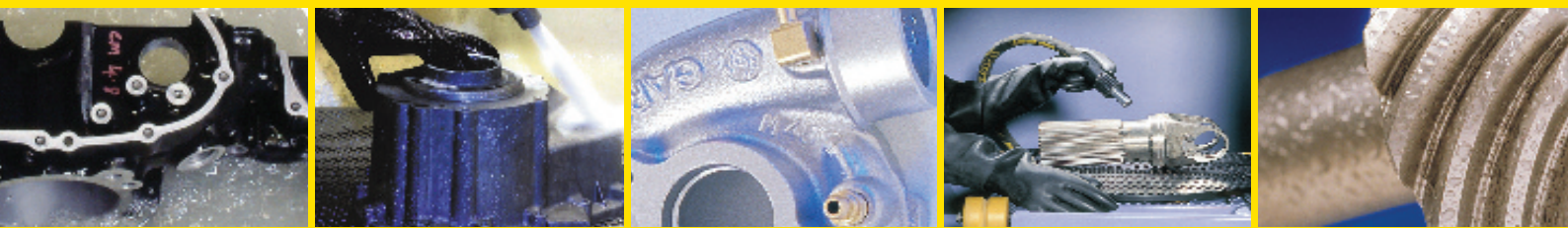


## AQUABLAST MACHINES

For the ultimate finish, simultaneously blasts and degreases, scrubs and washes producing a perfect finish efficiently and economically.



See our VIDEO LIBRARY of all machines in action at [www.vixen.co.uk](http://www.vixen.co.uk)

The Aqua  
WHEELBLASTER



The AQUABLAST 915



# VIXEN is a market leader in the manufacturing of wetblasting machines

AQUABLAST: 1515



AQUABLAST: 915

AQUABLAST: 1215



The AQUABLAST range is designed to simultaneously blast and degrease components in a quick and easy dust-free process, which achieves outstanding finishing results on a variety of components.

### The Principle of Wetblasting

The key to wetblasting is that the finish is produced through flow of water borne abrasive. This creates a finer finish due to the lubrication and flushing action of the water during the blasting process.

*The illustrations below show the different processes of grit, bead and wetblasting.*

aquablast®

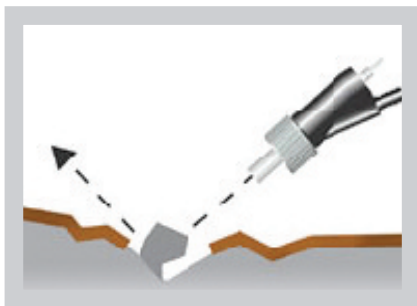


Diagram 1

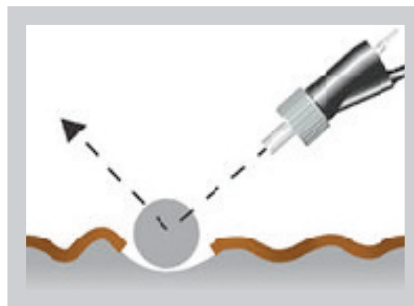


Diagram 2

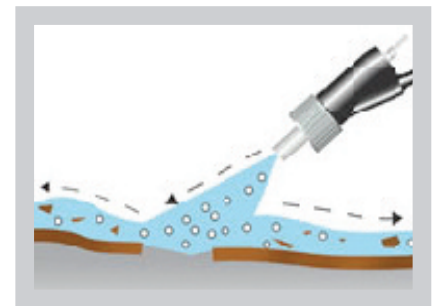


Diagram 3

The dry grit and bead blasting processes are shown in the first two diagrams, which demonstrate the severe 90° ricochet that occurs when using these methods.

The third diagram shows the wetblasting method and how cushioning from the water, alongside the altered angle for the media, produces a lapping effect which travels across the surface of the component. The resulting finish is a satin/polished one, which is desirable for many industries.

This process eliminates media impregnation into the component unlike dry blasting methods, and is vastly becoming a more popular choice for companies across the world.

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**Gordon Styles**  
Star Prototype, China:

"The AQUABLAST is a truly great, reliable and dust-free machine."

