

At its purpose built laboratory and production facility, based in Kent England, **Algasan** manufactures a range of speciality diamond-based abrasive products, specifically formulated for use in all precision engineering situations including micro lapping, polishing, surface finishing and metallographic laboratories.

Algamant is a range of diamond abrasive pastes, slurries, emulsions and suspensions, manufactured in formulae to suit specific applications each being produced in a full spectrum of micron sizes. Additionally we have the capability to advise and manufacture to customers own specifications.

Using only the finest raw materials, purchased from positively authenticated sources, **Algasan** manufactures products that produce precision results time after time.

Also available from **Algasan** is a full range of accessories and equipment including, Felts, Sticks, Finishing stones and high quality fine finishing Ceramic Stones

Algasan has a total commitment to customer service, product quality and a fair pricing policy.

ALGASAN INTERNATIONAL LTD.

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www.Algasan.co.uk email sales@Algasan.co.uk



Algamant Diamond Compounds for Precision Engineering



❖ Algamant Diamond Abrasive Compound.

Algamant Diamond compounds are ideally suited to most polishing operations where a high precision finish is required. Algamant Diamond compounds are perfect for toolroom metallographic and precision production applications such as mould tool polishing. Affording rapid stock removal and a superfine finish.

Constant Performance control.

Manufactured using only the finest raw materials, purchased from positively authenticated sources, Algamant compounds are manufactured to provide guaranteed consistent results time after time.

Versatile.

Algamant GP Diamond abrasive compound has been formulated to be an all-purpose product. Algamant OS Diamond abrasive compound is specifically formulated for high pressure /temperature applications.

Algamant WS Diamond compound is a traditional water soluble compound for those who prefer to use water based products.

Economy and efficiency.

Algamant compounds are available in 5g, 10g and 20g syringes. Allowing both economical and contamination free usage. Larger syringes and pots are available on request.

The table below lists the standard micron sizes, colours codes and concentrations available.

Micron Size	Colour		Concentrations	
WHICH OH SIZE	Coloui	Medium	Standard	Strong
1/10	Grey	N/A	*	*
1/4	Grey	N/A	*	*
1	Blue	*	*	*
3	Green	*	*	*
6	Yellow	*	*	*
8	Red	*	*	*
14	Brown	*	*	*
25	Mahogany	*	*	*
45	Purple	*	*	*
60	Orange	N/A	*	*
90	Yellow/Green	N/A	*	*



Algasan Liquid Diamond Products for Precision Lapping



❖ Algamant Liquid Diamond Abrasive Products.

Algamant Liquid Diamond products come in a range of formulae. Oil, Water, Emulsion or Suspensions, each is supplied in a concentration manufactured to suit specific precision lapping applications, all types are available in grades from 1/10 to 45 micron and are respectively referred to as Type EB, Type OB, Type WB and Type SP Suspension.

Constant Performance control.

Manufactured using only the finest raw materials, purchased from positively authenticated sources, Algamant liquid Diamond Products are produced to provide guaranteed consistent results time after time.

❖ Versatile and user Friendly.

Algamant Liquid Diamond products have been formulated using a blend of high quality green and user-friendly chemicals to produce a stable reliable product.

Economy and efficiency.

Algamant Liquid Diamond Products are available in 400g and 2000g containers. All can be used with Algalube purpose made extenders and lubricants.

The table below lists the standard micron sizes and concentrations available.

Micron Size	Colour	Concen	trations
Which on Size	(Suspension only)	Standard	Strong
1/10	Grey	*	*
1/4	Grey	*	*
1	Blue	*	*
3	Green	*	*
6	Yellow	*	*
8	Red	*	*
14	Brown	*	*
25	Mahogany	*	*
45	Purple	*	*



Algalube & Algacleanse for Engineering & Toolrooms



Algalube Extender and lubricant.

Algalube lubricating fluids are specifically designed for use with the Algamant range of Diamond Abrasive compounds. Acting as an all important lubricant and greatly assisting the polishing operation, ensuring that the compound is not allowed to dry out too quickly facilitating a cooler more even operation, it also make for greater economy by extending the compound. Algalube is available in three types. **Type O, Type O Blue** and **Type W**.

Algacleanse Cleaners.

Algacleanse types **S/C** and **D/G** are designed for clean up, after polishing or lapping operations. **Type S/C** is a solvent based cleaner that is simply sprayed on then evaporates leaving no residue, making it ideal for situations where water is not an option. **Type D/G** is a spray on wash of with water cleaner, making it a suitable cleaner for heavier contamination where water use is not a problem. **Types A** and **Type N** are specifically designed for use in ultrasonic cleaning baths.

