

Blasting media



Service & Specification

As a market leader in the development and manufacture of blast cleaning equipment, Vixen also supply a massive range of blast cleaning media and spare parts at very competitive prices.

We also have a highly trained team of after sales professionals who can advise you when it comes to selecting the best media and spares to use for your particular application.

This brochure contains details of all the different types of media which are available from stock as well as details of our spare parts and maintenance service. Whatever your blast cleaning requirements are - we can guarantee you a first class service.



VIXEN
SURFACE TREATMENTS LTD

Vixen media - To



Blast cleaning is an excellent method of surface preparation and finishing as there is a vast choice of blasting medias and grades which allow so many different results to be achieved.

Blast cleaning treatments can be used for:

- Etching surfaces prior to painting or bonding to improve adhesion (aluminium oxide, chilled iron grit)
- Stress relieving aircraft or high performance engine components (glass bead, steel shot)
- Removing flash from plastic or rubber moulded items (plastic, organic)
- Cleaning precision mouldings or components without marking the underlying surfaces (plastic, organic)

Over the next few pages we have listed the range of blasting media we supply with descriptions, grades supplied and typical applications.

BEFORE & AFTER

Illustrated below are four different applications with details of their specific requirements and the media used.



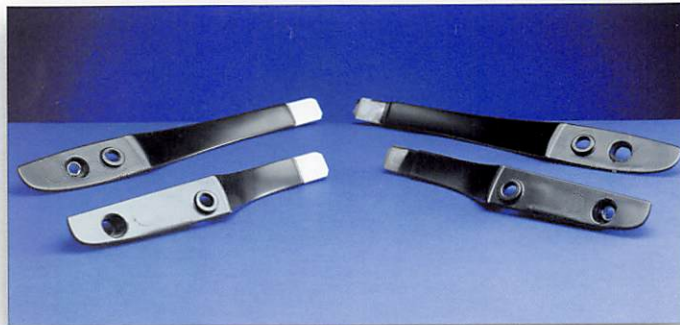
Hip joints

Hip joints are blasted using a glass bead. This media gently etches the surface of the joints so that bone and soft tissue will adhere to the stem.



Gear shafts, cogs and wheels

These components are all made of hardened steel and require blasting using Vixosheen glass bead to remove any burrs prior to packaging.



Roof rack bracket

The tips of these aluminium brackets are grit blasted using reclaimed aluminium oxide to give an ideal surface for bonding.



Balance shaft cleaned after braising

The balance shafts are blast cleaned with chilled iron grit after melted solder has sandwiched weights to either end of the shaft.

MEDIA SAMPLES


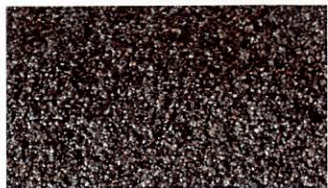
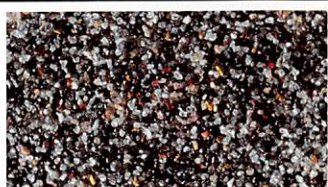



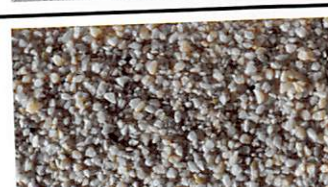

If you would like to see the different grades of any of the media types contained within this brochure we can send you a media sample case.

In this sample box you will find a series of tubes each containing a different grade of the media type you requested. These tubes come complete with plastic caps, which allow you to remove the media for closer examination.

Please refer to the back page for more details, and how to reserve your **FREE** sample case.



alking technically

Applications	Shot Peening	Deburring	Descaling	Mould Cleaning	Die Cleaning	Casting Cleaning	Paint Removal	Bonding Preparation	Heat Scale Removal	Etching	Surface Preparation	Adhesive Removal	Artefacts Removal	Corrosion Renovation	Plant Maintenance	Pre & Post Weld Cleaning	Cosmetic Finish	Paint Preparation	Deflashing	Glass Engraving	Sample Packs
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THE VIXEN RANGE OF MEDIA, TECHNICAL INFORMATION AND APPLICATIONS

This chart is a general guideline of the different applications your media can be used for.

