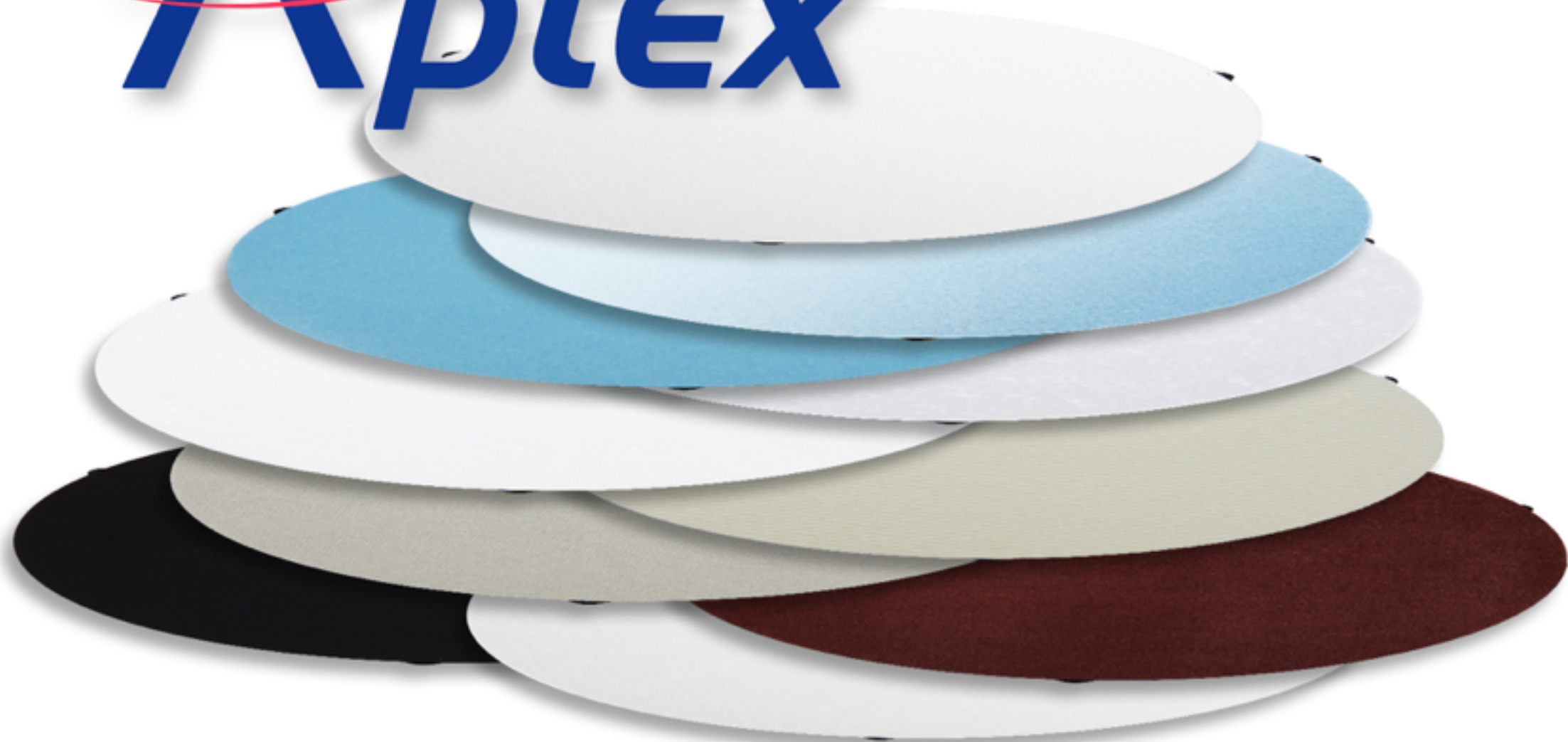


Aptex



Consumables
Price List

Valid from 1st March 2023

2023

Your key to smarter sample preparation and analysis

Ordering and Pricing

Prices valid from 1st March 2023. This price list supersedes all previous price lists.

All prices exclude VAT.

Delivery is £17.50 per order up to 25Kg. Timed deliveries are £25.

Orders containing items marked with  will attract a delivery charge of £35.

There is no minimum or maximum order.

We accept payment by credit card.

Payment is due 30 days from shipment.

You can order by phone, fax, post or through our webshop:

T: 01564 206393

M: Aptex Ltd
Patrick Farm Barns, Unit 8
Meriden Road
Hampton-in-Arden
Solihull
B92 0LT

E: websales@aptexgroup.com

W: www.aptex.co.uk

Bank details:

Sort code: 16-22-11

Account: 11131895

VAT Registration: GB 925 0090 51

Company Registration: 6396076



Full terms and conditions are available on our website:

aptex.co.uk/terms-and-conditions

Welcome to our 2023 consumables price list

We offer 24/48 hour delivery as standard from our UK warehouse for the majority of consumable items. Most morning orders are despatched the same day for delivery the following working day.

The few items not carried in stock are marked with this icon: . They can be ordered very easily and will be delivered within 2-4 weeks.

If you cannot find what you're looking for just contact us:  01564 206393  websales@aptexgroup.com

In addition to our consumables we offer a complete range of equipment needed for sample preparation, testing and analysis. If you'd like to discuss how to improve the speed and consistency of your sample preparation route and reduce your costs, we'd be delighted to help.

