø 2.9	333844	333858	*
		Barrette	5.1 x 1.8	-	333859	
		Crochet	5.4 x 1.3	-	333860	
		Pillar round edges	5.4 x 1.3	-	333861	
Set of 12 files in pouch (includes all files above) - (Cut 2)				*-*	*333862*	
*Set of 6 files in pouch (includes above files with *) - (Cut 2)*				*333849*	*333863*	*

Vallorbe Riffler files

The Vallorbe riffler file selection gives you the possibility to reach areas you never could file before.

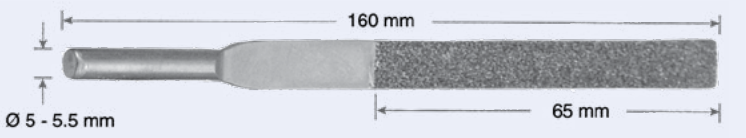
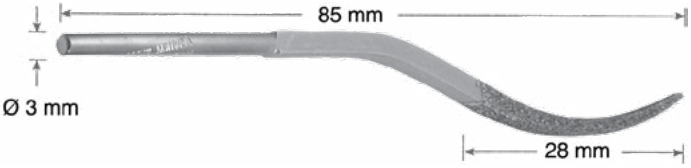
- Made from chrome steel
- Hardness of 66 HRC
- Certified quality management to ISO 9001 / EN 29001

Rifflers (Lengh 150mm)	Shape	Cut 2	Set
		333864	
		333865	
		333866	
		333867	
		333868	
		333869	
Set of 6 pieces		*333870*	

Diprofil Precision Diamond Machine Files

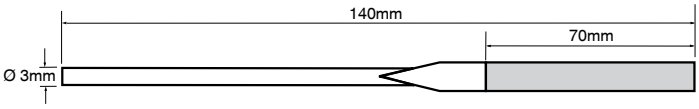
Diprofil Diamond Files are made from carefully selected diamonds, precisely bonded to obtain the best physical properties for added strength and resistance to wear. Diamond files are excellent for use on carbide, hardened steel, glass, ceramics and other similar materials. Other shapes, dimensions and grit sizes available on request.

Profile / Shape	Type	Size (mm)	Grit 63-53	Grit 150-125	Grit 180-150
	DLA Standard Files	2 x 1	333723	333724	333725
		3 x 1	333728	333634	333727
		4 x 1	333731	333418	333730
		4 x 2	333732	333733	333734
		5 x 2	333256	333419	333255
	DLA Standard Files	Ø 1	333021	333738	333739
		Ø 2	333881	333164	333882
		Ø 3	333740	333022	333741
		Ø 4	333999	333023	333541
	DLA Standard Files	2 x 2 x 2	-	333749	-
		3 x 3 x 3	-	333654	-
		4 x 4 x 4	-	332027	-
	DLA Standard Files	R = 1	-	333990	-
		R = 1.5	-	333743	-
		R = 2	-	333744	-
	DLA Standard Files	R = 2.5 x 5	333260	333025	333259
	DLA Safe Sided Files	2 x 1	333745	333016	333746
		3 x 1	333747	333017	333748
		4 x 1	333999	333018	333544
		5 x 2	333750	333019	333751
	DLA Safe Sided Files	0.5 x 4	-	333752	-
		1 x 4	-	333753	-
	DLA Safe Sided Files	2 x 2 x 2	333755	333756	333757
		3 x 3 x 3	333758	333759	333760
		4 x 4 x 4	333761	333198	333762
	DLA Safe Sided Files	R = 1	-	333763	-
		R = 1.5	-	333764	-
		R = 2	-	333765	-

Profile / Shape		Type	Size (mm)	Grit 150-125
		DLK	10 x 2.5	333769
		DLF	Ø 3	333032
			5 x 2.5	333033

Kemet Diamond Coated Needle Files

These files are available in various sections and are manufactured from high quality steel uniformly electroplated with diamond particles. Normally used by hand. A plastic handle is available. They can also be used in NSK and Diprofil reciprocating Filing machines. Needle File Handle - Code: 321608

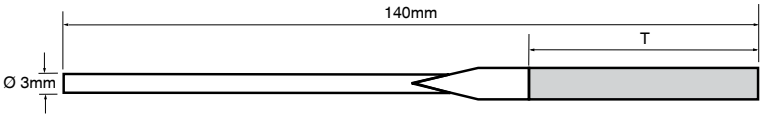


Shape	Size (mm)	Grit 120	Grit 200	Grit 400
	5.5 x 1.5	321560	321615	321564
	5 x 2	321559	321609	321563
	Ø 3	321561	321621	321565
	2.5	321578	321620	321569
	3.5	321562	321622	321566
	5.4 x 1.5	*	*	*
	1.7 x 6	321610	321632	*
	6 x 2	*	*	*
	5 x 2	321567	321633	321570
	6 x 1.5	*	*	*

** Available on request*

Kemet Diamond Coated Thin Section Flat Files

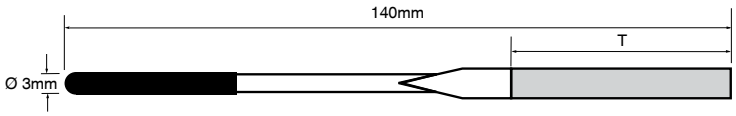
For use in restricted areas. They have a degree of spring and flexibility built in. Kemet have many different needle files in Diamond or Steel for use by hand or in NSK and Diprofil reciprocating filing machines.



Profile	Shape	Type	Size (mm)	T Length	Grit 150	Grit 200	Grit 400
		B5	5.5 x 0.5	40mm	321556	321551	321552
		B8	5.5 x 0.8	50mm	321553	321554	321555

Kemet Diamond Needle Files

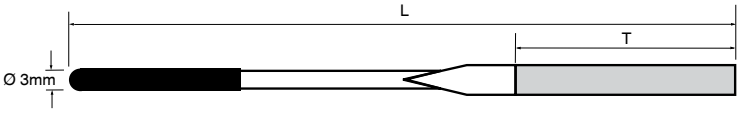
10 piece set each with a plastic grip in a wooden case. **Product code: 321611**



Profile	Shape	Size (mm)	T Length (mm)	Grit 200
		5.5 x 1.5	25	321655
		5.5 x 1.5	50	321646
		5.5 x 1.0	50	321651
		5.5 x 0.8	50	321653
		5.5 x 0.5	40	321652
		2.5	50	321649
		5 x 2	50	321647
		3.5	50	321650
		Ø 2	50	321654
		Ø 3	50	321648