Media Type	Vixen Name	Description	Grade	Size mm or Micron range	Supplied in Quantities of
CHILLED IRON GRIT	VIXOGRIT	A very abrasive media which is harder than steel and therefore has a quicker cleaning action. This media chips on impact with the component rather than wearing blunt. This range of grit is frequently used to prepare surfaces prior to coating. Coating is then essential as the components blasted with this will have an iron content on the surface and will be prone to rusting.	G05 G07 G12 G17 G24	0.125-0.3 0.18-0.42 0.3-0.71 0.42-1.0 0.6-1.0	25kg bags
VIRGIN BROWN ALUMINIUM OXIDE	VIXOGRAIN WA	This is a sharp, fast-working abrasive which is used when ferrous blasting abrasives cannot be used due to any risk of corrosion. It is ideal for extremely hard substrates. This media retains its cutting ability as it chips easily on impact creating another new face. This media can be very dusty in finer grades and especially when used in a pressure blast machine. Also available:- WHITE VIRGIN ALUMINA WHICH IS A PURER FORM OF THE VIRGIN BROWN. Ideally suited to glass engraving	VB120/220 VB80/120 VB80/90 VB30/40	125-65 177-125 177 590-420	20kg tubs
RECLAIMED ALUMINIUM OXIDE	VIXOGRAIN	This is a cheaper alternative to the virgin brown aluminium oxide. It may be cost-effective at low pressures but when blasting at high pressures it breaks down much faster. Used as above except that due to being reclaimed it can contain impurities which is not usually acceptable to aerospace industries. This is a popular choice for most applications.	120/220 80/120 60/80 40/60 30/40	125-65 177-125 250-180 420-250 590-420	20kg tubs
STEEL SHOT	VIXOSHOT	Media made from high carbon steel and treated to give durability and resistance. It has extensive applications in general industry for the removal of scale, rust and surface contaminant. Steel abrasives are very popular with foundries for de-burring or de-flashing of castings and cleaning moulds. When used with a blast cabinet little effluent or pollution are produced. This type of media is also well suited to peening / etching surfaces prior to bonding.	S070 S110 S170 S230 S330 S550	0.18-0.42 0.30-0.60 0.42-0.85 0.60-1.00 0.85-1.40 1.40-2.00	25kg bags
NICKEL CHROME SHOT	VIXOSHOT NC	This is a form of stainless steel shot which is used on non-ferrous components. When steel shot is used in the blasting process it leaves a ferrous residue - this is unacceptable on components made of materials such as aluminium or brass as after a while the surface will rust. Stainless steel shot can therefore be used effectively on these types of metals, as rusting will not occur. Typical applications are preparing surfaces and removing discolouration after heat treatment.	NC070 NC170 NC330	0.18-0.42 0.42-0.85 0.85-2.00	25kg tins
GLASS BEAD	VIXOSHEEN	A light abrasive material which is used primarily for peening and the removal of almost any surface blemish except corrosion or heavy scarring. It may also be used for texturing or producing attractive cosmetic finishes without damaging the component. There is no risk of corrosion or contamination as it is totally inert. The treated surfaces are not altered significantly and are left with a satin smooth finish. This media will have difficulty in removing paint and heavy surface deposits. It produces excellent results on soft metals such as aluminium or brass.	AQ AH or AG AF or AD AC or AB C B BL	0-44 50-100 100-150 150-300 300-400 400-600 600-800	25kg tubs
PLASTIC MEDIA	VIXOCHIP	This media has excellent properties for cleaning components such as moulds when there must be no dimensional change to the components whatsoever but only to remove carbon and other debris. It is therefore very popular in most moulding applications or the cleaning of extrusion dies. Used heavily in aerospace industries, although tight restrictions on contamination are necessary due to impurities found in the media. It is so controllable in the correct machine that it is possible to remove a single layer of paint leaving primer coat intact. This media allows the usage of considerably lower pressures (15-40psi) than other types of media thus increasing efficiency.	12/20 20/40 30/40	840-420 590-420	12.5kg tubs
ORGANIC MEDIA	VIXOBLAST	We supply two types of organic media - crushed walnut and olive stone. Crushed walnut is a softer abrasive which is quite economical in comparison to plastic media. Its softness makes it popular for de-flashing plastic moulds as the surface of the component will not be scratched or etched. Olive stone is an excellent hard abrasive which is often used instead of plastic media. Especially useful in the engine reconditioning market to remove paint and debris from engine blocks. The advantage with olive stone is any remaining particles in water jackets or cylinder heads will not present the danger a plastic media would.	12-20c	2000-1000	12.5kg tubs

Blast guns & nozzles

We supply a range of blast guns and nozzles to suit both pressure cabinets and suction cabinets. Each nozzle type is available in Tungsten Carbide, Silicon Carbide or Boron Carbide, your choice of material will depend on your requirements and budget.

Below we have listed the three different types of guns and their corresponding parts along with details of the different air jet sizes and air consumptions. The greater the sizes of airjet, the faster the cleaning rate as more grit will travel through the part.

Suction Blast System

This is a standard system for most blast cabinets. The suction blast system works by sucking blast media from the hopper of the cabinet via a pickup pipe connected to the blast gun. The media is picked up by a fast moving air stream inside the blastgun and forced out of the blast nozzle.