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Cutting



150mm (6") Precision Cut-off wheels

Actual size: 150 x 0.5 x 12.7mm

Aka-Cut 400 (50-400HV)	5 pcs	11151110	£118
Aka-Cut 700 (150-700HV)	5 pcs	11151140	£118
Aka-Cut 1000 (500-1000HV)	5 pcs	11151170	£118

Diamond Cut-off wheels

Metal bonded (1 pc)

Resin bonded (1 pc)

125 x 0.5 x 12.7	AP101250	£275	200 x 1.5 x 32	AP102060	£340
150 x 0.5 x 12.7	AP101550	£340	250 x 1.5 x 32	AP102560	£475
175 x 0.6 x 12.7	AP101850	£390	300 x 1.5 x 32	AP103060	£525

Cut-off wheels	250mm (10")		300mm (12")		350mm (14")		400mm (16")		432mm (17")	
Actual size:	254 x 1.7 x 32mm		305 x 2.2 x 32mm		354 x 2.6 x 32mm		406 x 3.2 x 32mm		Note: Prices for 432mm are for box of 5 pcs	
Aka-Cut 500HV (10)	11251140	£148	11301140	£178	11351140	£206	11411140	£326		
Actual size:	250 x 1.5 x 32mm		300 x 2.0 x 32mm		350 x 2.5 x 32mm		400 x 3.0 x 32mm		432 x 3.0 x 32mm	
Aka-Cut Fe50 (10)	11252150	£232	11302150	£306	11352150	£427	11402150	£572	11432150	£386
Aka-Cut Fe60 (10)	11252160	£232	11302160	£306	11352160	£427	11402160	£572	11432160	£386
Aka-Cut NF10 (10)	11252110	£232	11302110	£306	11352110	£427	11402110	£572	11432110	£386
Aka-Cut Ti20 (10)	11252120	£232	11302120	£306	11352120	£427	11402120	£572	11432120	£386

Cutting accessories

Aka-Cool - Concentrate for recirculation units

Aka-Cool	1l	19201015	£55	5l	19201017	£180
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Aka-NoFoam - Anti-foaming concentrate for recirculation units

Aka-NoFoam	500ml	19501013	£65
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Aka-Cut 500HV

These blades have a unique fibre-web coating that leads to:

- an exceptional lifetime and fewer breakages
- clean cuts due to water retention
- reliable cutting of surface hardened samples that normally compress during cutting

Recommended Cut-off Wheels

Hardness Range	50-250 HV	100-350 HV	250-500 HV	350-700 HV	500-1000 HV	
Brass						
Ceramic Capacitors						
Titanium Alloys						
Aluminium Alloys						
Plasma Spray Coated Parts						
Coated Sintered Carbides						
Stainless and Duplex Steel						
Titanium Fasteners						
Carbon Composites						
Soft Materials						
Medium Hard Materials						
Hard Materials						
Electronic Parts						
Cast Iron						
Zinc Coated Steel						
Medium Soft Materials						
Nitrided Steel						
Surface Hardened Steel						
Superalloys with Diffusion Coatings						
Superalloys						
Cut-Off Wheel	AKA-Cut NF10	AKA-Cut Ti20	AKA-Cut 500HV	AKA-Cut Fe50	AKA-Cut Fe60	Diamond

Metallurgy isn't ALL about consumables.
We supply equipment too!

Cut-off machines, mounting presses, grinder/polishers...



Visit www.aptex.co.uk to see our full range

Cold Mounting



Our epoxies have perfect adhesion and minimal shrinkage. These cured resins have no environmental risk. This makes them ideal for both routine work and for embedding difficult specimens such as plasma sprayed coatings or porous surfaces.

We provide resin and hardener separately so you can order only what you need.

Aka-Resin Liquid is a low viscosity, transparent epoxy resin. One of the Aka-Cure hardeners is required in addition to the liquid.




Our acrylic resin consists of a powder and a liquid.

Aka-Clear-2 is a fast curing, transparent embedding system. It cures in 8mins and produces totally clear, bubble free mount without having to use a pressure pot.


Mixing of the two components is not critical: if a slightly thinner mix is required a little extra liquid can be added without an adverse effect on the cured mount.



Mounting Epoxies & Resins

Aka-Resin Epoxy Liquid				Aka-Cure Quick Hardener - 30min cure @ 80°C			
Aka-Resin Liquid	1l	25101115	£63	Aka-Cure Quick		500ml	25101223 £62
Aka-Cure Slow Hardener - 8-12hrs cure @ 20°C							
Aka-Cure Slow		500ml	25101213 £68	Aka-Cure Slow-2*		500ml	25102213 £48
Aka-Clear-2 Acrylic Resin System - 8min cure @ RT. Best in class for edge retention.							
Aka-Clear-2 Powder	1kg	25202311	£108	Aka-Clear-2 Powder		5kg	25202313 £470
Aka-Clear-2 Liquid		1l	25202415 £104	* Discounted price as Aka-Cure Slow-2 has been discontinued.			

Moulds and Accessories

Polyethylene - 10 pcs		25mm		30mm		40mm		50mm	
Aka-Mould		73112510	£32	73113010	£36	73114010	£44	73115010	£49
Silicone rubber - 10 pcs		25mm		1.25"		40mm		50mm	
Circular		S10A01	£75	S10A02	£80	S10A03	£87	S10A04	£95
Silicone rubber - 10 pcs		20x55x27mm		40x70x23mm		50x100x25mm		L x W x D	
Rectangular		S10B00	£137	S10B01	£145	S10B02	£150		
Mould Release Agent					Clips				
Aka-No Stick Powder	50g	21901105	£90		Aka-Clip St. Steel 100 pcs			73210860	£53
Aka-No Stick Liquid	250ml	25901201	£26		Aka-Clip Trio 100 pcs			AK8810	£29
Cold Mounting Mixing Kit									
200 cups, 200 sticks		73511075	£90						



Hot Mounting

Epoxy - black, mineral-filled resin offering the best edge retention and embedding

Aka-Resin Epoxy	1kg	21101521	£72	7.5kg	21101524	£401
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Acrylic - clear thermoplastic resin

Aka-Resin Acrylic	1kg	21201001	£64	7.5kg	21201004	£382
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Melamine - white, mineral-filled resin offering amazing edge retention

Aka-Resin Melamine	1kg	21301511	£69	7.5kg	21301514	£396
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Phenolic - black, wood-filled, economy value resin

Aka-Resin Phenolic	2.5kg	21501122	£66	7.5kg	21501124	£143
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Black Bakelite	25kg	AP112007	£189			
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Phenolic SEM - black, graphite-filled, conductive resin

SEM Conductive Phenolic	1kg	21501721	£103	7.5kg	21501724	£579
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We offer a range of hot mounting compounds for use in hot embedding presses. These products are available in 1kg to 25kg packs.