Diamond Tapered Needle Files

10 piece set - one each of the files shown below, in a pvc pouch. Plastic handle colour coded to grit size. **Product code: 321568**



Profile	Shape	Size (mm) L	Size (mm) T	Size (mm)	Grit	Code
		130	30	2 x 1.7~0.4	R 200	321629
					Y 400	321656
					G 600	321626
		130	30	4 x 1.7~0.4	R 200	321630
					Y 400	321638
					G 600	321627
		130	30	6 x 1.7~0.4	R 200	321631
					Y 400	321637
					G 600	321628
		140	50	Ø 3	G 600	321657

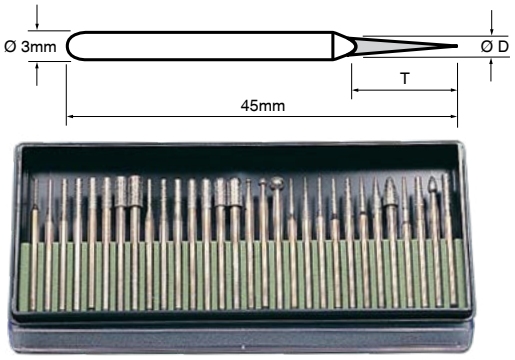
Large Diamond Hand Files

Large diamond hand files, all grit size 100

Profile	Shape	Size (mm)	Code
		11 x 3.5	321989
		10.5 x 4.4	321990
		Ø 5	321991
		6.3	321992
		7.7	321993

File Handles

Type	Fits	Code
Diprofil - (Red)	2x2 mm up to Ø 4 mm	331997
Kemet - (Black)	Kemet Needle Files	321608



Kemet Diamond Plated Profile Points

Kemet Diamond Plated Profile Points are high quality electro plated rotary grinding tools. They are designed for shaping and finishing hard materials including Tungsten Carbide and Ceramics. Individual shapes are available in packs of 10 with 3mm ø shank. The **BMS 30D Kit** contains 30 profile points. The shapes marked * form the kit, which is available with ø 3mm or ø 1/8" shank.
Product code: 321509 (Ø 3 mm shank)

Point													
Ø mm	1	1.5	2	2.5	3	3.5	4	5	6	1	1.5	2	2.5	3
T mm	8	8	8	8	10	10	10	10	10	8	8	8	8	10
Grit Size	150	150	120	120	120	120	120	100	100	150	150	120	120	120
Ref Mos.	10A	15A	20A	25A	30A	35A	40A	50A	60A	10C	15C	20C	25C	30C
Code	321542	321540	321480	321481	321543	321482	321498	321515	321516	321531	321524	321530	321545	321549
Items in 30D Kit	*	*	*	*	*	*	*	*			*	*	*	*

Point													
Ø mm	3.5	4	5	6	2	3	3	1.5	2	3	2	3	6	2
T mm	10	10	10	10	10	10	10	10	12	14	12	15	13	10
Grit Size	120	120	100	100	120	120	120	150	150	120	150	150	150	120
Ref Mos.	35C	40C	50C	60C	20T	30T	30V	15R	20R	30R	20P	30P	60P	20F
Code	321538	321537	321517	321518	321490	321491	321533	321525	321541	321485	321523	321522	321544	321486
Items in 30D Kit	*	*	*		*	*	*	*	*	*	*	*		*

Point													
Ø mm	3	4	5	3	6	1.5	2	3	4	5	6	3	3
T mm	10	10	10	14	13	-	-	-	-	-	-	5	6
Grit Size	120	120	100	120	100	150	150	120	120	100	100	120	120
Ref Mos.	30F	40F	50F	30J	60J	15B	20B	30B	40B	50B	60B	30Q	30S
Code	321497	321521	321528	321529	321519	321526	321520	321532	321535	321527	321539	321536	321534
Items in 30D Kit	*		*				*	*		*			*

Diamond Cutting Discs & Mandrels

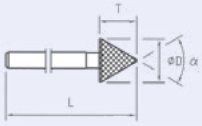
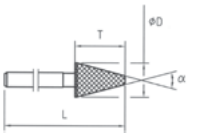
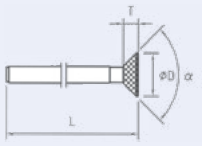
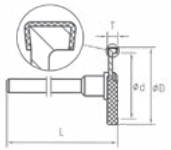
Other dimensions and grit sizes available on request

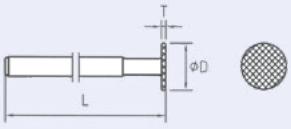
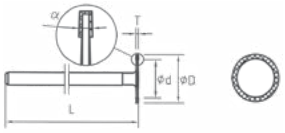
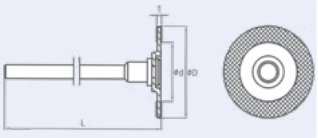
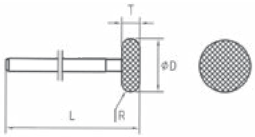
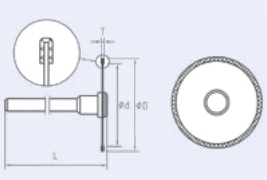
Dimensions (mm) (Ø x Width x Bore Ø)	Grit Size	Code
20 x 0.4 x 2.5	106 - 90	333430
20 x 0.6 x 2.5	150 - 125	333542
20 x 0.8 x 2.5	150 - 125	333431
20 x 1.0 x 2.5	150 - 125	333985
22 x 0.6 x 2.5	150 - 125	333800
25 x 0.8 x 2.5	150 - 125	333801
30 x 0.8 x 6	150 - 125	333802
36 x 1.0 x 2.5	150 - 125	333803

Hardened stainless mandrel shanks	Code
Shank Ø 2.35 mm, Flange Ø 5 mm, Screw M2.5	333804
Shank Ø 3.0 mm, Flange Ø 6 mm, Screw M2.5	333805

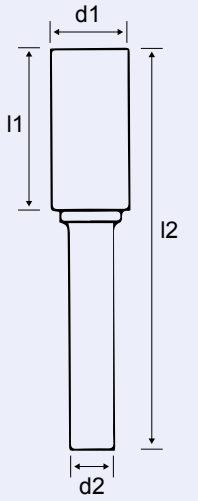
Rotary Diamond and CBN Tools

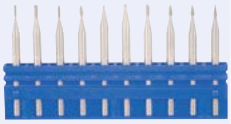
Made from carefully selected quality diamonds and Cubic Boron Nitride, precisely bonded to obtain the best physical properties for added strength and resistance to wear. Electroplated Diamond pins and wheels are excellent for general grinding applications in hard materials such as carbide, hardened steel and ceramics. Electroplated cylindrical CBN pins are excellent for general grinding applications in hardened steel.