# How the AQUABLAST Works

## GENERAL OPERATIONAL USE

- The water/media slurry is contained within the cabinet sump
- Delivery of the slurry to the hand-held nozzle is via a glandless polyurethane pump and hoses within the machine
- Compressed air is added at the blast nozzle to accelerate the slurry onto the component and provide the finishing effect
- After contact with the component, the slurry then drains back into the pump and is recirculated
- Fine and broken down media and other contaminants are fed via an overflow into a sedimentation filter at the rear of the machine.



## AQUABLAST APPLICATIONS

The AQUABLAST range brings huge benefits to a wide variety of industry sectors, including aerospace, automotive, construction and specialist manufacturing.

### The AQUABLAST is particularly effective for:

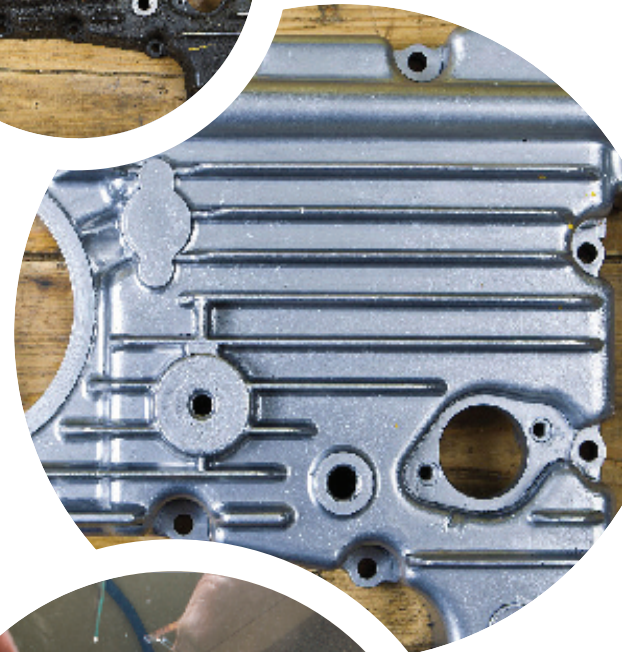
- Cleaning of dies and moulds
- Removal of paint, rust, scale, carbon and similar deposits
- Surface preparation prior to bonding, re-painting and re-coating
- Satin finishing of stainless steels and other metals
- Cleaning of PCBs and electrical connectors
- Removal of small burrs from manufactured components

### Advantages of Wetblasting:

- Dust-free process
- Cleans by flow and not by impact
- Simultaneously degreases and blasts
- Produces a 'softer' finish
- Water acts as a lubricant between media and component
- Promotes longer media life
- Avoids media impregnation on softer materials



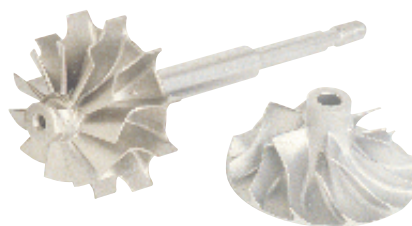
STUNNING RESULTS  
AquaBlast Range



# aquaBlast®



Products Before Treatment



Products After Treatment



The Aqua Blast Shop, Australia

**Peter Berendt, Managing Director** said:

"The machine's capability is now the main focus of the business. Before we invested in Vixen's Aquablast machine we used to finish the components using hard labour and elbow grease, whereas now, the absolute ease of use of this machine saves so much time during the process"

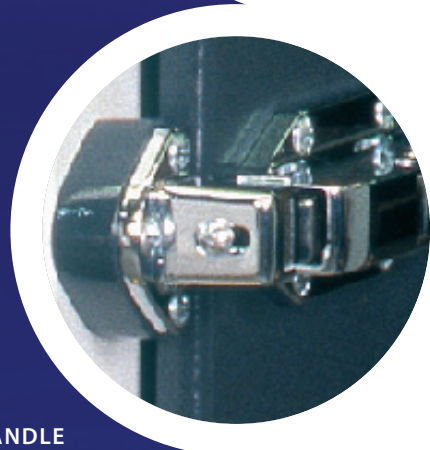
# STANDARD FEATURES of the AQUABLAST MACHINES

Aquablast machines are available in three different model sizes: the 915, 1215 and 1515. Each of these machines uses the same wetblasting technology that Vixen specialises in.