Purpose designed and user Friendliness.

Manufactured using a blend of high quality user-friendly chemicals, both Algalube and Algacleanse have been specifically designed for each Algasan product, producing a perfect working partnership.

Economical and Simple.

Algalube and Algacleanse is available 400gram trigger sprays that Allow easily directed spray right where it's needed. Larger 2000gram and 25litre container are available.

The table below lists each Algalube and Algacleanse type and use.

ALGALUBE	FOR USE WITH
Type O Blue	Algamant GP and OB compounds
Type O Colourless	Algamant OB and EB slurries
Type W	Algamant WS and SP Slurries and Suspensions
ALGACLEANSE	USE AREA
Type S/C	Any non water type clean up leaves no residue
Type D/G	Heavier water washable clean ups
Type A & Type N	Ultrasonic cleaning bath additives



Algasan Accessories

Felt and Wooden accessories for Precision Polishing

Algasan International Ltd offers a complete range of Lapping Sticks, Felt bobs and cones and Wooden bobs and cones



Just some of the sizes available!

Hard Wood and Soft Wood Lapping Sticks

Rectangular	Round	Square
6x3x150mm	3x150mm	3x150mm
8x6x150mm	4.5x150mm	4.5x150mm
12x8x150mm	6x150mm	6x150mm
19x8x150mm	10x150mm	8x150mm
25x6x150mm	12.7x150mm	

Felt Bobs and Cones Available with 3mm and 1/8" shanks

Bobs	Cones
6x12mm	6x12mm
10x12mm	10x12mm
12x19mm	10x25mm
12x25mm	12x25mm
16x32mm	16x32mm
19x32mm	19x19mm
19x38mm	19x32mm



Algasan Ceramic Lapping and Polishing Stones

Strong, Flexible, extremely thin and Non-loading

Algasan Ceramic Stones are manufactured from long ceramic fibres that do not break or dull under the most demanding of working conditions, even when dressed to a very fine point. Economical 100% of the stone is available for use. Achieve consistent results when polishing Moulds, Dies and precision components; excellent results are obtained when used on Tool steels, Stainless, Copper, aluminium, Silicon, and even Plastics.

All grits are colour coded for convenience.



Applications: -

- Perfect for precise finishing of flat surfaces, curves, ribs and bosses on forming dies.
- ❖ High finishing efficiency can be attained without clogging, even on aluminium and copper.
- Can be used on narrow and deep slots were common conventional stones are prone to breakage.
- Ceramic stones can be used on coarse surfaces left after electro-discharge machining.
 Sizes available: -

Size	180 Grit	300 Grit	400Grit	600 Grit	800 Grit	1000 Grit	1200Grit
100 x 0.8 x 4	G084	L084	OR084	BR084	B084	W084	R084
100 x 1 x 4	G104	L104	OR104	BR104	B104	W104	R104
100 x 1 x 6	G106	L106	OR106	BR106	B106	W106	R106
100 x 1 x 10	G110	L110	OR110	BR110	B110	W110	R110
50 x 3 dia	G50D	L50D	OR50D	BR50D	B50D	W50D	R50D

(Thickness 0.5mm, 1.5mm and 2mm also available upon request)



Gesswein Power Hand 2 X Dual Control Polishing System

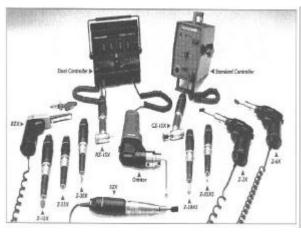


The PH2X is robust and extremely versatile and can operate <u>two hand pieces at one time</u>. A choice of motors and hand pieces, (rotary or reciprocating) are available as is a full range of accessories.

The PH2X is the ideal choice for those seeking professional results.











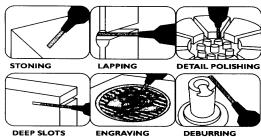
ULTRAMAX Model UM-2000

Compact and Powerful Ultrasonic Polishing and Finishing System for the 21st Century

For more than two decades, Gesswein has brought the benefits of ultrasonic polishing and finishing to mold and diemakers. Manual polishing can't compete with the ease of use, quality of results or time savings of using ultrasonic energy with conventional abrasive tools. As the recognized leader in the field, Gesswein continues to bring you the best that technology has to offer. Now, with the turn of the millennium, Gesswein gives you Ultramax UM-2000 — with the power to polish the most intricate and demanding jobs and the means to finish off your competition.