Product	Shape	Dimensions (mm)	Grit	Code
	Cone	D 3.1, a 30°, T 5.0, L 46	150 - 125	333404
		D 3.1, a 30°, T 5.0, L 46	63 - 53	333807
		D 8.0, a 90°, T 3.9, L 43.2	150 - 125	333226
		D 8.0, a 60°, T 6.6, L 45.9	150 - 125	333808
	Cone flat end	D 1.6, d 0.9, a 4°, T 10, L 46	150 - 125	333652
		D 2.1, d 1.4, a 4°, T 10, L 46	150 - 125	334025
		D 2.1, d 1.4, a 4°, T 10, L 46	63 - 53	333810
		D 2.6, d 1.75, a 4°, T 3, L 46	150 - 125	333650
		D 7.0, d 2.0, a 30°, T 10, L 49	150 - 125	333076
		D 8.0, d 1.4, a 45°, T 8.5, L 47.5	150 - 125	333412
	Cone inverted	D 2.4, d 1.5, a 20°, T 3, L 46	150 - 125	333811
		D 2.4, d 1.5, a 20°, T 3, L 46	63 - 53	333812
		D 6.5, d 3.5, a 15°, T 10, L 49	150 - 125	333411
		D 8.0, d 3.0, a 90°, T 2.15, L 42	150 - 125	333410
	Grinding wheel	D 17.2, d 14.6, T 2.4, L 48	150 - 125	334063

Product	Shape	Dimensions (mm)	Grit	Code
	Wheel	D 7.3, T 0.8, L 40	150 - 125	333247
	Wheel	D 9.0, d 7, T 0.6, L 40	150 - 125	332133
	Wheel	D 20, d 12.75, T 1.0, L 48	150 - 125	333656
	Grinding wheel	D 5.8, T 2.3, R 1, L 41	150 - 125	334015
		D 9.8, T 3.4, R 1.5, L 42.2	150 - 125	333817
	Cutting wheel	D 15.0, d 13.0, T 0.6, L 48	150 - 125	333265
		D 18.0, d 16.0, T 0.6, L 48	150 - 125	333818
		D 22.0, d 20.0, T 0.6, L 48	150 - 125	333657
		D 36.0, d 34.0, T 1.0, L 48	150 - 125	333819

Tungsten Carbide Rotary Burrs



Profile / Shape	Size (mm) d1	l1	d2	l2	Type		Code	Set
	12.7	25.0	6.0	70.0	Brazed (Cut 5)		*	Power Cut Burr Set 5pc (6mm Shank/Cut 5) Code: **321721**
	12.7	25.0	6.0	70.0			321726	
	12.7	25.0	6.0	70.0			321727	
	12.7	25.0	6.0	70.0			321728	
	12.7	32.0	6.0	77.0			321729	
	3.0	14.0	3.0	38.0		Solid (Cut 6)	321730	Burr Set 10pc (3mm Shank/Cut 6) Code: **321722**
	3.0	14.0	3.0	38.0			321731	
	3.0	2.5	3.0	38.0			321732	
	3.0	6.0	3.0	38.0			321733	
	3.0	14.0	3.0	38.0			321734	
	3.0	14.0	3.0	38.0			321735	
	3.0	6.0	3.0	38.0			321736	
	3.0	14.0	3.0	38.0	Angle (8°)		321737	
	3.0	11.0	3.0	38.0	Angle (14°)		321738	
	3.0	4.0	3.0	38.0	Angle (10°)		321739	
	1.0	4.0	3.0	38.0			321740	 Micro Burr Set 10pc (3mm Shank/Cut 2 Micro) Code: **321723**
	1.5	4.0	3.0	38.0			321741	
	1.0	4.0	3.0	38.0			321742	
	1.5	4.0	3.0	38.0			321743	
	1.0	0.9	3.0	38.0			321744	
	1.5	1.4	3.0	38.0		Solid (Cut 2)	321745	
	1.5	4.0	3.0	38.0			321746	
	1.5	4.0	3.0	38.0	Angle (16°)		321749	

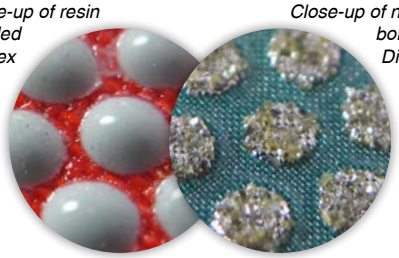
* Available in Power Cut Burr Set

Diaflex - Diamond Grinding

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 either discs or squares, and a wide range of grit sizes. The diamond is either nickel bonded (N) or resin bonded (R). It is suitable as a grinding step in either metallographic sample preparation or flat lapping. Diaflex can be supplied as plain backed.

Close-up of resin bonded Diaflex

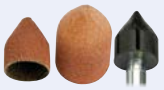
Close-up of nickel bonded Diaflex



Grade	Grit / Micron Size	Disc (mm) 150	200	230	250	300	Square (mm) 100 x 100	150 x 150	300 x 300
Green (N)	60 / 250	342074	342025	342075	342076	342068	342011	342013	342048
Black (N)	120 / 125	342001	342002	342077	342026	342027	342014	342070	342049
Red (N)	200 / 74	342004	342005	342067	342028	342029	342016	342036	342050
Yellow (N)	400 / 40-50	342006	342007	342071	342030	342031	342018	342066	342051
White (N)	800 / 20-30	342032	342008	342072	342033	342034	342020	342037	342052
Yellow / White (R)	800 / 20-30	342078	342035	342079	342080	342047	342038	342044	342053
Blue (R)	1800 / 6-12	342042	342009	342073	342081	342084	342043	342021	342054
Orange (R)	12000 / 1-3	342069	342010	342082	342083	342085	342022	342023	342055

AbraCap, AbraDisc & AbraStrips

Produced on a superior cloth backing with premium bonding materials to effectively key the aluminium oxide grit particles to the cloth and has an advanced adhesive for increased 'stickability' and shelf life. It has application in all industries where coarse abrading is required. The integral, self-adhesive backing, enabling used discs to be readily replaced on to the appropriate rubber holders, facilitates continuous & sustained use. Most types of hand tools and flexible shaft units can be used as driving equipment.