- Aka-Resin Epoxy - a black, mineral-filled compound for excellent embedding and edge retention.
- Aka-Resin Acrylic - a crystal clear, transparent, thermoplastic resin.
- Aka-Resin Melamine - a white, mineral-filled compound offering excellent edge retention. We believe this to be even better than the Epoxy.
- Aka-Resin Phenolic - a black wood-filled compound for economic embedding or backfilling.



Grinding & Polishing

Fine Grinding

Aka-Piatto

Aka-Piatto are a series of polymer-coated steel, diamond grinding discs suitable for magnetic systems. They are colour coded in grit sizes P80-P2400.

They have a number of advantages over grinding papers. They can:

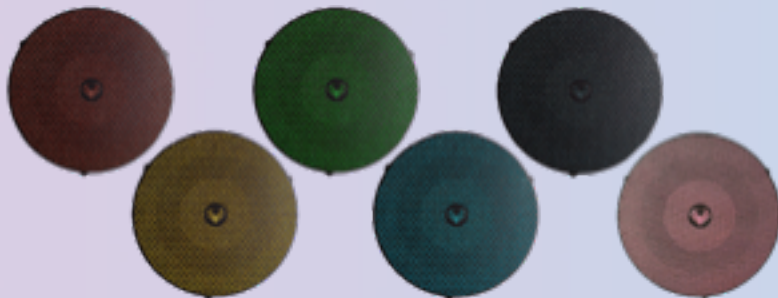
- Replace several grinding stages
- Replace 100-200 pieces of grinding paper
- Create fully plane samples avoiding half-moon effects
- Last longer due to the wear compensation design
- Maintain absolute edge retention due to the diamond abrasive being bonded to the disc
- Plane and fine-grind all materials harder than 150HV, although for materials above 400HV we recommend the use of a long life dressing stick (AP9885).

Aka-Piatto+

Aka-Piatto+ are a series of Piatto discs with double the diamond concentration used on Aka-Piatto. They have an improved lifetime and produce a finer surface finish on brittle samples such as cermets and ceramics due to the lower specific pressure.

They share all the other features of Aka-Piatto such as colour-coding, wear compensated design and the 3 small tabs for easy exchange. Aka-Piatto+ discs need to be dressed with a dressing stick before first use and, depending on the material, once in a while during use.

We recommend the dressing stick AP9885.



Aka-Allegran & Aka-Largan

Aka-Allegran & Aka-Largan are rigid fine grinding/polishing discs. Built in abrasive is released when diamond suspension or spray is added during preparation. This unique abrasive system results in high removal rates, perfect planeness and a very long life. Discs are delivered ready to use and require no maintenance.

Aka-Largan 9 is used for fine grinding of soft materials in the range 50HV to 400HV. Diamond suspension or spray in grain sizes 15 to 3 μ m is added during preparation.

Aka-Allegran 9 is used with 15 to 3 μ m diamond for fine grinding materials harder than 450HV. It will replace grinding steps from P320-P1200 in a single step.

Aka-Allegran 6 is recommended when an optimal balance between material removal and fine surface finish is required. It is the most universal disc in the range. It provides fast fine grinding of most materials with a hardness above 150HV using 9 to 3 μ m diamonds. It will replace the traditional grinding steps from P320-P1200 with one single step.

Aka-Allegran 3 can also be used with 15 to 3 μ m diamond for fine grinding materials with a hardness above 150HV. It also replaces P320-P1200 in a single step. Used with 6 μ m diamond it will produce perfectly flat samples ready for final polishing with 1 μ m.

Aka-Allegran 1 is used for polishing material with a hardness above 150HV. It can be used with diamonds as small as 0.1 μ m resulting in outstanding planeness.

Rhaco Grit Abrasive Papers

Our brand of plain abrasive grit papers, the Rhaco grit, are available in all standard sizes. Also available to special order in 9". Please contact us for prices.

Rhaco grit papers have several advantages over traditional SiC papers:

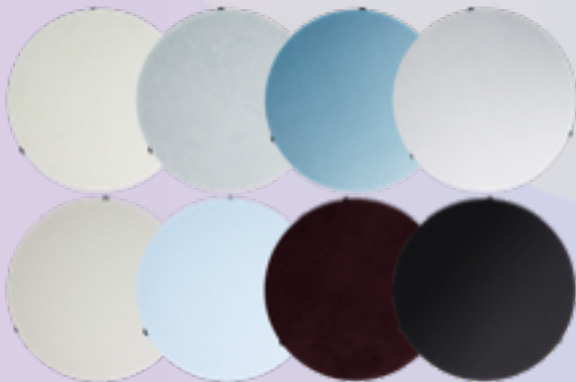
- Lasting 2-3 times longer than typical P120, P180, P220 and P320 papers
- Providing better edge retention than usual P500-P1200 papers
- Replacing self-adhesive paper when used with an Aka-Rhaco (see pages 10-13)

Grinding & Polishing

Polishing Cloths

Magnetic Polishing Cloths

Our range of magnetic polishing cloths contain a thick polymer barrier that keeps lubricant and abrasive on the surface. This makes them more effective at removing material. The magnetic backing ensures easy placement and removal.



Magnetic Adaption

We have magnetic adaption to suit every situation.

Aka-Rhaco is a stainless steel disc with a soft adhesive polymer coating on one side. This creates a low tack finish which means that additional adhesive is not required. It lasts for over 200 applications and is perfect for grinding and polishing.

Use with:

- Rhaco grit instead of buying expensive PSA backed papers
- Aka-cloths without removing their liner. Simply lay the cloth on the Aka-Rhaco and you have a magnetic cloth. When the cloth is worn out simply replace it with another.