Features:

- ▶ 30 watts of output power slashes finishing time by 60%.
- \blacktriangleright Reciprocation ranges from 4-30 μm amplitude, 20,000-30,000 strokes per second.
- ► Easy-to-use, uncomplicated controls make operation simple.
- Automatic power adjustment ensures efficient operation of any size tool for either aggressive roughing or precision polishing.
- ► Compact design uses less bench space and provides maximum portability.
- Small, comfortable handpiece with flexible cord greatly reduces polishing fatigue and increases accuracy.
- Includes a comprehensive line of tool holders for common abrasives and tooling accessories, including diamond tools, stones, ceramic stones and laps.



Specifications:

UM-2000 Power Pack
Frequency (stroke) 20,000-30,000 cycles/sec.

Amplitude (stroke) 4-30 µm

Frequency Adjustment Automatic feedback system

Power Output 30W maximum
Output Adjustment Continuously variable

Power Consumption 100VA

Electrical 120V AC, 1 Ph, 50/60 Hz Dimensions $5\frac{1}{2}$ "W × $7\frac{3}{2}$ "D × $5\frac{1}{6}$ "H

Net Wt. 4.2 lbs

UM-2001 Handpiece

Transducer B.L.T. electrostrictive

Cable Length 6½' (curl cord)

Screw Thread M4

Dimensions 3/4"-1"Ø x 5"L

Net Wt. 5.25 oz.

UM-2000 Standard Set includes UM-2000 Power Pack, UM-2001 Handpiece, Power Cord, Tool Holder Pouch, 8mm Spanner Wrench, 2.5mm Hexagonal Wrench, Spare Fuse, and an assortment of tools and holders, including: Diamond Stones 6x1x18mm and 6x1.5x25mm, 200 grit; Diamond Files 5x1x40mm and 4x0.5-0.8x15mm, 200 grit; Ceramic Stones 1x6x40mm and 3Øx30mm, 800 grit; and Clamp Tool Holders Imm flat and 3mm round.



Ultramax DF For Both Ultrasonic and Mechanical Applications.



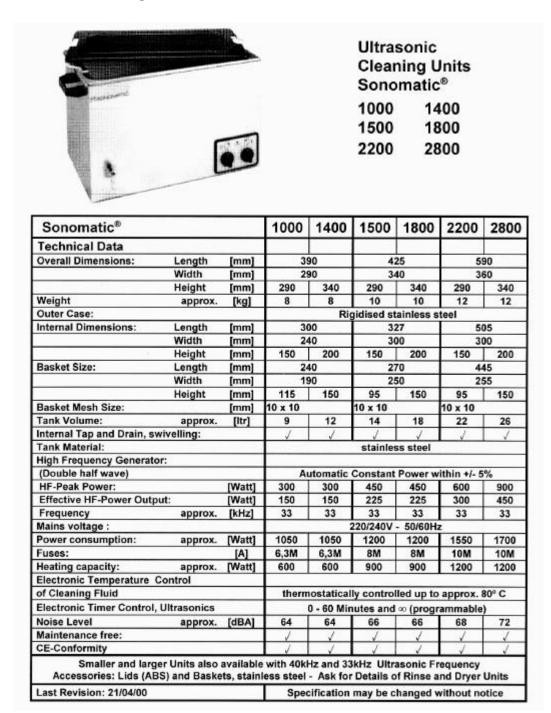
Ultramax DF gives you the versatility of both ultrasonic and mechanical applications.

This unit will accommodate the UF-9700 ultrasonic hand piece and the entire range of Power Hand 2X mechanical hand pieces. When used with the Ultramax DF, the mechanical hand pieces will have 30% more Torque. The Ultramax DF is supplied with all of the following accessories.

- Power Pack
- UF-9700 Hand piece in a wooden box
 - 6/4mm Tool Adaptor
 - Hand piece Rest
- Tool Box with a 30-piece tool set that includes 4 diamond files, 3 diamond stones, 2 resin- bonded diamond stones, 2 lapping tools, 1 clamp tool holder for round tools, 4 clamp tool holders for flat tools, 1 protector sleeve and 1 large bevelled hand piece protector sleeve, 8mm wrench, 2x 10mm wrenches, a 13mm wrench, 1 Allen wrench, a set of earplugs and an extra fuse.