Small AbraCap	Size (mm)	Max recommended speeds (rpm)	Rubber Holder		Grit 80		Grit 150		Grit 320	
			Ref	Code	Ref	Code	Ref	Code	Ref	Code
	5 x 10	57,000	5S	430100	5SC	430001	5SM	430040	5SF	430002
	7 x 12	42,000	7S	430118	7SC	430039	7SM	430043	7SF	430044
	10 15	30,000	10S	430103	10SC	430009	10SM	430050	10SF	430010
	13 x 17	23,000	13S	430120	13SC	430053	13SM	430054	13SF	430055
	16 x 26	18,000	16S	430106	16SC	430021	16SM	430061	16SF	430022
	5 x 11	57,000	5R	430101	5RC	430003	5RM	430041	5RF	430004
	7 x 12	42,000	7R	430117	7RC	430038	7RM	430045	7RF	430046
	10 x 15	30,000	10R	430104	10RC	430011	10RM	430051	10RF	430012
	13 x 19	23,000	13R	430121	13RC	430056	13RM	430057	13RF	430058
	16 x 26	18,000	16R	430107	16RC	430023	16RM	430062	16RF	430024
	5 x 11	57,000	5P	430102	5PC	430005	5PM	430042	5PF	430006
	7 x 12	42,000	7P	430119	7PC	430047	7PM	430048	7PF	430049
	10 x 15	30,000	10P	430105	10PC	430013	10PM	430052	10PF	430014
	13 x 19	23,000	13P	430122	13PC	430059	13PM	430060	13PF	430037
	16 x 26	18,000	16P	430108	16PC	430025	16PM	430063	16PF	430026

Above codes for 1/8in Shanks, 3mm also available on request.

AbraCap Small Kit Type A

The AbraCap Abrasive Caps and the flexible Rubber Holders are novel tools for fine grinding and polishing of all metals; whenever rigid grinding is unsatisfactory Abracap fulfils their purpose. The Abrasive Caps are manufactured without a seam and are covered with several layers of grit. They can be used up to the last particle. AbraCaps Kit Type A contains coarse and fine caps. There are three shapes of Rubber Holders and Polishing Caps, each in five diameters.

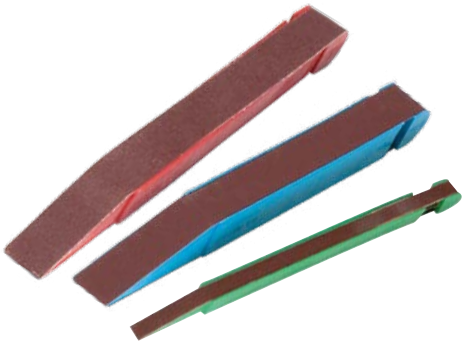
AbraCap Small Kit Type A Contents

1 Rubber Holder 5, 10 and 16mm in each shape, square, round and pointed (9 Holders). 10 Abrasive Caps, Coarse and fine grade for each of the above Holders (180) caps supplied in plastic box with transparent lid. Product Code: 430035

Aluminium Oxide Abrasive Discs

Product		Size (mm)		
		25	50	75
Rubber Holder		410201 (Shaft 1/8in)	410202 (Shaft 1/4in)	410203 (Shaft 1/4in)
Foam Face Holder		410210 (Shaft 1/8in)	410211 (Shaft 1/4in)	410212 (Shaft 1/4in)

Product		Grit	Size (mm)		
			25	50	75
AbraDisc		60	410001	410004	410007
		120	410002	410005	410008
		180	410003	410006	410009



Gesswein Belt Sticks

Each plastic holder allows a narrow abrasive belt to be quickly fitted. As the abrasive wears, the belt can be easily inched round to expose fresh abrasive. The overall design of this tool makes it extremely useful for the dressing of irregular profiles. The holders are colour coded to promote correlation with different abrasives.

Size (mm)	Grit 120	Grit 240	Grit 320	Grit 400	Grit 600
6.25	312302	312304	312303	312305	312306
12.5	312323	312325	312324	312292	312294
18.75	312313	312315	312316	312293	312295

Gesswein Abrasive Belts

Size (mm)	Grit 120	Grit 240	Grit 320	Grit 400	Grit 600
6.25	312307	312309	312310	312311	312312
12.5	312308	312326	312327	312296	312298
18.75	312320	312321	312322	312297	312314

Aluminium Oxide Abrasive Rolls

Suitable for grinding shapes, outlines, profiles and radii. Grinding of brass, tool steel, zinc castings, aluminium alloys, stainless steel. Excellent adaptability to contoured workpieces and radii. Suitable for intricate profiles and small radii. The high strength bonding system prevents a premature abrasive grain shedding. Improved abrasive life. Supplied in dispenser box.

W x L	Grit	Code
25 mm x 50 m	120	342374
	180	342376
	240	342378
	320	342379
	400	342384
50 mm x 50 m	120	342394
	180	342396
	240	342399
	320	342398
	400	342400

Abrasive Cords & Tapes

Flexible cords and tapes fully covered in abrasives for grinding, polishing and finishing small holes, narrow slots, curved surfaces and other areas standard tools can't reach. Can be used by hand and in saw frames, drills and other tools on hard and soft metals, ceramic, plastic and wood. Won't tear or fray. Supplied in 50' spools.

Cord	Style		Dia.	Grit	Code
AlO	●	49	.082"	120	342640
	●	50	.070"	180	342641
	●	51	.055"	120	342642
	•	53	.040"	180	342643
	•	54	.030"	200	342644
SiC	•	54-H	.025"	200	342645
	◦	55	.018"	200	342646
	◦	60	.015"	200	342647
	·	66	.012"	280	342648
Crocus	●	52-C	.055"	Ultra-fine	342649
	●	53-C	.040"		342650
	•	54-C	.030"		342651
	•	54-HC	.025"		342652
	◦	55-C	.018"		342653
	◦	60-C	.015"		342654
	·	66-C	.012"		342655

Tape	Style		W x Thick	Grit	Code
AlO	▬	56	.093" x .037"	180	341656
	▬	57	.125" x .037"	180	341657
Crocus	▬	56-C	.093" x .030"	Ultra-fine	341658

Non-Adhesive Rolls and Papers

Grit FEPA	Met Papers	Met Discs			Met Rolls	
	230 x 275 mm	Ø 200 mm	Ø 250 mm	Ø 300 mm	75 mm x 50 m	100 mm x 50 m
60	-	342286	342297	342307	342221	342225
80	-	342246	342298	342308	342241	342333
100	-	-	-	-	342245	342226
120	-	342250	342299	342309	342331	342334
180	342201	342207	342300	342310	342242	342335
240	342219	342208	342301	342311	342213	342336
320	342202	342234	342302	342312	342222	342249
400	342203	342209	342238	342313	342214	342216
600	342204	342210	342303	342314	342215	342217
800	342235	342211	342304	342315	342224	342337
1000	342205	-	-	-	342244	342340
1200	342206	342212	342305	342316	342240	342218
2500	342339	342287	342306	342317	342332	342338

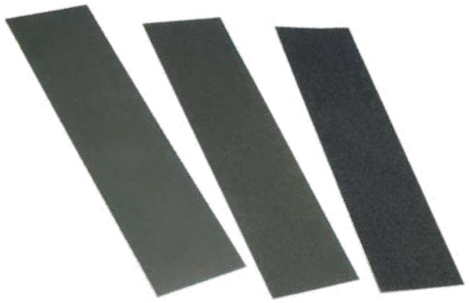
Met discs supplied in box of 100 & Met papers supplied in pack of 10

Non-adhesive rolls and papers for the initial stages of preparation, available in a variety of sizes, dimensions and grits.