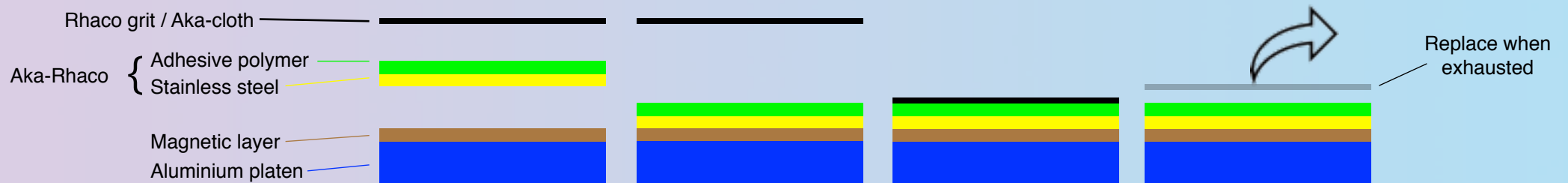
Aka-Rhaco Flex uses a soft magnetic polymer material in place of the stainless steel disc. Due to its lower magnetism it is only recommended for polishing or manual grinding.

Aka-Rhaco-PSA is a self adhesive version which is adhered directly onto a platen and will remain there until worn out.

Please Note:

On the following pages details are given for 8", 10", 12" and 14" consumables.

How the Rhaco system works:



Grinding & Polishing

200mm (8") consumables

Aka-Piatto (1 pc)				Aka-Piatto+ (1 pc)				Aka-Allegran (2 pcs)				Rhaco-Grit Plain Paper			
80	Red-Brown	31212010	£95	80	Red-Brown	31412010	£131	9	Grey	33412022	£124	P120	(50pcs)	35220207	£32
120	Yellow-Ochre	31212020	£77	120	Yellow-Ochre	31412020	£100	6	Red	33412032	£113	P180	(100pcs)	35220258	£54
220	Green	31212030	£69	220	Green	31412030	£89	3	Blue	33412042	£113	P220	(100pcs)	35220308	£52
600	Blue	31212045	£69	600	Blue	31412045	£89	1	Buff	33412062	£113	P320	(100pcs)	35220358	£52
1200	Black	31212060	£69	1200	Black	31412060	£89	Aka-Largan (2 pcs)				P500	(100pcs)	35220408	£52
2400	Pink	31212075	£87									P800	(100pcs)	35220508	£52

Magnetic Polishing Cloths (5 pcs)			
Mag-Plaran	42201013	£84	Fine grinding 15-6µm
Mag-Paran-S	42202013	£92	
Mag-Silk	42204013	£87	Polishing 6-1µm
Mag-Daran	42202513	£84	
Mag-Ramda	42203013	£66	Polishing 3µm
Mag-Moran	42205013	£89	
Mag-Moran-U	42205113	£75	
Mag-Plural	42206013	£76	

Magnetic Polishing Cloths (5 pcs)			
Mag-Napal	42207013	£76	Fine polishing 1µm or less
Mag-Chemal	42209013	£92	

Magnetic Adaption			
Aka-Rhaco	75151202	£93	Aka-Rhaco, Aka-Rhaco Flex and Aka-Rhaco PSA sold in packs of 2. Aka-Magnet sold in packs of 1.
Aka-Rhaco Flex	75152202	£75	
Aka-Rhaco PSA	75153202	£75	
Aka-Magnet	75110201	£35	

Hermes SiC Paper			
P2500	(100pcs)	35820808	£90

Grinding & Polishing

250mm (10") consumables

Aka-Piatto (1 pc)				Aka-Piatto+ (1 pc)				Aka-Allegran (2 pcs)				Rhaco-Grit Plain Paper			
80	Red-Brown	31212510	£104	80	Red-Brown	31412510	£141	9	Grey	33412522	£135	P120	(50pcs)	35225207	£47
120	Yellow-Ochre	31212520	£87	120	Yellow-Ochre	31412520	£119	6	Red	33412532	£124	P180	(100pcs)	35225258	£75
220	Green	31212530	£79	220	Green	31412530	£105	3	Blue	33412542	£124	P220	(100pcs)	35225308	£70
600	Blue	31212545	£79	600	Blue	31412545	£105	1	Buff	33412562	£124	P320	(100pcs)	35225358	£70
1200	Black	31212560	£79	1200	Black	31412560	£105	Aka-Largan (2 pcs)				P500	(100pcs)	35225408	£70
2400	Pink	31212575	£102									P800	(100pcs)	35225508	£70
								9	Grey	33212522	£124	P1000	(100pcs)	35225558	£70
												P1200	(100pcs)	35225608	£70
												P2400	(100pcs)	35225758	£272
												P4000	(100pcs)	35225908	£272
Magnetic Polishing Cloths (5 pcs)				Magnetic Polishing Cloths (5 pcs)								Hermes SiC Paper			
Mag-Plaran	42251013	£102	Fine grinding 15-6µm	Mag-Napal	42257013	£102	Fine polishing 1µm or less								
Mag-Paran-S	42252013	£122		Mag-Chemal	42259013	£122									
Mag-Silk	42254013	£116	Polishing 6-1µm	Magnetic Adaption											
Mag-Daran	42252513	£102													
Mag-Ramda	42253013	£80	Polishing 3µm	Aka-Rhaco	75151252	£109					P2500	(100pcs)	35825808	£115	
Mag-Moran	42255013	£121		Aka-Rhaco Flex	75152252	£90					Aka-Rhaco, Aka-Rhaco Flex and Aka-Rhaco PSA sold in packs of 2. Aka-Magnet sold in packs of 1.				
Mag-Moran-U	42255113	£89		Aka-Rhaco PSA	75153252	£90									
Mag-Plural	42256013	£102		Aka-Magnet	75110251	£47									

Aka-Rhaco, Aka-Rhaco Flex and Aka-Rhaco PSA sold in packs of 2.
Aka-Magnet sold in packs of 1.

