

Surface Finishing Media & Compounds

we redefine

Specially Formulated Consumables

We're the UK's leading experts in designing and developing machinery and consumables for mass finishing applications.

we redefine:

- Vibratory Finishing High Energy Finishing Consumables Precision Polishing
- Subcontract Services

We're a family run business that pride ourselves on working as a strong, unified team of specialists.

Born in the United Kingdom, we are unique in our product design and the manufacture of our specialist machines and consumables.

With five decades of experience and knowledge in the finishing industry, we know what works for you.



Why Choose Us?

We believe in British

We're here for you

Being based in the heart of the country means we have easy access to all of our clients.

We have experience

We provide options

We have an impressive range of media and compounds to choose from, including one of the best polishing compounds in the market. We also provide a wide range of machinery and subcontract services to meet all of your needs.

We go the extra mile

We'll tailor our services to your needs, not the other way round. Our service is all about you.

Man x Machine x Media = M^3

The thinking behind our consumables.



Over the years, we have been at the forefront of the industry, developing a range of specially formulated consumables approved by the manufacturing industry.

Working closely with highly skilled manufacturers, our Engineers understand the numerous challenges faced in the industry and have developed suitable consumables accordingly. Our R&D department always sets high standards for the environmentally friendly, biodegradable compounds and high quality media.

We are highly committed to continuously developing and expanding our range of consumables to suit any given application.

Ceramic media

We manufacture our ceramic media at our facility in Kedah, Malaysia and it is subject to strict quality control to ensure our customers receive a great product raw materials to ensure the final product meets our customers' standards.

oxide, silicon carbide or quartz, with a ceramic matrix in a wet state. The matrix is extruded through various shaped dies and wire cut into small pieces. The preformed media is then fired at high temperatures through a kiln for up to 24 hours with precise heat up and cool down cycles. The ceramic pieces can then be pre-conditioned to remove any flash if required.



We manufacture our plastic media using the same high standards as we do for our ceramic media. Our R&D department is continuously developing our recipes and the range of media shapes and dimensions to our customers' needs. ActOn plastic media can be used for a long time even if it wears down, as it will maintain its shape.

Our plastic media is manufactured by mixing an abrasive with a polyester or synthetic based resin fluid, with a catalyst added to harden the matrix. After media is molded into specific shapes and it hardens, this is tumbled to remove any flash.

Mass Finishing Compounds

We develop, test and continuously improve the formulation of our liquid, powder and paste compounds at our facility in friendly and are formulated for vibratory and high energy finishing machines.

Selecting ActOn Consumables

The recipe to achieve the required surface finish involves using the correct machinery, media and compound. At ActOn, we offer the complete package. The following factors must be considered when choosing the right media and compound.

Ceramic Media is recommended for removing burrs, edge radiusing, burnishing and to quickly remove polishing lines on components made from harder materials. Faster cut Medias are designed to be softer, thus allowing the cutting elements to be exposed. Polishing Medias are harder (which contain no abrasives) and are used for burnishing. In general, the slower

2. Shape

When choosing the shape of the media it is important to consider the geometry of the part - hence any lodgement of media can be avoided and the part finish will be consistent.

and media residues and flushing them from the system, as well as keeping the components and media clean, which brings stability to the process. Other advantages include corrosion inhibition, brightening of different materials, and removing scale post-heat treatment. As the compound acts as a lubricant, it extends the media life.

When choosing a compound there are 3 considerations:

- on edges for deburring and radiusing. However, round shaped media, such as balls, cylinders and cones generate a single point contact concentrating energy in one small point, therefore producing more work in that area.
- For components which have corners, holes and slots both Tri-Star media and wedge media are recommended, minimising
- For surface improvement of hard to reach areas, an ellipse or

Size

- chosen. A larger media will generate higher energy; hence it will cut and finish faster with higher wear rates. This is also recommended for processing larger parts.
- resulting in less part-on-part damage. Also, a smaller media has a gentler impact on part, which results in longer processing times, better finishes and less media wear.
- part to allow complete separation at the end of the finishing process. If media is larger than parts, then an inverse separation system can be used. For ferrous components,

Hardness

- To avoid damaging the component, it is important to consider the part material and the hardness of the media. Ceramics are harder than plastic; hence it may cause damage to soft

Finishing Applications

Deburring
Descaling
Degreasing & Oil Removal
Cleaning
Smoothing

Radiusing Brightening Polishing Drying **Corrosion Protection**

Turbocut

For rapid removal of surface defects on ferrous parts.

Chemcut

For the quick improvement of the surface finish (Ra values) on ferrous parts.



ActoGrind

For heavy removal of grinding lines using mass finishing methods.

Powders & Pastes

Ceramic Media

of abrasive grades, starting from low abrasive to super finishing. This type of media is suitable for various deburring, radiusing and polishing processes, and is specially formulated to go hand-in-hand with ActOn's compounds.

ActOn ceramic media has a high strength and long wear-ability, and it is recommended to process parts

How to order with ActOn:

- 1 Choose grade
- Choose shape
- 3 Choose measurement

The media grade is the product name. Based on

			Triangle			Cylir	Cylinder						
Media Grade	Grinding Performance	Surface Finish			10/7 10/2				B B				
			ACT Angle Cut	SCT Straight Cut	ACC Angle Cut	SCC Straight Cut		W Wedge	S Star	TR Tristar	ACTR Angle Cut Tristar	E Ellipse	
			a x b	a x b	a x b	a x b		axb	a x b	a x b	a x b	axbxc	
Ρ		Andre Andre	3 x 8, 4 x 4 4 x 10, 5 x 5 5 x 10, 6 x 10 8 x 12, 9 x 9 10 x 15, 15 x 15	6 x 6 10 x 10 15 x 15	3 x 10 6 x 13 10 x 15 13 x 25	3 x 10 6 x 13 10 x 15 13 x 25		8×8		4 x 4 5 x 5 6 x 6 8 x 8 10 x 10	4 x 8 6 x 6 6 x 10 10 x 12	8 x 3 x 9 10 x 5 x 10 15 x 4 x 15 15 x 6 x 15 20 x 8 x 20	
RPI		MMM	4 x 10, 6 x 6 6 x 10, 8 x 8 10 x 10, 10 x 15 15 x 18, 13 x 13 16 x 16, 19 x 19 21 x 21, 25 x 25	6 x 6 10 x 10 13 x 13 16 x 16 19 x 19 25 x 25	3 x 10, 6 x 10 6 x 13, 7 x 15 8 x 8, 8 x 20 10 x 15, 10 x 20 13 x 25, 15 x 25 18 x 30	7 x 13 8 x 8 10 x 19			10 x 10 10 x 20 25 x 20 45 x 15	4 x 4, 6 x 6 10 x 10, 12 x 12 15 x 15, 20 x 20 25 x 25, 30 x 30	$\begin{array}{c} 4 \times 8, 6 \times 6 \\ 6 \times 10, 10 \times 10 \\ 10 \times 12, 10 \times 15 \\ 12 \times 12, 12 \times 15 \\ 15 \times 10, 15 \times 15 \\ 15 \times 20, 15 \times 25 \\ 20 \times 10, 20 \times 20 \\ 20 \times 25, 25 \times 15 \\ 25 \times 25, 25 \times 30 \\ 30 \times 12, 30 \times 15 \\ 30 \times 30 \end{array}$	$\begin{array}{c} 8 \times 3 \times 8, 10 \times 5 \times 10 \\ 10 \times 5 \times 15, 12 \times 5 \times 12 \\ 12 \times 5 \times 15, 14 \times 5 \times 14 \\ 15 \times 7 \times 15, 15 \times 7 \times 20 \\ 15 \times 7 \times 25, 16 \times 8 \times 16 \\ 16 \times 8 \times 20, 16 \times 8 \times 25 \\ 20 \times 9 \times 20, 20 \times 9 \times 25 \\ 25 \times 10 \times 25, 25 \times 10 \times 30 \\ 30 \times 12 \times 30, 30 \times 12 \times 35 \end{array}$	
STI		/m/~/w/~	10 x 10 15 x 15 20 x 20 25 x 25 30 x 30	7 x 7, 12 x 12 15 x 15, 20 x 20 25 x 25, 30 x 30 32 x 32, 34 x 34 40 x 40, 50 x 50	10 x 15, 10 x 20 15 x 2, 15 x 25 20 x 20, 20 x 25 20 x 30, 25 x 25	10 x 15, 10 x 20 15 x 20, 15 x 25 20 x 20, 20 x 25 20 x 30, 25 x 25						15 x 7 x 15 20 x 9 x 20 25 x 10 x 25	
CFB	L.	MMM	4 x 10, 6 x 6 6 x 10, 8 x 8 10 x 10, 10 x 15 15 x 18, 13 x 13 16 x 16, 19 x 19 21 x 21, 25 x 25	6 x 6 10 x 10 13 x 13 16 x 16 19 x 19 25 x 25	3 × 10, 6 × 10 6 × 13, 7 × 15 8 × 8, 8 × 20 10 × 15, 10 × 20 13 × 25, 15 × 25 18 × 30, 20 × 40	7 x 13 8 x 8 10 x 19						15 x 15 x 7	
ссі	L.	MAAAA	4 x 10 6 x 12 10 x 20 13 x 26 16 x 32	5×5,6×6 10×10,13×13 16×16,19×19 25×25,32×32	3 x 10, 6 x 10 6 x 13, 10 x 15 10 x 20, 13 x 25 15 x 25, 18 x 30 20 x 40	3 x 10, 6 x 10 6 x 13, 10 x 15 10 x 20, 13 x 25 15 x 25, 18 x 30 20 x 40		15 x 15 15 x 18	10 × 10 20 × 10 20 × 20 30 × 30	6 x 6, 10 x 10 10 x 12, 20 x 8 20 x 10, 20 x 20	4 x 4, 6 x 6 6 x 10, 10 x 12 15 x 06, 15 x 18 20 x 20, 25 x 25 30 x 12	10 x 5 x 10, 13 x 5 x 13 15 x 5 x 15, 16 x 7 x 16 20 x 8 x 20, 25 x 10 x 25	
CC4		MMM	6 x 6, 8 x 8 10 x 10, 10 x 15 13 x 13, 16 x 16 19 x 19, 21 x 21 25 x 25, 32 x 32 33 x 33	6 x 6, 10 x 10 13 x 13, 16 x 16 19 x 19, 25 x 25 30 x 30, 32 x 32	3 x 10, 6 x 10 6 x 13, 7 x 15 8 x 8, 8 x 20 10 x 15, 10 x 20 13 x 25, 15 x 25 18 x 30, 20 x 40	6 x 7 7 x 13 8 x 8 10 x 19		10 x 12	35 x 17 45 x 23	4 x 4 10 x 10 20 x 20	4 x 4 4 x 10 6 x 6 10 x 12 15 x 18	14 x 5 x 14	
СС8	L	MMM	6 × 6, 6 × 10 8 × 8, 10 × 10 10 × 15, 15 × 18 13 × 13, 16 × 16 19 × 19, 21 × 21 25 × 25, 32 × 32 33 × 33	6 x 6, 10 x 10 13 x 13, 16 x 16 19 x 19, 25 x 25 30 x 30, 32 x 32	3 x 10, 6 x 10 6 x 13, 7 x 15 8 x 8, 8 x 20 10 x 15, 10 x 20 13 x 25, 15 x 25 18 x 30, 20 x 40	6 x 7 7 x 13 8 x 8 10 x 19		10 × 12 15 × 15 20 × 20	45 x 16	10 x 10	10 x 12 15 x 18 15 x 6 20 x 20 30 x 10	14 x 5 x 14 15 x 7 x 15	
SFB		MMM	4 x 10, 6 x 6 6 x 10, 8 x 8 10 x 10, 10 x 15 15 x 18, 13 x 13 16 x 16, 19 x 19 21 x 21, 25 x 25 32 x 32, 33 x 33	6 x 6, 10 x 10 13 x 13, 16 x 16 19 x 19, 25 x 25 30 x 30, 32 x 32	3 x 10, 6 x 10 6 x 13, 7 x 15 8 x 8, 8 x 20 10 x 15, 10 x 20 13 x 25, 15 x 25 18 x 30, 20 x 40	7 x 13 8 x 8 10 x 19		10 × 12 15 × 15 20 × 20	45 x 16	10 x 10	10 x 12 15 x 18 15 x 6 20 x 20 30 x 10	14 x 5 x 14 15 x 7 x 15	
SFC		MMM	4 × 10, 6 × 6 6 × 10, 8 × 8 10 × 10, 10 × 15 15 × 18, 13 × 13 16 × 16, 19 × 19 21 × 21, 25 × 25 32 × 32, 33 × 33	6 x 6, 10 x 10 13 x 13, 16 x 16 19 x 19, 25 x 25 30 x 30, 32 x 32	3 x 10, 6 x 10 6 x 13, 7 x 15 8 x 8, 8 x 20 10 x 15, 10 x 20 13 x 25, 15 x 25 18 x 30, 20 x 40	7 x 13 8 x 8 10 x 19		10 x 12 15 x 15 20 x 20	45 x 16	10 × 10	10 × 12 15 × 18 15 × 6 20 × 20 30 × 10	14 x 5 x 14 15 x 7 x 15	