Bramet N

IMPROVED BRAMET with easy peel off adhesive, waterproof silicon carbide papers. No need for clamping or gluing, saving time when changing grit sizes.

Grit	75 x 275mm	305 x 305mm
80	342461	342472
120	342462	342473
180	342124	342135
240	342125	342164
320	342126	342476
400	342127	342477
600	342128	342478
800	342491	342479
1000	342133	342492
1200	342134	342480
2500	-	342481



Diamond Lapping Film

Precision coated diamond abrasive lapping film products are specifically engineered to meet all your ultra-fine, consistent polishing and final finishing requirements.

Micron	230 x 280mm
0.5	362901
1	362549
3	362550
6	362902
9	362903
15	362040
30	362904

Wide range of engineered, tightly-graded micron-sized particles ensures consistent, long-lasting polishing. Generates scratch free surfaces, achieving Ra values under 1 micro-inch on hard materials, including HVOF depositions. Improves coolant access at point of contact. Long life offers high yields, reduced rework, and uses fewer steps for lowest total abrasive costs. **Rolls and discs available on request**.

Aluminium Oxide Lapping Film

Tightly graded aluminium oxide coated onto a 0.3mm thickness polyester film backing.

- Excellent surface finish
- Reduces overall process time
- Produces high yields
- Non-slurry processing

216 x 280 mm sheet PSA backed Aluminium Oxide. Lapping Film - Supplied in packs of 50

Micron	Colour	Code
0.3	White	361706
1	Green	361707
3	Pink	361708
5	Brown	362420
9	Blue	361709
12	Yellow	361710
30	Green	361711
40	Blue	361712
60	White	361713

Supra MM Brushes

Miniature mandrel-mounted wheel and cup brushes are made with solid steel ring construction for durability. Brush filaments are permanently anchored in the solid steel ring and uniformly distributed for even wear. Great for flat, curved, small and hard-to-reach surfaces.

Bristle Cups	Type	Dia	Length	Shank	Code
	Hard	1/2”	5/32”	3/32”	321415
	Soft	1/2”	5/32”	3/32”	321494
	Hard	9/16”	1/4”	3/32”	321421
	Soft	9/16”	1/4”	3/32”	321495
	Hard	9/16”	1/4”	1/8”	321422
	Soft	9/16”	1/4”	1/8”	321414
	Hard	1”	7/16”	1/8”	321423
	Soft	1”	7/16”	1/8”	321440

Wire Cups	Type	Dia	Length	Shank	Code
	Steel	5/8”	1/4”	1/8”	321443
	Stainless Steel	5/8”	1/4”	1/8”	321483
	Brass	9/16”	1/4”	3/32”	321442
	Brass	9/16”	1/4”	1/8”	321444

Kemet Brushes

Product		Type	Dia	Trim Length	Code
	Type A	Hard Bristle	12 mm	33 mm	321401
	Type A	Hard Bristle	9 mm	33 mm	321402
	Type A	Hard Bristle	6 mm	36 mm	321403
	Type B	Hard Bristle	22 mm	37 mm	321405
	Type B	Hard Bristle	19 mm	37 mm	321406
	Type B	Hard Bristle	16 mm	37 mm	321407
	Spindle for Brush Insert				321413
	American Cup	Hard Bristle	12 mm	38 mm	321415
	Junior Cup	Black Bristle	7 mm	37 mm	321425

Above brushes are all shank 2.35mm. Maximum operating speed: 10,000 rpm.

Supra MM Brushes

Wire Wheels	Type	Dia	Length	Shank	Code
	Brass	3/4”	3/16”	3/32”	321437
	Steel	3/4”	3/16”	3/32”	321436
	Stainless Steel	3/4”	3/16”	1/8”	321489
	Brass	3/4”	3/16”	1/8”	321439
	Steel	3/4”	3/16”	1/8”	321438
	Steel	1”	5/8”	1/8”	321492
	Stainless Steel	1”	5/8”	1/8”	321493

Bristle Wheels	Type	Dia	Length	Shank	Code
	Hard	9/16”	1/8”	3/32”	321484
	Soft	9/16”	1/8”	3/32”	321487
	Hard	3/4”	3/16”	3/32”	321434
	Hard	3/4”	3/16”	3/32”	321488
	Hard	3/4”	3/16”	3/32”	321435
	Hard	3/4”	3/16”	1/8”	321427
	Hard	3/4”	3/16”	1/8”	321428

Supra ME Brushes

Miniature mandrel-mounted end brushes are available in a wide variety of sizes. One-piece ferrule construction ensures that the stem and ferrule will not become separated during use. Plastic ferrules are available to prevent scratching when used for interior polishing work.

Product	Ferrule Dia	Trim Length	Shank	Type	Code
	5/16”	9/16”	1/8”	Hard Bristle	321449
				Steel Wire	321458
				Brass Wire	321459
	3/16”	1/4”	3/32”	Hard Bristle	321450
				Soft Bristle	321451
	3/16”	1/4”	3/32”	Steel Wire	321456
				Brass Wire	321457
	3/16”	1/2”	3/32”	Hard Bristle	321452
	1/4”	3/8”	3/32”	Hard Bristle	321453
	1/4”	3/8”	3/32”	Soft Bristle	321454

Product	Ferrule Dia	Trim Length	Shank	Type	Code
	3/16”	1/4”	1/8”	Hard Bristle	321419
				Soft Bristle	321417
	1/4”	3/8”	1/8”	Hard Bristle	321420
				Soft Bristle	321418
	1/4”	1/2”	1/8”	Hard Bristle	321447
	1/4”	3/4”	1/8”	Hard Bristle	321448

Maximum operating speed: 15,000 rpm.