Grinding & Polishing

300mm (12") consumables

Aka-Piatto (1 pc)				Aka-Piatto+ (1 pc)				Aka-Allegran (2 pcs)				Rhaco-Grit Plain Paper			
80	Red-Brown	31213010	£157	80	Red-Brown	31413010	£211	9	Grey	33413022	£149	P120	(50pcs)	35230207	£61
120	Yellow-Ochre	31213020	£127	120	Yellow-Ochre	31413020	£169	6	Red	33413032	£137	P180	(100pcs)	35230258	£103
220	Green	31213030	£110	220	Green	31413030	£146	3	Blue	33413042	£137	P220	(100pcs)	35230308	£97
600	Blue	31213045	£110	600	Blue	31413045	£146	1	Buff	33413062	£137	P320	(100pcs)	35230358	£97
1200	Black	31213060	£110	1200	Black	31413060	£146	Aka-Largan (2 pcs)				P500	(100pcs)	35230408	£97
2400	Pink	31213075	£143									P800	(100pcs)	35230508	£97
								9	Grey	33213022	£137	P1000	(100pcs)	35230558	£97
												P1200	(100pcs)	35230608	£97
												P2400	(100pcs)	35230758	£385
												P4000	(100pcs)	35230908	£385
Magnetic Polishing Cloths (5 pcs)				Magnetic Polishing Cloths (5 pcs)								Hermes SiC Paper			
Mag-Plaran	42301013	£129	Fine grinding 15-6µm	Mag-Napal	42307013	£129	Fine polishing 1µm or less								
Mag-Paran-S	42302013	£166		Mag-Chemal	42309013	£166									
Mag-Silk	42304013	£145	Polishing 6-1µm												
Mag-Daran	42302513	£129													
Mag-Ramda	42303013	£83	Polishing 3µm												
Mag-Moran	42305013	£156													
Mag-Moran-U	42305113	£113													
Mag-Plural	42306013	£129													

Grinding & Polishing

350mm (14") consumables

Aka-Piatto (1 pc)				Aka-Piatto+	Aka-Allegran (2 pcs)				Rhaco-Grit Plain Paper
80	Red-Brown	31213510	£218	Not available in 350mm Ø	9	Grey	33413522	£214	Not available in 350mm Ø
120	Yellow-Ochre	31213520	£177		6	Red	33413532	£198	
220	Green	31213530	£153		3	Blue	33413542	£198	
600	Blue	31213545	£153		1	Buff	33413562	£198	
1200	Black	31213560	£153						Magnetic Adaption

Magnetic Adaption

Aka-Rhaco	75151352	£154
Aka-Rhaco Flex	75152352	£126
Aka-Rhaco PSA	75153352	£126
Aka-Magnet	75110351	£68




Aka-Rhaco, Aka-Rhaco Flex and Aka-Rhaco PSA sold in packs of 2.
Aka-Magnet sold in packs of 1.

Magnetic Polishing Cloths (5 pcs)			
Mag-Plaran	42351013	£193	Fine grinding 15-6µm
Mag-Paran-S	42352013	£252	
Mag-Silk	42354013	£203	Polishing 6-1µm
Mag-Daran	42352513	£193	
Mag-Ramda	42353013	£141	Polishing 3µm
Mag-Moran	42355013	£233	
Mag-Moran-U	42355113	£163	
Mag-Plural	42356013	£193	

Magnetic Polishing Cloths (5 pcs)			
Mag-Napal	42357013	£193	Fine polishing 1µm or less
Mag-Chemal	42359013	£252	

Grinding Stones 356mm 150 grit

Our stone grinding discs are ideal for general metal grinding and fit both Struers™ and ATM© grinding machines with stone adapters.

Al ₂ O ₃ grinding stone	(1pc)	39136240		£462
SiC grinding stone	(1pc)	39136210		£570
Al ₂ O ₃ grinding stone with base plate	(1pc)	39235240		£622

Polishing

Diamond Suspensions, Oxides and Lubricants

DiaUltra is a unique 2-in-1 diamond suspension that provides absolutely the best preparation results in the shortest possible time.

DiaUltra is an advanced diamond suspension using high-quality diamonds and a superior lubrication system. With **DiaUltra** you get the highest material removal, shortest preparation times and best surface quality possible. This diamond suspension can reduce your preparation time by up to 40%, which also means that you can save cost on consumables as well. **DiaUltra** is recommended for all materials, as long as they are not water sensitive. Only having to dose one liquid - instead of two - makes the preparation easy, trouble-free and reproducible.

DiaMaxx-Poly, **DiaMaxx-Mono**, **DiaDoublo-Poly** and **DiaDoublo-Mono** are one dose liquid preparations containing both diamonds and a lubricant (Aka-Lube Clear plus) in a permanently stable form that offers excellent and consistent results. Unlike other two-in-one products on the market, they are perfectly compatible with any polishing or fine-grinding surface. The **DiaMaxx** products contain 20ct/l of diamonds while the **DiaDoublos** contain 10ct/l. They contain no oil and are consequently very easy to clean.

Aka-Poly, **Aka-Mono**, **Aka-Poly Plus** and **Aka-Mono Plus** contain no lubricants, allowing you to choose the most suitable one for your project. The suspensions have been developed to ensure that the diamond stays evenly distributed throughout the products. This ensures an outstanding, scratch-free finish is achieved every time. They have been designed for use with semi-automatic systems and are compatible with all manufacturers' dosers. **Aka-Poly** and **Aka-Mono** contain 20ct/l of diamonds (up to 50% greater than comparable products on the market) while the **Plus** products contain 40ct/l leading to exceptional removal rates and cost/time savings.

Our range of glycol based **Water Free Diamond Suspensions** contain less than 0.1% water and are ideal for water sensitive samples. They are all oil-free to ensure easy cleaning and are non-hazardous and non-flammable. **Aka-Poly Water-free** and **DiaDoublo Water-free** are made from non-toxic and non-flammable glycols. **Aka-Stick** and **Aka-Paste** are both water-free and are ideal for manual polishing and for quick charging of new polishing cloths. Both have high diamond concentrations to ensure high removal rates.

Our range of fumed and colloidal **Silica Suspensions** are designed to suit a variety of materials and are available in grain sizes from 0.05-0.2µm. They polish through a combined chemical and mechanical reaction. The chemical etches the surface which is then removed by the soft silica leaving a deformation-free surface. They are designed to prevent the crystal formation common in competing products. Our water-free suspensions are unique on the market.