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ACE Angle Cut Ellipse	AR Arrow	P Pyramid	C Cone	R Rhombus	B Ball
axbxc	a x b	a x b	α	axbxc	α
15 x 4 x 15 15 x 6 x 15	10 × 10				3, 6, 10
8 x 3 x 8, 8 x 3 x 10 10 x 5 x 10, 12 x 5 x 12 15 x 7 x 15, 16 x 8 x 15 20 x 9 x 20, 20 x 9 x 25 25 x 10 x 20, 25 x 10 x 25 30 x 10 x 30, 30 x 10 x 35	10 × 10, 12 × 12 15 × 10, 18 × 18 20 × 12	38 x 40	15, 20, 30, 40		4, 5, 6, 7, 8, 10, 12
15 x 7 x 15 20 x 9 x 20 25 x 10 x 25			15, 20, 30, 40		
15 x 4 x 15, 15 x 6 x 15 20 x 8 x 15, 25 x 10 x 25 25 x 13 x 25	10 x 5, 10 x 10 14 x 14, 15 x 10 15 x 15, 20 x 20 25 x 25	15 x 16, 22 x 25 25 x 27, 30 x 34 35 x 39	15, 19, 20, 30, 35, 40, 45, 60	35 x 18 x 25 50 x 30 x 30	6
20 x 8 x 20	14 x 14	25 x 25 35 x 35			5.5 8
25 x 13 x 25	10 × 10 15 × 10 15 × 15 20 × 20			50 x 40 x 40	
25 x 13 x 25	10 × 10 15 × 10 15 × 15 20 × 20			50 x 40 x 40	
25 x 13 x 25	10 × 10 15 × 10 15 × 15 20 × 20			50 x 40 x 40	

Plastic Media

Plastic Media

ActOn plastic media is manufactured using the same high standards as the ceramic media. Even though this media does not cut as much as the ceramic one, plastic media provides a smoother finish and is highly recommended to process parts manufactured out of softer materials.

Plastic media does not chip due to the materials used in manufacturing. Furthermore, this media can be used for a long time even if it wears down, as it will maintain its shape.

How to order with ActOn:

Choose grade
Example: BR

Choose shape
Example: Cone

3 Choose measurement Example: 10X10

Media Grade	Grinding Performance	C C	Pa	P	
		Cones	Paracones	Pyramid	
		a	axb	a	
YL		10, 12, 14 16, 20, 25 30, 40, 50 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 60 x 60, 70 x 70	5.5 6.5	4
P2F		10, 12, 14 16, 20, 25 30, 40, 50 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 60 x 60, 70 x 70	5.5 6.5	4
PMD		10, 12, 14 16, 20, 25 30, 40, 50 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 60 x 60, 70 x 70	5.5 6.5	4
BL		10, 12, 14 16, 20, 25 30, 40, 50 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 60 x 60, 70 x 70	5.5 6.5	4
PIK		10, 12, 14 16, 20, 25 30, 40, 50 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 60 x 60, 70 x 70	5.5 6.5	4
P3W		10, 12, 14 16, 20, 25 30, 40, 50 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 60 x 60, 70 x 70	5.5 6.5	4
PSG		10, 12, 14 16, 20, 25 30, 40, 50 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 60 x 60, 70 x 70	5.5 6.5	4
PDV		10, 12, 14 16, 20, 25 30, 40, 50 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 60 x 60, 70 x 70	5.5 6.5	4
PSE		10, 12, 14 16, 20, 25 30, 40, 50 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 60 x 60, 70 x 70	5.5 6.5	4
P7M		10, 12, 14 16, 20, 25 30, 40, 50 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 60 x 60, 70 x 70	5.5 6.5	4
BR		10, 12, 14 16, 20, 25 30, 40, 50 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 60 x 60, 70 x 70	5.5 6.5	4
P62		10, 12, 14 16, 20, 25 30, 40, 50 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 60 x 60, 70 x 70	5.5 6.5	4
PSS		10, 12, 14 16, 20, 25 30, 40, 50 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 60 x 60, 70 x 70	5.5 6.5	4
РТХ		10, 12, 14 16, 20, 25 30, 40, 50 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 60 x 60, 70 x 70	5.5 6.5	4