Gesswein G-Flex Wheels

The Gesswein range of G-Flex mounted Wheels are manufactured from the finest quality materials. These wheels can be dressed with a file to various shapes, their slight resilience keeps them from being too aggressive, they maintain their shape and do not clog, their non-loading and resilient characteristics enable abrading and finishing to be completed in one operation.

Ideal in size and shape, their versatility enables them to be used in a variety of ways from polishing mould runners to forming and polishing the interiors of fine gold rings.

Safety is an additional feature, the muslin laminates run parallel to the shank preventing the end from chipping.

G-Flex Wheels Introductory kit	Code
Kit contains 1 off each of the following: 5 x 13mm, grit 80, 120, 180. (Ref. 154) 10 x 13mm, grit 80, 320. (Ref. 176) 10 x 19mm, grit 120, 180. (Ref. 177) 13 x 13mm, grit 80, 120, 320. (Ref. 185) 6m x 13mm, grit 120, 180. (Ref. 163)	312238

Profile	Size (mm)	Grit	Shank	Code
	5 x 13	80	1/8in	312201
		120	1/8in	312202
		120	3mm	312236
		180	1/8in	312203
		320	1/8in	312221
	6 x 13	80	1/8in	312205
		80	3mm	312286
		120	1/8in	312206
		120	3mm	312237
		180	1/8in	312207
		180	3mm	312243
		320	1/8in	312208
		320	3mm	312287
	10 x 13	80	1/8in	312209
		120	1/8in	312210
		120	3mm	312240
		180	1/8in	312211
		320	1/8in	312212
	10 x 19	80	1/8in	312220
		120	1/8in	312213
		180	1/8in	312214
		320	1/8in	312215
	13 x 13	80	1/8in	312216
		120	1/8in	312217
		180	1/8in	312218
		320	1/8in	312219

Kemet Wooden Accessories

Kemet Wooden Lapping Accessories are available in both soft and hard wood and include Bobs, Cones, and Sticks. A variety of sizes are available and Bobs and Cones are available on either 1/8” or 3mm spindles.

Kemet Hard Laminated Wooden Accessories

Designed for operations requiring fast stock removal, and consist of highly compressed wood layers with alternating grain direction, saturated with synthetic resin.

Kemet Soft Wooden Accessories

Specially selected from a grit free soft wood, for use with fine grades of Kemet Diamond Compound where a softer medium is needed to produce a fine lustre and polish on the workpiece.

Wooden Lapping Sticks, Bobs & Cones

Profile	No.	Size (mm)	Code	
			Hard	Soft
	1	4 x 4 x 150	321201	-
	2	4 x 6 x 150	321202	321222
	3	6 x 6 x 150	321203	321223
	5	8 x 12 x 150	321205	321225
	6	8 x 19 x 150	321206	321226
	7	Ø 3 x 150	321207	321227
	8	Ø 4.5 x 150	321208	321228
	9	Ø 6 x 150	321209	321229

Profile (Hard / Soft)	No.	Size (mm)	3mm Spindle	
			Hard	Soft
	1	Ø 7 x 12	321104	321124
	2	Ø 12 x 20	321105	321125
	3	Ø 18 x 28	321106	321126
	1	Ø 7 x 16	321110	321130
	2	Ø 12 x 30	321111	321131
	3	Ø 18 x 30	321112	321132

Kemet Felt Accessories

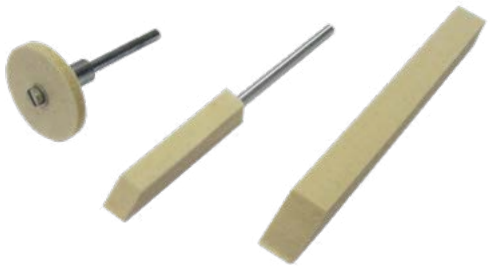
Suitable for flexible shaft and power tools. Felt Accessories are made from pure wool in a variety of sizes and shapes suitable for final polishing operations.

Felt Bobs & Cones

Profile		No.	Size (mm)	Spindle 3mm
	Felt Bob	5	Ø 7 x 11	321310
	Felt Bob	4	Ø 9 x 14	321309
	Felt Bob	3	Ø 12 x 25	321308
	Felt Bob	2	Ø 16 x 34	321307
	Felt Bob	1	Ø 20 x 38	321306
		7	Ø 38 x 38	321331 (6mm Spindle)
	Felt Cone	5	Ø 7 x 16	321351
	Felt Cone	4	Ø 9 x 20	321350
	Felt Cone	3	Ø 12 x 28	321349
	Felt Cone	2	Ø 16 x 28	321348
	Felt Cone	1	Ø 20 x 28	321347

Other sizes available on request including bespoke profiles and spindles.

Felt Accessories



Product	Size (mm)	Spindle (mm)	Code
Felt Wheels	Ø 25	-	321371
Spindle for Felt Wheels	Ø 3	Ø 3	321372
Felt Sticks	6 x 6 x 100	-	321382
	10 x 10 x 100	-	321383
Mounted Felt Sticks	6 x 6 x 40	Ø 3	321385
	10 x 10 x 40	Ø 3	321386

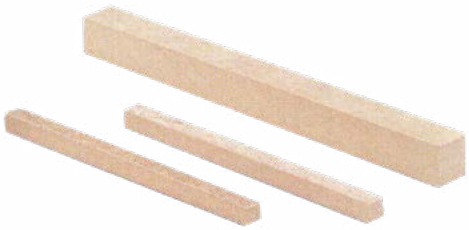
Kemet Polishing Accessory Kit

Kit contains 15 felt cones and 15 felt bobs (3 of each size), 3 felt wheels (3mm spindle) and rectangulars, 10 assorted brushes, 10 brush inserts, 2 spindles, 18 hard and 18 soft lapping sticks (2 of each size). 6 hard and 6 soft wooden bobs and 6 hard and soft wooden cones (2 of each size) and a felt wheel spindle.
Product code: 321504

Square Finishing Sticks

Abrasive filled semi flexible composite material for blending and deburring most materials, combines material removal with a smooth finish.

Size (mm)	Grit	Code
6 x 6 x 100	80	312357
10 x 10 x 100	120	312354
13 x 13 x 100	180	312360
13 x 13 x 150	320	312356



Felt Sheets

Product	Size (mm)	Thickness (mm)	Code
Felt Sheet	230 x 280	3	321473
Felt Rectangle	50 x 25	3	321373

Dasty Industrial Degreaser

Thanks to its ultra-concentrated formula, it is a powerful and extremely effective degreasing product.