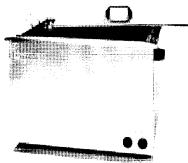


Ultrasonic Cleaning Baths





Ultrasonic Cleaning Baths



Ultrasonic Cleaning Units Sonomatic[®]

2900 3800 4800 5800 7800 98/1kW 120/1kW 160/1kW 200/1kW

Sonomatic [®]			2900	3800	4800	5800	7800	98/1kW	120/1k	160/1kW	200/1kW
Technical Data		·	-					F			
Overall Dimensions:	Length	[mm]	i –	600		l	700)		800	
	Width	[mm]		400		<u> </u>	600)		700	
	Height	[mm]	430	530	630	500	550	650	550	650	750
Weight			25	35	40	50	60	70	90	95	110
Outer Case:						R	Rigidis	ed stainle	ss steel		
Internal Dimensions:	Length	[mm]		500			600)		700	
	Width	[mm]		300			500)	1	600	
	Height	[mm]	200	300	400	250	300	400	300	400	500
Basket Size:	Length	[mm]		490			586	5		690	
-	Width	[mm]		295			485	5	****	560	
	Height	[mm]	165	265	365	215	265	365	255	355	455
Basket Mesh Size:		[mm]	12	.5 x 12	.5				25 x 25		
Tank Volume:	approx.	[ltr]	28	38	48	58	78	98	120	160	200
with Tap (external) and Dra	in 3/4" (ma	le)	V	- V	V	7	7	J		/	7
with Overflow 1" (female)			√	$ \overline{} $	$\sqrt{}$	7	7	/	$\sqrt{}$	7	
with Fresh Water Inlet 3/4"	(male)		$\sqrt{}$	7	$\sqrt{}$	√	V		7	/	7
Tank Material:				Stai	nless	Steel,	1,6mm	wall thic	kness, pla	sma weld	ed
High Frequency Generator:				Double	e half v	wave -	Autor	natic Con	stant Pow	er within +	1-5%
HF-Peak Power:		[Watt]	900	1200	1200	1500	2000	2000	2000	2000	2000
Effective HF-Power Output		[Watt]	450	600	600	750	1000	1000	1000	1000	1000
Frequency	approx.	[kHz]						33kHz			
Mains voltage :				22	20/240	V - 50	/60Hz		380/440\	/,50/60Hz,	+N+Earth
Power consumption:	approx.	[Watt]	1700	2700	2700	2900	3200	3200	7200	7200	7200
Fuses:		[A]	10M	16M	16M	16M	16M	16M	3x16M	3x16M	3x16M
Heating capacity:	approx.	[Watt]	1200	2000	2000	2000	2000	2000	6000	6000	6000
Electr. Temp. Control of Cle	d		EI	ectron	ic the	rmosta	at control	up to app	rox. 80° C		
Heatup Time: ambient to 70	1.25h	1.75	2.25h	3.0h	3.5h	4.0h	1.0h	1.25h	1.5h		
Electronic Timer Control, L			0	- 60 M	inutes	and ∞ (pi	ogramma	ble)			
Noise Level	[dBA]	74	74	74	75	76	76	76	76	76	
Maintenance free:			$\overline{}$	√	√	V	$\overline{}$		√	7	7
CE-Conformity			1	7	-√	√	$\overline{}$		7		V

Note: All above Units optionally available mit external Generator and Remote Control.

From Unit Size 7800 upwards, apart from 1kW Ultrasound, also 1.5kW or 2kW Ultrasound Power available. (external Generator with Nominal Output Power Setting facility from 30% bis 100%) Please ask for more information.

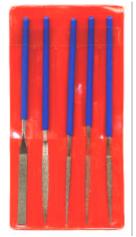
Smaller and Higher Power Units are also available with 40kHz and 33kHz Ultrasonic Frequency Accessories: Lids and Baskets, stainless Steel - Ask for Details of Rinse and Dryer Units

Last Revision: 21/04/00 Specification may be changed without notice



Diamond File Sets

15 cm. Set of Five Files



Five different shapes Medium

16 cm. Set of Nine Files



Tapered flat files, three widths in course, medium and fine.