The **Alumina Oxides** are virtually pH neutral for final polishing.

Lubricants

Our low viscosity lubricants provide an unrivalled combination of removal rates and smooth finish. The low evaporation rates and very stable preparation ensure that they offer consistent lubrication. This reduces the heat produced in the grinding and polishing process.

Aka-Lube Green - a very thin film suitable for high removal in initial preparation stages.

Aka-Lube Red - a thick film giving the best finish for final polishing.

Aka-Lube Yellow - a general purpose lubricant, sitting between Red & Green.

Aka-Lube Clear Plus - a polymer based lubricant with an excellent removal rate. It is ideal for use with Aka-Poly and Aka-Mono (and their Plus ranges) or any suspension that does not already contain a lubricant.

Aka-Lube Clear - a water-free, non-hazardous and non-flammable version of Aka-Lube Clear Plus.






























Aka-Lube Blue - water free, very thin lubricant for high removal rates.

Aka-Lube Blue Concentrate - a traditional water-free ethanol based lubricant. It requires the addition of ethanol in a ratio of 10:1 to create a thin film for high removal rates.

Polishing





Self-Lubricating Diamond Suspensions



		DiaUltra		DiaMaxx-Poly		DiaMaxx-Mono		DiaDoublo-Poly		DiaDoublo-Mono	
15µm	500ml	43618013	£87	43128013	£106	43118013	£76	43328013	£76	43318013	£42
	2.5l					43118016	£220	43328016	£346	43318016	£160
	5l	43618017	 £483	43128017	 £855	43118017	 £415	43328017	 £615	43318017	 £297
9µm	500ml	43617013	£87	43127013	£106	43117013	£76	43327013	£76	43317013	£42
	2.5l					43117016	£220	43327016	£346	43317016	£160
	5l	43617017	 £483	43127017	 £855	43117017	 £415	43327017	 £615	43317017	 £297
6µm	500ml	43616013	£87	43126013	£106	43116013	£76	43326013	£76	43316013	£42
	2.5l					43116016	£220	43326016	£346	43316016	£160
	5l	43616017	 £483	43126017	 £855	43116017	 £415	43326017	 £615	43316017	 £297
3µm	500ml	43615013	£87	43125013	£106	43115013	£76	43325013	£76	43315013	£42
	2.5l					43115016	£220	43325016	£346	43315016	£160
	5l	43615017	 £483	43125017	 £855	43115017	 £415	43325017	 £615	43315017	 £297
1µm	500ml	43614013	£87	43124013	£106	43114013	£76	43324013	£76	43314013	£42
	2.5l					43114016	£220	43324016	£346	43314016	£160
	5l	43614017	 £483	43124017	 £855	43114017	 £415	43324017	 £615	43314017	 £297
0.25µm	500ml	43612513	£87	43122513	£106			43322513	£76		
	2.5l							43322516	 £346		
	5l	43612517	 £483	43122517	 £855			43322517	 £615		

Polishing

Diamond Suspensions

		Aka-Poly		Aka-Mono		Aka-Poly+		Aka-Mono+	
15µm	500ml	44128013	£139	44118013	£84	44148013	£195	44138013	£113
	1l	44128015	£263	44118015	£149	44148015	£363	44138015	£206
9µm	500ml	44127013	£139	44117013	£84	44147013	£195	44137013	£113
	1l	44127015	£263	44117015	£149	44147015	£363	44137015	£206
6µm	500ml	44126013	£139	44116013	£84	44146013	£195	44136013	£113
	1l	44126015	£263	44116015	£149	44146015	£363	44136015	£206
3µm	500ml	44125013	£139	44115013	£84	44145013	£195	44135013	£113
	1l	44125015	£263	44115015	£149	44145015	£363	44135015	£206
1µm	500ml	44124013	£139	44114013	£84	44144013	£195	44134013	£113
	1l	44124015	 £263	44114015	£149	44144015	£363	44134015	£206
0.5µm	500ml	44123013	£139						
	1l	44123015	 £263						
0.25µm	500ml	44122513	 £139			44142513	£195		
	1l	44122515	 £263						

Most of our diamond preparations can be supplied with either **poly-crystalline** or **mono-crystalline diamonds**. But which to choose?

Poly-crystalline diamonds are more resistant to fracture under load and consequently produce a more consistent polish. They also last longer since when they do fracture they produce new cutting edges. Mono-crystalline diamonds are, however, cheaper.

Don't forget to factor in the lubricant. The lubricant also has a massive effect on the quality and speed of preparation.

Just email websales@aptexgroup.com for more information.

Polishing

Water-free Polishing Media

Aka-Stick Poly			
9µm	20ml	46027012	£97
6µm	20ml	46026012	£97
3µm	20ml	46025012	£97
1µm	20ml	46024012	£97
0.25µm	20ml	46022512	£97

Aka-Paste Poly			
15µm	10ml	47028011	£97
9µm	10ml	47027011	£97
6µm	10ml	47026011	£97
3µm	10ml	47025011	£97
1µm	10ml	47024011	£97
0.25µm	10ml	47022511	£97

Aka-Poly Water-free			
15µm	500ml	44168013	£140
9µm	500ml	44167013	£140
6µm	500ml	44166013	£140
3µm	500ml	44165013	£140
1µm	500ml	44164013	£140
0.25µm	500ml	44162513	£140

Other diamond sizes available. Please contact us.