- Ideal for thoroughly degreasing all mechanical parts as well as large surfaces
- Safe for shipping and contains no ozone depleting chemicals
- Perfect for cleaning lapping residue
- Brings back the original shine effortlessly
- Easily removes grease, mineral oil, scale and more
- Biodegradable

Size	Code
1 Litre	362936
Box of 12	362962

Simichrome

One of the finest all-metal polishes in the world. Simichrome is used to produce an ultra high finish. It is ideal for chrome, steel, brass, gold and silver. It leaves a protective film and is recommended for use after using Kemet Diamond Compounds.

Size	Code
50g Tube	300515
250g Can	300516

Sabre Aluminium Oxide Paste

Specially formulated containing Aluminium Oxide Abrasive suitable for a wide range of lapping/polishing operations. Particularly effective when used for smoothing soft metals such as brass, aluminium and copper; it is also effective for smoothing small areas of glass prior to polishing. Also available based on both silicon carbide and boron carbide abrasives.

Micron	20g
0.1	300206
0.5	300205
3	300204
7	300203
9	300202
23	300201

Kemet Lapping Compounds & Powders

In some cases, Silicon Carbide and Aluminium Oxide are the preferred abrasive for precision lapping, cutting and smoothing of metal surfaces. Kemet Lapping Compounds retain their texture and lubrication properties during extended lapping operations.

Product	Type	Micron	FEPA Grade	Powders	
				5 kg	25kg
Green Silicon Carbide	Fine	3	1200	361537	361616
		4.5	1000	361535	361536
	Medium	9	600	361563	361631
		17	400	361512	361579
	Coarse	37	280	361532	361629
		75	180	361541	361653
Black Silicon Carbide	Medium	9	600	361562	361651
		23	360	361648	361649
	Coarse	37	280	361646	361647
		53	230	361644	361645
Aluminium Oxide	Medium	7	800	361676	361615
		9	600	361555	361614
	Coarse	23	360	361554	361561

Product	Type	Micron	FEPA Grade	Pastes
				1kg
Silicon Carbide	Fine	3	1200	361547
		4.5	1000	361552
	Medium	7	800	362616
		9	600	361514
		17	400	361551
	Coarse	23	360	361548
		30	320	361558
		37	280	361538
		75	180	361549
		109	120	361689
Aluminium Oxide	Fine	3	1200	361544
		5	1000	361624
	Medium	7	800	361545
		9	600	361543
		13	500	361546
	Coarse	23	360	361542

Kemet Composite Lapping Rods

For use with Kemet's diamond compounds, Kemet composite rods are manufactured from a homogeneous mix of synthetic resins, metal particles and other materials. Produced in a variety of hardness values, the softest materials can be safely lapped with Kemet Diamond compound.

Kemet Copper - For softer materials where fine lapping and polishing is the primary requirement.
Kemet XP - For polishing hard materials, e.g. ceramic and tungsten carbide.
Kemet Iron - For harder materials where heavy stock removal is required.

Benefits

- Higher stock removal
- Greater shine
- Diamond lasts longer as it embeds into the composite
- Harder composite material particularly suited to problem steels
- Easily machined into specific profile tools
- Suitable for making laps to polish injection moulds
- Can reduce the number of steps by combining lapping and polishing

Type	Size (mm)		
	Ø25x150	Ø50x150	Ø75x150
Iron	352101	352102	352103
Copper	352104	352105	352106
XP	352113	352108	352114
Tin	352107	352116	352163

Liquid Diamond

Our range of Kemet Liquid Diamond products are available as oil soluble, water soluble or as oil/water soluble emulsions. The chemical composition of the carrier fluids is carefully controlled to ensure that they are compatible both with the Kemet Lapping Plate and the components being lapped.

- Precision graded diamond particles in a fluid
- Optimum viscosity and chemical composition of each Liquid Diamond Product gives fast stock removal with the ability to produce superfine surface finishes
- Suitable for dispensing with all Kemet Dispensing Systems, eliminating wastage and reducing lapping costs
- Specially formulated Liquid Diamond Products enable parts to be easily cleaned

TYPE K (Oil / water emulsion)

An excellent, low viscosity oil/water emulsion suitable for all general purpose lapping.

TYPE O (Oil based)

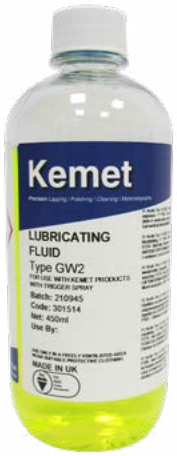
An excellent, general purpose, low viscosity oil based suspension suitable for heavy parts and high volumes.

Micron		TYPE K						TYPE O					
		400g			2000g			400g			2000g		
		Standard	Strong	Extra Strong	Standard	Strong	Extra Strong	Standard	Strong	Extra Strong	Standard	Strong	Extra Strong
A	1	211004	211024	-	211084	211105	-	216004	216024	-	216085	216104	-
	2	211005	211025	-	-	-	-	216005	216025	216045	216081	216105	216136
	3	211006	211026	211046	211086	211106	211126	216006	216026	216046	216086	216106	216137
	4.5	211007	211027	211047	211087	211107	211127	216007	216027	216047	216087	216108	216138
B	6	211008	211028	211054	211088	211108	211128	216008	216028	216048	216088	216107	216139
	8	211009	211029	-	211089	211109	211129	216009	216029	216049	216089	216109	216140
	10	211010	211030	211050	211132	211110	211130	216016	216030	216050	216095	216110	216141
	14	211011	211031	211051	211091	211111	211131	216011	216031	216051	216092	216111	216142
C	25	211012	211032	211052	211092	211112	211133	216012	216032	216052	216090	216112	216143
	45	211013	211033	211053	-	-	-	216013	216033	216053	216094	216113	216144

A = *Final Polishing* **B** = *Lapping & Pre-polishing* **C** = *Rapid Stock Removal*

* 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.

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

Type	Description	Soluble in	Colour	450ml Trigger spray	2.5 Litres	25 Litres
W2	Developed for use with Kemet Diamond Suspension, particularly when used with Kemet Lapping Plates.	Water	Clear	301202	301102	301205
GW2		Water	Light green	301514	301108	*
W	Recommended for use on all Kemet Polishing Cloths as it helps to extend their life	Water	Clear	301201	301101	301151
W9	Recommended for use with FastCut & AquaPol	Water	Clear	*	301527	*
LS	Where components need to undergo a water based cleaning operation after lapping	Oil/Water	Blue	301204	301104	*
K	Assists smooth running of the lapping operation and helps to ensure a cleaner process	Oil	Clear	301178	301124	301125
R OS2	For use where water is not permitted	Oil	Red	301513	301512	*
OS	Recommended when polishing tooling, moulds and similar components	Oil	Blue	301203	301103	301112

Diamond Suspension

Aquapol is the next generation of ***water based*** diamond suspensions for sample preparation. Available in monocrystalline (Aquapol-M) and polycrystalline (Aquapol-P). Aquapol is easy to clean and non-foaming.