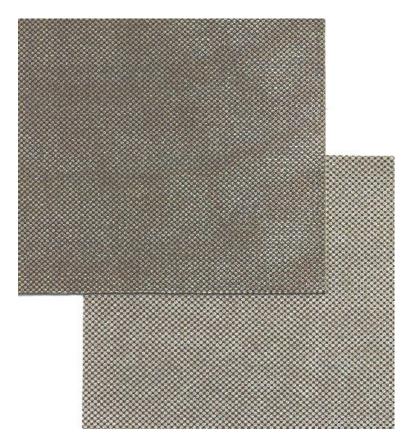
18 cm. Set of twelve Files



Versatile, Tapered flat files, four widths In course, medium and fine



Self Adhesive Diamond Cloth



Self-adhesive 100mm squares. Available in 60,120, 200, 400,800, and 1200 grits

Multiple uses around the toolroom can easily be cut to size. Ideal for fabricating or relining finishing tools.



Cloths



A full range of Polishing & Lapping cloths are available from Algasan. In a wide choice of types and sizes, manufactured in materials with or without nap.

Plain backed or self-adhesive.

Silk Nylon Chemotextile Royale Alphacloth Etc.

Please ask for your specific type.



Internal helical Slot laps



Internal laps & Arbours.

Lap Sizes	Length	Arbor No.	Shank Dia	Shank Length	Taper Length	Expander No
3/64	1/2	4/0	1/8	3/4	1 1/2	4/0
1/5, 5/64	5/8	3/0	1/8	3/4	1	3/0
					1/2	
3/32, 7/64	3/4	2/0	1/8	3/4	1 5/8	2/0
1/8, 5/32,	7/8	0	1/8	3/4	1 3/4	0
9/64, 11/64						
3/16, 13/64	13/8	1	3/16	1	2 3/4	1
7/32, 15/64	13/4	2	3/16	1	3	2
1/4, 9/32,	2	3	3/16	1	4	3
17/64, 19/64						
5/16, 11/32,	2	4	7/32	1	4	4
21/64, 23/64						
3/8, 13/32,	21/2	5	9/32	1 1/2	5	5
25/64, 27/64						
					_	
7/16, 15/32,	21/2	6	15/16	1 1/2	5	6
29/64, 31/64	2.1/					
½, 17/32,	3 1/4	7	3/8	1 1/2		7
9/16, 19/32	3 1/4	/	3/8	1 1/2	6	/
37/64, 39/64	3 1/4					
5/8, 21/32,	3 1/4					
11/16, 23/32	3 74	8	13/32	1 1/2	6	8
41/64, 43/64,	3 1/4		13/32	1 1/2		Ü
45/64, 47/64	3 /4					
3/4, 25/32,	3 1/2					
13/16, 27/32	3 /2	9	1/2	2	7	9
49/64, 51/64,	3 1/2			_		
53/64, 55/64						
7/8, 29/32,	3 1/2					
15/16, 31/32		10	9/16	2	7	10
57/64, 59/64,	3 1/2					
61/64, 63/64						



Bellstones Mould Polishing Stones

Bellstones are pre-filled with lubricant during the manufacturing process. This aids the cutting action by keeping the pores open.

Grade	Characteristics
Type VH	Made from premium grade aluminium oxide. Fast cutting action removes the tough, hard scale left by Electric Discharge Machining. Suitable for the rough and middle finishing of heat treated moulds, hard alloy tool steel and delicate engraving moulds
Type MS	Made with aluminium oxide in a low resistance bonding material. Has good impact strength and cutting ability. Suitable for curved surfaces on normal steel.
Type HS	Made from premium grade Silicon Carbide. Fast cutting action from the sharp edged abrasive grains. Suitable for hard materials, Stainless and Die steels.



Stock Sizes *

Size/				Туре	e VH				Type MS						Type HS									
mm																								
	120 Grit	180 Grit	220 Grit	320 Grit	400 Grit	600 Grit	1200 Grit	1500 Grit	120 Grit	180 Grit	220 Grit	320 Grit	400 Grit	600 Grit	800 Grit	1200 Grit	1500 Grit	220 Grit	320 Grit	400 Grit	600 Grit	800 Grit	1200 Grit	1500 Grit
3 x 6		*		*								*		*										
3 x 13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			*		*	*	*
6 x 13	*	*	*	*		*			*	*	*	*		*	*			*	*	*	*	*		
6 x 6	*			*					*			*												_

GENERAL TERMS OF BUSINESS

All quoted prices are exclusive of VAT and Carriage

Delivery: - normally 2-3 Days

Account Terms: - 30 Days Nett

ALGASAN INTERNATIONAL LTD.

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