Aka-Stick Mono			
9µm	20ml	46017012	£56
6µm	20ml	46016012	£56
3µm	20ml	46015012	£56
1µm	20ml	46014012	£56

Aka-Paste Mono			
15µm	10ml	47018011	£56
9µm	10ml	47017011	£56
6µm	10ml	47016011	£56
3µm	10ml	47015011	£56
1µm	10ml	47014011	£56



Polishing

Lubricants & Oxides

Lubricants

Aka-Lube Green

1l	49301015	£26
5l	49301017	£91

Aka-Lube Yellow

1l	49401015	£26
5l	49401017	£91

Aka-Lube Red

1l	49501015	£26
5l	49501017	£91

Aka-Lube Clear Plus

1l	49201015	£31
5l	49201017	£105

Aka-Lube Clear Water Free

1l	49101015	£36
5l	49101017	£122

Aka-Lube Blue

1l	49601015	£32
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Aka-Lube Blue Concentrate

500ml	49605013	£29
5l	49605017	£251



Oxides for final polishing

Alkaline pH 9-10

1l	Colloidal silica suspension 50 nm	48161015	£54
5l	Colloidal silica suspension 50 nm	48161017	£203
1l	Fumed silica suspension 0.2 μ m	48123015	£71
5l	Fumed silica suspension 0.2 μ m	48123017	£282

Water-free For water sensitive materials

1l	Fumed silica suspension 0.2 μ m WF	48133015	£83
5l	Fumed silica suspension 0.2 μ m WF	48133017	£317

Alumina pH 7-8 neutral for final polishing


1l	Alumina suspension 50 nm neutral	48211015	£78
5l	Alumina suspension 50 nm neutral	48211017	£339

Fumed or colloidal silica?

Fumed silica is made in a flame oxidizing process which produces crystals about 40nm in size. However, these then clump forming aggregates with a grain size of between 0.12 and 0.2 μ m. (0.2 μ m equivalent to Struers™ OP-S). Colloidal silica is made in a wet process that is very uniform and does not lead to clumping. Final particle size is about 0.05 μ m. Some manufacturers quote a grain size of 0.04 μ m for fumed silica, despite the fact that the aggregates have a mean size of 0.2 μ m.

Sample Preparation Kits For Specific Materials - Demo Kits

We have a wide range of demo kits ideal for improving your sample polishing process. The kits are available in 200mm, 250mm and 300mm sizes and include everything that you need to produce 25-50 samples for your specific preparation route: a step-by-step guide with images showing how each stage should look, grinding/polishing discs, papers and polishing cloths, and 100ml sizes of self lubricating diamond suspensions. The kits are an inexpensive way to test out a new route, typically saving you £60-£190 over buying the items separately.

These kits are not kept in stock but are made to order. 



Example: Our Brass preparation kit contains the items shown below in quantities sufficient to produce between 25 and 50 samples:



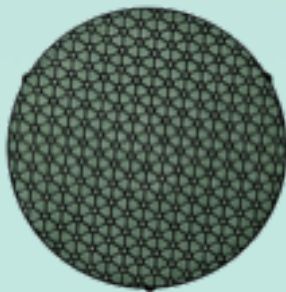
Rhaco Grit P320



Daran and DiaUltra 3 μ m



Chemal and 0.2 μ m Fumed Silica



Largan 9 and DiaUltra 9 μ m



Napal and DiaUltra 1 μ m



Demokits - Material Specific Smart Preparation Kits	200mm diameter			250mm diameter			300mm diameter		
Brass - 5 Step Preparation Kit	61200110		£127	61250110		£147	61300110		£207
Ceramic Capacitors - 4 Step Preparation Kit	61200210		£127	61250210		£147	61300210		£207
Titanium Alloys - 3 Step Preparation Kit	61200310		£127	61250310		£147	61300310		£207
Aluminium Alloys - 4 Step Preparation Kit	61200410		£127	61250410		£147	61300410		£207
Plasma Spray Coated Parts - 4 Step Preparation Kit	61200510		£127	61250510		£147	61300510		£207
Coated Sintered Carbides - 3 Step Preparation Kit	61200610		£127	61250610		£147	61300610		£207
Stainless & Duplex Steel - 4 Step Preparation Kit	61200710		£127	61250710		£147	61300710		£207
Titanium Fasteners - 3 Step Preparation Kit	61200810		£127	61250810		£147	61300810		£207
Carbon Composites - 5 Step Preparation Kit	61200910		£127	61250910		£147	61300910		£207
Soft Materials 50-150 HV - Quick 3 Step Kit	61201010		£127	61251010		£147	61301010		£207
Medium Hard Materials 400-700 HV - Quick 3 Step Kit	61201110		£127	61251110		£147	61301110		£207
Hard Materials 450-2000 HV - Quick 3 Step Kit	61201210		£127	61251210		£147	61301210		£207
Electronic Parts - 4 Step Preparation Kit	61201310		£127	61251310		£147	61301310		£207
Nodular Cast Iron - 4 Step Preparation Kit	61201410		£127	61251410		£147	61301410		£207
Zinc Coated Steel - 4 Step Preparation Kit	61201510		£127	61251510		£147	61301510		£207
Medium Soft Materials 150-450 HV - Quick 3 Step Kit	61201610		£127	61251610		£147	61301610		£207
Nitrided Steel - 5 Step Preparation Kit	61201710		£127	61251710		£147	61301710		£207
Surface Hardened Steel - 4 Step Preparation Kit	61201810		£127	61251810		£147	61301810		£207
Superalloys with Diffusion Coatings - 5 Step Preparation Kit	61201910		£127	61251910		£147	61301910		£207
Superalloys - 4 Step Preparation Kit	61202010		£127	61252010		£147	61302010		£207

Portable Polishing Consumables / General Accessories

Our portable polishing consumables are compatible with all major brands of portable grinder polishers.