- Uniform suspension of diamond particles
- No agitation required
- Suitable for dispensing by Kemet Electronic Dispenser or alternative systems
- ZERO Volatile Organic Compounds (VOC*)
- Colour coded for easy identification
- Supplied in 400g bottles with trigger spray. Other sizes available upon request

AQUAPOL-M Water Based Monocrystalline		AQUAPOL-P Water Based Polycrystalline	
Micron	Code	Micron	Code
1/10	219471	1/10	219472
1/4	219459	1/4	219461
1/2	219457	1/2	219463
1	219450	1	219452
3	219440	3	219453
6	219448	6	219454
9	219442	9	219455
15	219444	15	219456
25	219446		

Diamond Spray

Water soluble spray manufactured from Polycrystalline or Monocrystalline Diamond Powder. Supplied in 100g Pump Spray Dispenser.

Micron	Monocrystalline	Polycrystalline
1/10	116000	-
1/4	116001	116036
1/2	116002	-
1	116003	116037
3	116004	116038
6	116005	116039
9	116006	116040
15	116007	116041

Diamond Stick

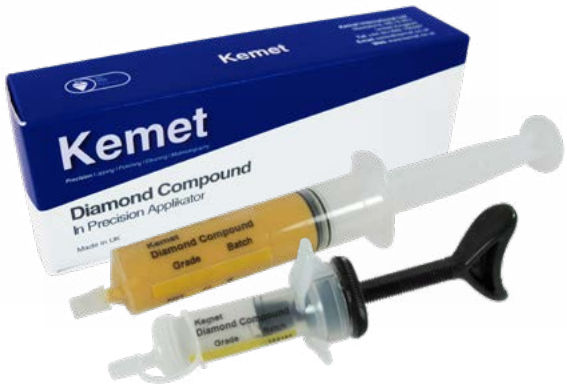
Water soluble stick diamond compound, manufactured from Polycrystalline or Monocrystalline Diamond Powder.

- Eliminating the need for spatulas or manual application
- Allows easy application of Diamond Compound
- Supplied in 10g Applicator Stick

Micron	Monocrystalline	Polycrystalline
1	113189	113201
3	113190	113202
6	113191	113203
8	113192	113204
14	113193	113205

* 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.

Diamond Compounds



Type KD

- Universal Diamond Compound for rapid stock removal and superfine surface finish
- Soluble in both oil and water

Type W

- Water Soluble Diamond Compound
- Ideal for use on polishing cloths
- Recommended for precision engineering and electronic applications where water based products are preferred

Type L

- Oil Soluble Diamond Compound specially developed for use on hard materials such as Tungsten Carbide, hardened Steels and Ceramics
- High thermal stability of the chemical carrier ensures that Kemet Diamond Compound resists frictional heat, remains stable, and keeps its suspension properties under operating conditions

DiaVers

- Sharper diamond particles for superior cutting action
- New oil-based carrier with superior lubricant qualities to improve the surface finish
- Better adhesion to laps such as felts or wooden laps
- Stable to 200°C which allows working on moulds in situ which have not yet cooled
- VOC Free*

NEW!

	Micron	Colour	Grade	Type KD			Type W			Type L			DiaVers		
				5g AppliKator	10g Syringe	20g Syringe	5g AppliKator	10g Syringe	20g Syringe	5g AppliKator	10g Syringe	20g Syringe	5g AppliKator	10g Syringe	20g Syringe
Final Polishing	1/10	Grey	C2	111002	111126	111095	-	-	-	-	-	-	-	-	-
	1/4	Grey	C2	111004	111128	111097	-	-	-	-	-	-	-	-	-
	1	Blue	C1	111005	111129	111098	113005	113129	113098	112001	112069	112052	115558	115541	115548
			C2	111006	111130	111099	113006	113130	113100	112002	112070	112053			
			C3	111007	111131	111100	113007	113131	113099	-	-	-			
	3	Green	C1	111008	111132	111101	113008	113132	113101	112003	112071	112054	115507	115542	115549
			C2	111009	111133	111102	113009	113133	113102	112004	112072	112055			
			C3	111010	111134	111103	113010	113134	113103	-	-	-			
			C4	111011	111135	111104	113011	113135	113104	-	-	-			
Lapping & Polishing	6	Yellow	C1	111012	111136	111105	113012	113136	113105	112005	112073	112143	115508	115543	115550
			C2	111013	111137	111106	113013	113137	113106	112006	112074	112138			
			C3	111014	111138	111107	113014	113138	113107	-	-	-			
	8	Red	C1	111015	111139	111108	113015	-	113108	112007	112075	112058	115559	115544	115551
			C2	111016	111140	111109	113016	113141	113109	112008	112076	112059			
			C3	111017	111141	111110	113017	-	113110	-	-	-			
			C4	111018	111142	111111	113018	113142	113111	-	-	-			
	14	Brown	C1	111019	111143	111112	113019	113143	113112	112009	112077	112060	115560	115545	115552
			C2	111020	111144	111113	113020	113144	113113	112010	112078	112061			
			C3	111021	111145	111114	113021	113145	113127	-	-	-			
Rapid Stock Removal	25	Mahogany	C1	111022	111146	111115	113022	113146	113115	112011	112079	112062	115561	115546	115553
			C2	111023	111147	111116	113023	113147	113116	112012	112080	112063			
			C3	111024	111148	111117	113024	113148	113166	-	-	-			
	45	Purple	C1	111025	111149	111118	113025	113149	113118	112013	112081	112064	115562	115557	115555
			C2	111026	111150	111119	113026	-	113119	112014	112082	112065			
			C3	111027	111151	111120	113027	113151	113120	112015	112086	112066			
	60	Orange	C1	111028	111152	111121	113028	113152	113121	112016	112085	112067	115563	115547	115554
			C2	111029	111153	111122	113029	113154	113122	-	-	-			
	90	Cream	C1	111030	111154	111123	-	-	113123	112017	112084	112068	-	-	-
			C2	111031	111155	111124	113031	113153	113124	-	-	-			

Colourless

Each micron size is available in a range of concentrations:- (C1 lowest concentration; C4 highest concentration).

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