The 401 Blastgun

When the foot pedal is depressed, compressed air is fed through the airjet and into the throat of the blast nozzle. This rush of air creates a vacuum in both the blast gun chamber and the media feed pipe, which in turn is connected to the cabinet hopper. Media is sucked up the feed pipe and propelled out of the nozzle by the incoming air.

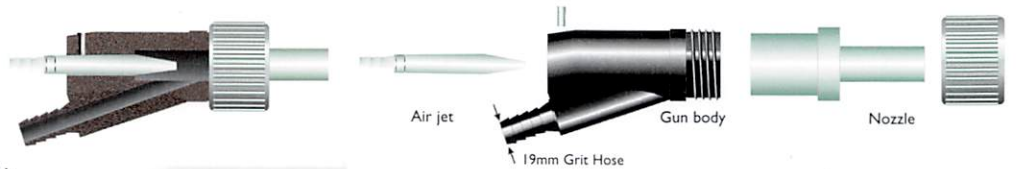
Chart details standard airjets with matching nozzle sizes and air consumption required for each size. Free Air consumption for suction blast guns (cubic feet / minute)



Gun model suction	Air jet number	Air jet size of	Nozzle size of	At continuous 80PSI 100PSI
401	SJ1	1.5mm	S3 4.8mm(3/16")	7 - 9 CFM
401	SJ2	2.5mm	S4 6mm(1/4")	12 - 16 CFM
401	SJ3	3.75mm	S5 8mm(5/16")	22 - 26 CFM

Highflow Gun

The Highflow blast gun is more powerful than the 401 because its larger body allows larger airjets and nozzles to be used. This larger range of airjets and nozzles creates a greater suction than those fitted to the 401. This allows media to be delivered both quicker and in a greater volume from the Highflow gun resulting in a better blasting performance. To achieve the best results, Highflow guns have a greater air requirement than the 401.



Gun model suction	Air jet number	Air jet size of	Nozzle size of	At continuous 80PSI - 100PSI
HIGHFLOW	HF1	2.25mm	HF4 6mm(1/4")	12 - 16 CFM
HIGHFLOW	HF2	3.75mm	HF5 8mm(5/16")	22 - 26 CFM
HIGHFLOW	HF3	4.5mm	HF6 10mm(3/8")	40 - 58 CFM

Chart above details standard airjets with matching nozzle sizes and air consumption required for each size. Free Air consumption for suction blast guns (cubic feet / minute)

Pressure Blast System

The pressure blast system is up to 5 times faster than a standard suction system, is more controllable and can be used more effectively with a wider range of media. This system does require more air to operate it effectively. Instead of sucking media from the cabinet hopper as in a suction blast system, this works by building up pressure inside a pressure vessel where the media is stored and then releasing the air and media under pressure when the foot pedal control is activated.

Pressure Blast Gun & Nozzle

Chart on right details nozzle sizes and air consumption required for each size for pressure blast guns. Free air consumption for pressure blast guns (cubic feet / minute)



Nozzle type	Nozzle size	Continuous pressure @ 40PSI	Continuous pressure @ 60PSI	Continuous pressure @ 80PSI
VT3	4mm	27 CFM	37 CFM	47.5 CFM
VT4	6mm	49 CFM	58 CFM	85 CFM
VT5	8mm	64 CFM	77 CFM	110 CFM

Media sample cases

We have highlighted the different types of blasting media available and given details of the grades and their typical applications. To further assist you with your choice of media we can send you one of two types of sample cases, **ABSOLUTELY FREE.**



Case A

This contains each and every media type and grade we supply. Each grade of media can be inspected more thoroughly as it can easily be removed from the tube.

Case B

This case is slightly smaller and contains your specified media type and all of the different grades. Again, each grade of media can be removed from the tube for closer examination to ensure you order the correct grade for your application.

To receive one of these cases simply telephone the After Sales and Service Department on 01642 769333 and we'll discuss your application in more detail with you.



THE ABOVE SAMPLE CASES ARE ABSOLUTELY FREE AND CAN BE WITH YOU THE DAY AFTER YOUR ENQUIRY IS PLACED WITH US. SO CALL US NOW TO RECEIVE YOURS.

Service department

The service department is dedicated to providing you with solutions to any of the daily problems associated with your blast cleaning cabinets. We have a highly trained team of service engineers who will respond to your problems and are also available to regularly maintain your machines to ensure peak performance.



We acknowledge that it is imperative for you to keep your operation running smoothly and efficiently. With this in mind we have developed our range of CarePlan service schemes. These schemes enable you to save money on regular services, spare parts and consumables. Whichever one you choose will depend on how intensively your blast cabinet is used.



For more information on our service department and CarePlan schemes please call

TEL: +44 (0)1642 769333 FAX: 769441 (8 LINES)

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