Adhesive backed grinding discs - 32mm 100 pcs

P60	AP13 03 00	£18
P120	AP13 03 03	£18
P240	AP13 03 07	£18
P400	AP13 03 10	£18
P600	AP13 03 12	£18
P1200	AP13 03 15	£18

Self-adhesive polishing cloths - 32mm 25 pcs

Aka-Daran	41032516	£35
Aka-Moran	41035016	£38
Aka-Plural	41036016	£35
Aka-Ramda	41033016	£35
Aka-Napal	41037016	£35
Aka-Silk	41034016	£46
Aka-Moran-U	41035116	£33
Aka-Rhaco	75153037	£50

Bottles and triggers

Trigger spray for 250-1000ml bottles	78200005	5 pcs	£21
Trigger spray bottle 250ml	78101103	3 pcs	£21
Trigger spray bottle 500ml	78101303	3 pcs	£21

Portable grinder / polisher spares

Flapper abrasive wheel P240 60x30x70	APFLAP01	25 pcs	£120
Controller (110v or 220v)	NE249	1 pc	£725
Motor and cord	ENK-250T	1 pc	£860
Motor and cord	ENK-410S	1 pc	£780
Handpiece	BMH-300	1 pc	£390
Handpiece	IH-300	1 pc	£390
Handpiece 45° angle	KC-300	1 pc	£495
Handpiece 90° angle	IC-300	1 pc	£495
Reduction gearbox	RG-01	1 pc	£495
Extension joint	CN-01	1 pc	£380
Foot control	FC-64	1 pc	£145
Rubber 30mm disc holder/3mm shank	PT-030	5 pcs	£40



Dressing stick (for Aka-Piatto & Aka-Allegrens >400HV)

Long life dressing stick 25x25x150mm	AP9885	1 pc	£11
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Our small range of accessories help increase reproducibility and improve consistency. If you don't see what you're looking for, please contact us.

Metallurgy isn't ALL about consumables.
We supply equipment too:

Nikon Microscopes



LV150N

We have experience with all sorts of makes, models and types of microscope and know that customers, companies, even countries have their preferences.

So when working with a customer we listen to your needs, likes and dislikes before recommending a microscope solution.

However, with Nikon being a strategic business partner with Clemex, we are able to offer great optics at all magnifications and full integration with the Clemex Image Analysis solutions.

This combined solution will give you great ease of use and years of reliable service.

Don't just trust us, test us!



SMZ1270i

Microscope Accessories

Stage Micrometers

Clemex micrometer, NIST traceable	CL14322	£995
Stage micrometer 1mm into 100 divisions, glass	MTMA285	£120
Stage micrometer 1mm into 100 divisions, metal for reflected light	MTMA292	£245
Glass stage micrometer, 1mm into 100 divisions	TS-M1	£35
Stainless steel stage micrometer, 10mm in 0.1mm divisions with UKAS cert.	PS1R	£385
75x75mm glass stage micrometer 50mm in 0.1mm divisions with UKAS cert.	PS50	£480
Stainless steel stage micrometer, 1mm in 0.01mm divisions with UKAS cert.	PS78	£360

Many other stage micrometers are available. Please contact us for details and prices.



Hand Press

Hand press	K10017302	£170
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Eyepiece graticules (other sizes available - please contact us)

Olympus - eyepiece graticule 24mm diameter U-OCM 10/100	K10017220	£38
Olympus - eyepiece graticule 24mm diameter 35072 U-OCMC 10/100	K10017241	£43
Eyepiece micrometer, 10mm into 100 divisions, 19mm diameter	MTMA280	£65
Eyepiece micrometer, 10mm into 100 divisions, 25mm diameter	MTMA506	£65

Microscope Servicing

We are pleased to offer microscope servicing at £195 for the first microscope and £50 per subsequent instrument at the same location and on the same order.

Minor adjustments and repairs will be performed as part of the service; for more major repairs please contact us for a quotation.

Microscope Bulbs 1 pc

Meiji 6V 10W halogen for PBH stand	MTGE787	£20	Olympus 6V 30W halogen bulb	OLE0430150	£15
6V 30W bulb	MTMA326	£25	Olympus 12V 100W bulb	OL035359	£15
Meiji 6V 1.2A bulb for PB incident lamp	MTMA560	£17	Olympus 15V 150W halogen bulb (KL1500)	OLE0433066	£15
Olympus HL-EKE 21V/150W bulb	K10017116	£25	Leica 12V 100W bulb	LEBULB	£15

Metallurgy isn't ALL about consumables.
We also supply equipment:

Hardness Testers

We supply a wide range of Affri Hardness Testers performing every hardness test scale such as Rockwell, Brinell and Vickers, on any material from iron, steel, aluminium, metal alloys, to plastic and rubber with absolute accuracy due to fully automatic control and precise software. Benchtop and portable hardness testers conform to ASTM and ISO hardness standards.



LD3000 A
Automatic Brinell
Hardness Tester



WIKI 200 JS
Fully Automatic
Vickers Hardness
Tester






330 RSD
Semi-Automatic
Rockwell Hardness
Tester

Hardness Testing Accessories

Reference hardness blocks with UKAS certificates


Vickers test blocks (specify hardness followed by load)

Nominal hardness block values: 40, 70, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950



Vickers test block (HV2, HV3, HV5, HV10, HV20, HV30, HV50 & HV100)	INBLOCKV		£495
Micro Vickers test block (HV0.01, HV0.025, HV0.05, HV0.1, HV0.2, HV0.3, HV0.5 & HV1)	INBLOCKMV		£660
Knoop test block (HK0.01, HK0.025, HK0.05, HK0.1, HK0.2, HK0.3, HK0.5 & HK1)	INBLOCKKP		£660




Rockwell and Superficial Rockwell test blocks (specify hardness scale and hardness value)

Please specify Rockwell hardness scale and hardness value.	INBLOCKRC		£260
Blocks can be supplied with a grid pattern for an additional £40.			

Brinell test blocks (specify hardness scale and hardness value)

Low load <187.5kgf (64mm dia x 15mm)	INBLOCKBL		£370
High load >250kgf (150 x 125 x 16mm)	INBLOCKBH		£495

Standard Indenters with UKAS certificates

Micro Vickers Indenter	INDENTV01		£630
Vickers Indenter	INDENTV02		£450
Knoop Indenter	INDENTV03		£630

Note:

When ordering an indenter please specify your machine's manufacturer and model number. Other indenters are available. Please contact us.



Metallurgy isn't ALL about consumables.
We supply equipment too:

Cameras/Image Analysis

We are proud to be the UK representative for Clemex Image Analysis systems. Not only do we think they are the most user-friendly and most versatile, but also that they are the most innovative.

They offer a complete range of multi-purpose and specific image analysis software and turn-key systems to suit every situation and budget. The systems are intuitive and easy to use and set-up for repeat testing. And the team in Canada are always happy to help customers create new routines to meet their specific needs.