\Diamond			
Tetra	Ir Tristar	Wedge	Octocone
α	axb	axbxc	axbxc
10, 12, 14 16, 20, 30 40, 50, 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 70 x 70	20 x 12 x 12	65 x 65 x 35
10, 12, 14 16, 20, 30 40, 50, 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 70 x 70	20 x 12 x 12	65 x 65 x 35
10, 12, 14 16, 20, 30 40, 50, 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 70 x 70	20 x 12 x 12	65 x 65 x 35
10, 12, 14 16, 20, 30 40, 50, 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 70 x 70	20 x 12 x 12	65 x 65 x 35
10, 12, 14 16, 20, 30 40, 50, 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 70 x 70	20 x 12 x 12	65 x 65 x 35
10, 12, 14 16, 20, 30 40, 50, 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 70 x 70	20 x 12 x 12	65 x 65 x 35
10, 12, 14 16, 20, 30 40, 50, 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 70 x 70	20 x 12 x 12	65 x 65 x 35
10, 12, 14 16, 20, 30 40, 50, 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 70 x 70	20 x 12 x 12	65 x 65 x 35
10, 12, 14 16, 20, 30 40, 50, 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 70 x 70	20 x 12 x 12	65 x 65 x 35
10, 12, 14 16, 20, 30 40, 50, 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 70 x 70	20 x 12 x 12	65 x 65 x 35
10, 12, 14 16, 20, 30 40, 50, 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 70 x 70	20 x 12 x 12	65 x 65 x 35
10, 12, 14 16, 20, 30 40, 50, 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 70 x 70	20 x 12 x 12	65 x 65 x 35
10, 12, 14 16, 20, 30 40, 50, 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 70 x 70	20 x 12 x 12	65 x 65 x 35
10, 12, 14 16, 20, 30 40, 50, 60, 70	20 x 20, 30 x 30 40 x 40, 50 x 50 70 x 70	20 x 12 x 12	65 x 65 x 35

Click <u>here</u> to request your Quotation today!

B Button	ACT Angle Cut Triangle
axb	axb
14 x 5	40 x 25
14 x 5	40 x 25
14 x 5	40 x 25
14 x 5	40 x 25
14 x 5	40 x 25
14 x 5	40 x 25
14 x 5	40 x 25
14 x 5	40 x 25
14 x 5	40 x 25
14 x 5	40 x 25
14 x 5	40 x 25
14 x 5	40 x 25
14 x 5	40 x 25
14 x 5	40 x 25

se contact our sales representatives

Agro & Pre-treated

ActOn agro and pre-treated media is manufactured out of corn cleaning. All of our agro and pre-treated medias are bovine free.

To collect the fine dust resulting from using the maizorb in the drying process, ActOn recommends the usage of a Dust Extractor for Maize Application.

Media Type	Material Specification	Media Size	Approx. Grain Size in mm
Maizorb	The maizorb grains have high abrasion resistance, good moisture absorption and low specific gravity. This agro product is best suited for drying, cleaning and polishing components.	Maize 4 Maize 6 Maize 8 Maize 10 Maize 12 Maize 16 Maize 20 Maize 30 Maize 80 Maize 200	4.50 - 8.00 3.50 - 6.50 2.50 - 4.00 1.60 - 2.50 1.50 - 2.00 1.00 - 1.50 0.75 - 1.00 0.25 - 0.75 0.20 - 0.55 0 - 0.20
Pre-treated Maizorb	The pre-treated maizorb has been developed to produce a bright mirror finish. This can be used both in vibratory and high energy machines.	Pre-treated Maize 4 Pre-treated Maize 6 Pre-treated Maize 8 Pre-treated Maize 10 Pre-treated Maize 12 Pre-treated Maize 16 Pre-treated Maize 20 Pre-treated Maize 30 Pre-treated Maize 80	4.50 - 8.00 3.50 - 6.50 2.50 - 4.00 160 - 2.50 150 - 2.00 100 - 150 0.75 - 100 0.25 - 0.75 0.20 - 0.55 0 - 0.20
Walnut Shell	Walnut shells are hard and fibrous, and are known as 'soft abrasive'. Being extremely durable, walnut shells are used for the cleaning and polishing of heat-treated components, jewellery, surgical components, watches, etc.	Walnut Shell 1/12 Walnut Shell 2/12 Walnut Shell 3/16 Walnut Shell 4/20 Walnut Shell 5/30	2.36 - 100 2.00 - 100 140 - 0.71 100 - 0.60 0.60 - 0.30
Pre-treated Walnut Shell	The pre-treated walnut shell imparts high lustre on components. It has been proven that on certain materials, pre-treated walnut produces a much brighter finish than pre-treated maizorb.	Pre-treated Walnut Shell 1/12 Pre-treated Walnut Shell 2/12 Pre-treated Walnut Shell 3/16 Pre-treated Walnut Shell 4/20 Pre-treated Walnut Shell 5/30	2.36 - 100 2.00 - 100 140 - 0.71 100 - 0.60 0.60 - 0.30

Special Media

Our R&D department is continuously working closely with our clients to develop a range of Special Medias suitable for particular finishing requirements.

Special Plastic Media

- SPM4 (particularly good for achieving a low surface finish on medical implants manufactured using materials such as Cobalt
- Cobalt Chrome and Stainless Steel parts, SPM7 being the most aggressive plastic media option).

Wood Media

Wood media is generally used alongside with ActOn compounds to achieve a smooth finish, a polished finish, dry tumbling or for light deburring. ActOn offers the wooden media in different sizes and shapes:

Cubes, Diamonds, Pegs.

This media can be used in different applications on part materials such as plastic, nylon, ceramics, wood and metals.

Stainless Steel

media, the B series provides added reinforcement.

shapes and sizes:



Stainless Steel Balls (available in sizes ranging from
2mm to 6mm in diameter).
Stainless Steel Ball Cones (dimensions on request).
Stainless Steel Pins (dimensions on request).

Shot Blasting & Peening Media

ActOn offers a wide range of Abrasive Consumables for shot blasting and peening processes. Selecting the right blasting media is essential and depends upon the condition of the material before blasting and the finish required after blasting.

Metallic Blasting Media

ActOn metallic blasting media range includes:

- **Steel shot**: great for cleaning, stripping, smoothing, polishing and improving a metal surface.
- Steel grit: an aggressive blasting media, used for removing any contamination from steel and foundry metals & to obtain an etched surface finish on components manufactured out of hard metals.
- **Chilled iron grit**: recommended for quick cleaning, etching and roughening up hard surfaces. This is a hard abrasive media, suitable for blasting rooms.

Cut wire shot: available in stainless steel, aluminium, copper, zinc and nickel version, this can be used for peening, cleaning & vibratory finishing.



Silicon Carbides

Silicon carbide is the most aggressive and tough media recommended for general blasting, glass and stone etching, aggressive deburring, scale removal and smoothing components' edges. ActOn silicon carbide is a very fast cut media and due to its hardness it takes less time to process the components in comparison to other blasting media. Hence this media can be reused for a longer period of time, making it also a cost effective product.

Glass Beads

Glass beads are great for obtaining a clean, smooth, bright or satin finish. This media is a cost effective solution as it can be recycled. Glass beads are mainly used in the shot blasting cabinets.

Aluminium Oxide

An aggressive and tough media suitable for different applications such as general blasting, surface finishing, grinding, polishing, matte finishing, edge rounding and cleaning and preparing the component surface prior to plaiting or painting.

Aluminium oxide is a durable abrasive media which can be recycled a number of times, making it a cost effective solution. Aluminium Oxide is much lighter than other medias, thus minimising the possibility of parts made out of thin materials being damaged in the finishing process.

Nonetheless, Aluminium Oxide has the properties which allow this media to deburr parts made from hard metals and sintered carbide.

ActOn offers the following options:

- **Brown Aluminium Oxide** (high performance for aerospace and automotive industries).
- White Aluminium Oxide (commonly used in the medical industry).



Walnut Shell

Walnut shell is great for removing coatings, cleaning, deburring and de-flashing. This media is hard and fibrous and it is known as 'soft abrasive'. Being extremely durable it can be reused in all types of blasting equipment. ActOn walnut shell is bovine free.





We recommend using ActOn Alumina media for a decorating.

- Brown Alumina: a fast cutting and tough media, wid
- White Alumina: ideal for processes where no contami allowed, being used for finishing materials such as titar steel, crystal glassware.
- Pink Alumina: tougher than the white one being used b and dry blasting process. Applications include removal paint, rust, hard deposits, cleaning, matte finishing, deco finishing and glass frosting.

For dimensions and special types of media specific for your application, please contact our sales representatives.

Plastic Blast Media

ActOn plastic blast media is recommended for paint and coatings stripping from components manufactured out of soft metals, plastic and composites. This media is widely used in aerospace and automotive industry for blasting applications.

Ceramic Beads

Ceramic beads can be used to process steel, aluminium, and non-ferrous alloys. Applications include cleaning, smoothing, satin finishing, removal of coatings, rust and oxides and deburring. This is a tough media that can be used both in the air and wet blasting process.



osion removal, cleaning, etching and

used in the aerospace and automotive industry

ation is um, stainless

oth in wet of scale, prative

Liquid Compounds

ActOn compounds are specially formulated for vibratory and high energy finishing machines. They comprise of abrasives, brighteners, lubricating agents, cushioning materials and cleaning agents.

Our R&D department has developed specially formulated, environmentally friendly and biodegradable compounds that suit customers' requirements. They are continuously focused on improving our existing compounds and creating new ones.

Due to varying properties of metals and alloys, one chemical formulation is not enough for all engineering materials. Therefore, it is prudent to take expert advice and recommendations when selecting suitable compounds for specific requirements.

000 Excellent Good

Click <u>here</u> to request your Free Trial today!

Average

	Material Name	LQ18M	LQ18
ActOn liquid compound details	Description	Light de-scaling, removal of rust and discolouration due to heat treatment processes. Removes metal oxides to produce a bright polish, retaining base metal colour.	Acidic compound for removal of light heat treatment, scale, brightening and polishing suitable for ferrous and non-ferrous metals. Widely used in the aerospace sector.
	РН	1-2	2.5-3
	Colour	Pale Gold	White Cloudy
	Brightening/ Polishing	000	00
	Ball Burnishing	00	00
	Cleaning		
	Corrosion Inhibitor		
Application guide and	Degreasing/ De-oiling		
characteristics	Descaling / Derusting / Light Heat Treatment	00	000
	Foam	0	
	Pickling	00	000
	Suitable for Recirculation		
	Carbon Steel	000	000
Ferrous	Hardened Steel	000	000
Material	Iron	000	000
	Stainless Steel	000	000
	Aluminium		
	Brass		
	Ceramic		
Non-ferrous	Copper	000	000
Material	Magnesium		
	Plastic		
	Titanium	000	000
	Zinc		
All Metals	All Metals	00	00

LQ9	LQ60	LQ4	LQ14	LQ15D	LQ17	LQ19	LQ30	LQ191
Specially formulated for polishing and brightening of ferrous and non-ferrous metals.	A low-cost, multi-purpose compound for all metals. Grinding, deburring, polishing on all metals. Used for obtaining bright colour throughout the process. Can be used with all types of media and for self tumbling operations.	Low foaming compound suitable for cleaning, brightening and polishing of all metals.	General cleaner with good polishing properties for all metals.	Specially formulated for die-cast products. Excellent cleaning and emulsifying properties.	Multi-purpose liquid for cleaning ferrous metals. Contains strong corrosion inhibitor. Mainly use on ferrous metal.	Multi-purpose compound for all metals.	Concentrated compound for all metals. Good cleaner and polisher with corrosion inhibitor.	Cleaning and polishing of ferrous metals with strong corrosion inhibitor. Low foaming compound designed for ferrous metals.
<4	10-11	8-8.5	8-8.5	8-8.5	8-8.5	8-8.5	8-8.5	8-8.5
Cream	Pale Yellow	Pale Blue	Golden	Golden Yellow	Pale Green	Shades of Blue	Golden	Pale Gold
000	00	00	00	00	00	0	000	00
00	Ο	00	0	00	00	00	000	00
	00	00	00	000	000	00	00	000
	00	Ο	0		00	00	00	000
				00				
000	0	0	0	0	0	0	00	
000	U	C	Ŭ	C	U	C	00	
000								
	Recirculation	of compoun	ds can be a	idapted to s	uit specific p	rocesses and	d application:	5.
			000		000		000	000
			000		000		000	000
			000		000		000	000
			000		000		000	000
				000		000		
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000	000	0.0	0	000		000	00	
000	000	00	U			00	00	

		Material Name	LQ16	LQ40	LQ6	LQ20	LQ110	LQ191S	LQ30/F2	LQ11	LQIII	LOIIIS	F2C	LQ10
Liquid Compounds	ActOn liquid compound details	Description	Concentrated cleaner and polisher for non-ferrous metals.	Excellent cleaning properties on non-ferrous metals. Keeps media and parts free of dirt and metal fines. Higher percentage delivers a brighter finish.	A very low foaming compound for zinc allays and copper allays. For fine cutting semi-bright finishing, use plastic media. Contains cleaning agent suitable for zinc allays to give a smooth finish. Often used prior to electro-plating	Powerful degreaser and cleaner with good inhibitor qualities designed for ferrous metals.	Degreaser and cleaner suitable for heavy machining oils and lubricants. Designed for ferrous metals. Saponify and emulsify oils, greases. Inhibits corrosion. Low foaming properties.	Cleaning and polishing of ferrous metals with strong corrosion inhibitor. Low foaming compound designed for ferrous metals.	Good cleaner and polisher with corrosian inhibitor.	Powerful degreaser and cleaner with good inhibitor qualities designed for ferrous metals.	Powerful degreaser and cleaner suitable for heavy machining oils and lubricants. Designed for ferrous metals. Saponify and emulsify oils, greases. Inhibits corrosion. Low foaming properties.	Cleaning, degreasing of ferrous metals. Saponify and emulsify oils and greases. Used in various industrial washing and spraying machines for degreasing and cleaning.	Powerful degreaser and cleaner with excellent inhibitor qualities. Designed for ferrous metals.	Leaves surface clean and bright. Excellent cleaning. Mainly used with plastic media.
OOO Excellent OO Good O Average		PH	8.5-9	8.5-9	9-10	10-11	9-9.5	9	9-10	10-11	10-11 Colourloss (10-11 Celeurless (10-11	11-12
		Colour	Pale Yellow	Golden	Golden	Colourless	Colourless	Pale Gold	Golden	Colourless	Golden	Golden	Colourless	Colourless
		Brightening/ Polishing	000	00	00			000	000					00
		Ball Burnishing	000	00					00					
		Cleaning	00	000	00	00	00	000	00	000	000	000	000	000
		Corrosion Inhibitor				00	00	000	000	00	00	000	000	
	Application guide and characteristics	Degreasing/ De-oiling Descaling / Derusting / Light Heat Treatment				00	00		00	000	000	000	000	00
		Foam	0	Ο	О	Ο	O	Ο	Ο	Ο	Ο	Ο	Ο	0
		Suitable for Recirculation				R	Recirculation	of compound:	s can be ad	apted to su	it specific pro	cesses and a	applications	
		Carbon Steel		00		00	00	000	000	000	000	000	000	
	F	Hardened		00		00	00	000	000	000	000	000	000	
	Material	Iron		00		00	00	000	000	000	00	000	000	
		Stainless Steel		00		00	00	000	000	000	000	000	000	
		Aluminium	000	00										000
		Brass	000	00										000
		Ceramic	000	00										
		Copper	000	000	000									000
	Non-terrous Material	Magnesium	000	00										
		Plastic	000	00										
		Titanium	000	00										
		Zinc	000	000	000									000
	All Metals	All Metals	00		0							0		

Powder Compounds

As well as a comprehensive range of liquid compounds, ActOn Finishing offers a full range of Powders & Pastes. These are used for grinding, cleaning and polishing of ferrous and non-ferrous materials for vibratory and high energy finishing machines.

000 Excellent	O Good	Average	

	Category	Abrasive Compounds						
	Material Name	AO	Al	A2	A3	A7	35F	P6
ActOn powder compound details	Description	An aggressive, coarse, concentrated, abrasive compound, used on harder metals for grinding, radiusing and the removal of heavy machine marks and burrs. Used with an abrasive media. It leaves the surface of components with a shot blast appearance.	It is a fast cutting compound for heavy deburring and combined with cleaning agents and is mainly used for ferrous components, brass cuttings and pressings. It leaves the surface with a matte finish.	It is a medium abrasive compound and is combined with cleaning agents.	It is a light deburring compound combined with cleaning agents for fine surface finishing of all materials, but mainly used on soft metals like zinc, brass or aluminium. It can also be used to bring back the surface on ceramic media which is contaminated.	It is a light grinding compound for cutting down and polishing and contains an extremely fine abrasive, which during the process breaks down into a slurry. This assists the polishing ingredients to impart a polished surface.	This is used for cutting and polishing of non-ferrous metals and contains a soft abrasive with polishing agents.	It is used for polishi copper and its alloy with non abrasive media. A silky foam lather is built which enhances the polishing process.
	PH	9-10	11-12	11-12	10-11	9-10	5-6	9-10
	Colour	Dark Brown	White/Brown	White/Light Brown	White	Dark Brown	Off White	White
	Brightening/Polishing	0	0	Ο	0	00	00	000
	Ball Burnishing							000
Application guide and characteristics	Cleaning	000	000	000	000	Ο		000
	Corrosion Inhibitor	00	00	00		O		
	Degreasing/ De-oiling							
	Descaling /Derusting / Light Heat Treatment	000	000	00	0			
	Foam	O	0	Ο	O	0	0	00
	Carbon Steel	000	000	000		000		
Ferrous	Hardened Steel	000	000	000		000		
Material	Iron	000	000	000				
	Stainless Steel	000	000	000				
	Aluminium				000		000	
	Brass		000		000		000	000
	Ceramic						000	
Non-ferrous Material	Copper						000	000
	Magnesium						000	
	Plastic						000	
	Titanium 7:				000		000	
				00	000		000	0
All Metals	All Metals			00	00			0

Powder Compounds

000 Excellent OO Good Average

Click <u>here</u> to request your **Quotation today!**

Polishing Compounds Cleanin Category P71 C1 Material Name P51 C4 It produce a clean, bright luster and keeps the metal in solution, allowing Used to A polishing compound for aluminium with extra brightening and polishing agents giving superb results. Mainly used with steel media remove Used for cleaning of ferrous grease, oils and lubricating the process to ActOn powder fluids, leaving metal continue for long periods. This is components and can be Description compound details components suitable for Zinc used with or plastic media to give a semi-polished matte finish. clean and ready for further and Zinc Alloys. Mainly used with all types of media. non-abrasive media. processes. PH 9-10 9-10 12-13 12-13 Colour White White White White 000 000 00 Brightening/Polishing 000 **Ball Burnishing** 000 000 000 000 Cleaning Application guide Corrosion Inhibitor and characteristics Degreasing/ 000 De-oiling Descaling /Derusting / Light Heat 0 Treatment 0 0 0 00 Foam 000 Carbon Steel 000 00 Hardened Steel Ferrous 000 00 Iron Material 000 00 Stainless Steel 000 Aluminium 000 Brass Ceramic Non-ferrous Copper Material Magnesium Plastic Titanium

000

000 000

0

All Metals

Zinc

All Metals

g and Degreasing Com	pounds
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C5	C6	Actoclean BT (C7)	C50		
It keeps processes free of grease and oil. Good rust inhibitor. Mainly used on ferrous components.	Cleaning compound with brightening. Used on ferrous components to give a clean, bright surface finish. It contains a strong rust inhibitor. Abrasive and polishing media can be used with C6 compound.	Used mainly on ferrous components to give a clean surface finish. It contains strong rust inhibitor.	Suitable for processing all metals. Copes with all types of oily and greasy components. Contains corrosion inhibitor and can be used with all types of media.		
12-13	11-12	11-12	10-11		
White	White	White	White		
00	00				
000	000	000	000		
00	000	000	000		
000		000	000		
			00		
Ο	O	Ο	Ο		
000	000	000	000		
000	000	000	000		
000	000	000	000		
000	000	000	000		
	000				
	000				
			00		

Special	
Compour	nds

000 Excellent	OO Good	Averag

tOn Special ompound details	Description	A near neutral material to give a safe process for the rapid removal of metal on ferrous components. Ideally suited for steel and hardened steels in the hand tool industries. After the Turbocut process, the surface is ultra smooth and can be plated directly, eliminating expensive hand polishing.	Removal of grinding, linishing and machine marks. Recommended for steel, hardened steel and certain stainless steels only to give rapid metal cut-down and levelling, producing super smooth surfaces, ready for polishing and elector-plating if required. Mainly used with non-abrasive media.	This is an abrasive paste that is used in Vibratory bowl machines and it is used for both ferrous and non-ferrous parts.	This is a polishing paste and can be used on all metals.	Used for descaling and rust removal of oxides, heat treatment, discolouration, welding scale, some carbon deposits, hard- water scale. Not used on zinc or magnesium.	Fi vi w fc o a it
	PH	6-7	1-2	6-7	8.5	<1.5	
	State	Liquid	Powder	Paste	Paste	Powder	
	Colour	Clear/pale	White	Brown	White	White/Off White	
	Brightening/			00	000		
Rer ma grin	noval of chining/ ding lines	000	000	000			
CI	eaning	00			00		
Cor Inh	rosion ibitor	00					
Degr De-	easing/ -oiling						
Des Derust Heat T	caling / ing / Light reatment	00		00		000	
Foar	n	Ο	Ο	0	0	Ο	
Pickling							
Carbo	n Steel	000	000			000	
Hardened Steel		000	000			000	
In	on	00	000			000	
Stain	less Steel	00	00			000	
	Aluminium					000	
E	Brass					000	
	Ceramic					000	
Co	opper					000	
Μα	gnesium						
	Plastic					000	
	Titanium					000	
	Zinc						
A	All Metals			000	000		

Actogrind Vibropol

AD1

Chemcut

Material Name

Turbocut

Vibroshine	Actopol 108	Actopol 106	Separating Compound
For use in vibratory beds with crushed walnut shell media for bright polishing of small ferrous and non-ferrous items.	A fine, long lasting clean cutting abrasive for normal burr and surface finish improvement. It prevents corrosion on ferrous parts and produces a clean smooth finish on all metal parts. This is used with ceramic, natural or soft metallic media.	This is an abrasive compound for normal deburring and stock removal. It can be used with ceramic, natural or soft metallic medias, and is excellent for part-on-part processing. This produces a clean smooth fnish on all metal parts.	This is used to keep flat parts from sticking to each other when wet in a process. It is used in all types of vibratory and barrel finishing machines with all metals.
6-7	9.3	9.0	
Paste	Powder	Powder	Granules like Beads
White	Off White	Off White	White
000			
	000	000	
	000	000	
	000	000	
000			
0	0	0	N/A
000	000	000	000

Water Treatment System

ActOn's effective water treatment system is a combination of equipment technology (ActOn Centrifuge System) and water cleaning products

ActOn Coagulants

Coagulants are added into the solution to neutralise the negative charges on non-settable solids. The coagualnts have an

Once the charge is neutralised, the small suspended particles are capable of sticking together. These slightly larger particles

Over-mixing of the coagulant with the suspended solids in the water does not affect coagulation, but insufficient mixing will

Coagulants					
Product name	AC PAC	Ferric Sulphate	AC CL520		
Liquid / Powder	Liquid	Liquid	Liquid		
Anionic / Cationic	Cationic	Cationic	Cationic		
Application	Coagulation of Metal Finishing Effluents – Product Choice Dependent on Chemical Nature of Effluent and Particle Size of Solids				
рН	pH 1.8-2.5		5.5-6.5		
Recommended Dosage	200-500ppm	200-500ppm	20-50ppm		

ActOn Flocculants

Flocculation is the formation of larger flocs using high molecular weight polymers. These products help to bridge, bind and strengthen the pin flocs formed, adding weight and increasing settling rate. Once the floc has reached its optimum size and strength, the water is ready for sedimentation.

It is important not to over-mix the flocculent with the water as once the flocs formed are torn apart, it is not possible to get

Product name	AF AD985	AF AD987	AF AE66	AF 209	AF 990	AF A260
Liquid / Powder	Dewatered Liquid Emulsion	Dewatered Liquid Emulsion	Liquid Emulsion	Powder	Powder	Powder
Anionic / Cationic	Low Anionic	Mid Anionic	Mid Anionic	Very Low Anionic	Low Anionic	Low/Mid Anionic
Application	Flocculation of	Metal Finishing Effl	luents – Product Ch	oice Dependent	on Chemical Natur	re of Effluent
рН	3.5-4.5	3.5-4.5	6-8	6-8 (1%Soln)	6-8 (1%Soln)	6-8 (1%Soln)
Recommended Dosage	4-8ppm	4-8ppm	5-10ppm	3-5ppm	3-5ppm	3-5ppm

Flocculants									
Product name	AF A320	AF K540	AF K560	AF K580	AF CE662	AF 528	AF CE682		
Liquid / Powder	Powder	Powder	Powder	Powder	Liquid Emulsion	Powder	Liquid Emulsion		
Anionic / Cationic	Mid Anionic	Mid Cationic	Mid/High Cationic	High Cationic	Mid/High Cationic	Anionic	High Cationic		
Application	Flocculation of Metal Finishing Effluents – Product Choice Dependent on Chemical Nature of Effluent								
рН	6-8 (1%Soln)				4-6 (1%Soln)	6-8	4-6 (1%Soln)		
Recommended Dosage	3-5ppm	5-10ppm	5-10ppm	5-10ppm	8-12ppm	5-10 ppm	8-12ppm		

Click <u>here</u> to request your Free Trial today!



Value Added Service

On top of our state-of-the-art machinery and media, we also supply a range of support and training services.

Learn more on how you'll benefit:

Subcontract Services

High Energy and Vibratory Finishing Services

Our factory is well equipped with High Energy (HE) and Vibratory machines, which are designed and manufactured by our Engineers. The HE machines provide a speedy finishing solution, as well as a high quality finish to the parts, eliminating any need of fixturing and preventing their impingement. Along with the HE machines we also have Vibrota finishing equipment, which processes parts of variable sizes and batch quantities.





Shot Blasting and Peening Services

We offer shot blasting service from our Coventry facility to our customers in the Architectural, Automotive, Defence, Design, Food Manufacturing, Health and Safety, Marine, Steel Manufacturing and Profiling industries. Our service can achieve the desired Sa standards to ensure that the part's surface is cleaned to the specification. our applications include descaling, removing corrosion, mill scale, paint or rust, achieving a smooth finish, deflashing, polishing, strengthen the metal and more.

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Waste Water Treatment

During the finishing operation, the effluent can be polluted with oil, media and metal fines. It is critical that the effluent must be treated before going to drain, or if it is being recycled back into the system. Each area or district has its own discharge consent, hence the effluent must be analysed against this.

The effluent can be recycled, however there are certain applications where it is not possible. In that case, the treated effluent can be transferred directly to the drain. Recycling can save on the significant amount of water and compounds (greater than 90%) used.

We offer a range of flocculants (powder and liquid) coupled with our Centrifugal technology. Please refer to our waste water treatment brochure for more details.



Precision Polishing

In order to provide you with complete surface finishing solutions, we offer a precision polishing service for components from various industry sectors. In combination with our barrelling capability, you'll benefit in terms of cost, delivery and quality. Our applications include removal of manufacturing defects on femurs and aerofoils, which are inherent in the casting and forging process.

Inspection

Our trained inspectors ensure every component is inspected to the required specification prior to delivery. The inspections can include visual, dimensional and surface finish measurements. Our document controls ensure that all inspections are recorded for traceability purposes.



After-sales, Training and Installation

We hire a number of highly trained staff, including engineers, who are on-call for all of your after-sales requirements. From installation and training, to maintenance and prompt professional advice, our finishing specialists are here for you every step of the way.

Click <u>here</u> to request your Free Trial today!

What Our Customers Say

"We stopped searching for a good quality polishing compound once we tested ActOn's LQ9."

"We were facing difficulties in removing the machining lines on the components manufactured by us. The combination of ActOn media and compounds helped improve the finish and quality of our products."

"Regardless of day or time, their response to all technical enquiries is excellent."

Quality You Can See







We pride ourselves on our excellence, and over the years we have successfully demonstrated an ongoing compliance with ISO quality and environmental standards. We're also an approved supplier for many of our industries, including medical and aerospace.

For ISO, we currently hold:



We're proud members of the 'Made in Britain' campaign

we redefine

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