The Aquablast comes with many standard features that are specifically designed to enhance the blasting process and achieve the best finishing results.



**ROLLED FILTER UNIT**  
*Standard Fitment*



**SLAM SHUT HANDLE**  
*Standard Fitment*



**HEAT REDUCTION VALVE**  
*Standard Fitment*



**AUTO WIPE WINDSCREEN**  
*Standard Fitment*

The AQUABLAST can be fitted with a variety of optional extras depending on the application. These can range from turntables, electrical settings and machine colours as well as many more, and all can be decided upon after further consultations with a Vixen sales engineer.



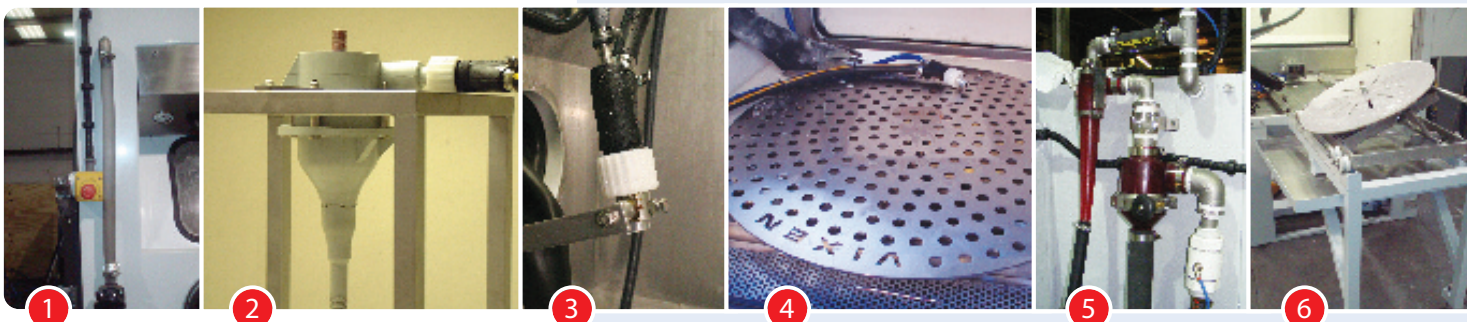
## aquablast®

### Standard Features of the AQUABLAST:

- Powder coated finish
- Fully stainless steel
- Large viewing window with low voltage windscreen wiper
- Leg mounted pressure regulator and control
- Single footswitch operation
- Dual purpose sedimentation filter
- 3KW heater complete with thermostat
- Polyurethane abrasive pump fitted with stainless steel inlet filter and motor housing
- Lightweight polyurethane blast gun
- Dust-free process

### Optional Extras:

- (1) Media sight glass
- (2) Hydro cyclone complete with free-standing frame
- (3) Blast gun holder
- (4) Turntables
- (5) Twin mini cyclones
- (6) Trollies
- (7) Single or three phase electrics
- (8) Rubber blast chamber curtains
- (9) And many more



# The Aqua WHEELBLASTER

The Aqua WHEELBLASTER uses wetblasting technology to simultaneously blast, wash and prepare alloy wheels after kerb damage in one quick and simple step, ready for painting and lacquering.

The machine combines the standard six-stage process of manually preparing wheels into one application, and can reduce the application time from one hour per wheel to just three minutes in one compact cabinet.

The process uses water mixed with an abrasive to blast the wheel inside the machine to create an etched finish, ready for the next stage of the repairing process. The use of water in the application ensures that no media is impregnated onto the alloy wheel, provides a washing action, and does not strip the wheel back to bare metal.



ACID WASH



POWER WASH



QUICK DRY



ABRASIVE KEY



RESIDUE REMOVAL



DRY PRE-PAINT

## x6

PROCESSES ALL  
IN ONE MACHINE





## Vixen has designed a revolutionary new wetblasting machine designed specifically for alloy wheel repairs - The AQUA WHEELBLASTER.

### Why choose the Aqua WHEELBLASTER?

Vixen's Aqua WHEELBLASTER is designed exclusively for the operator working in the automotive industry.

The dry blasting method of finishing alloy wheels creates dust, which is a major hazard in the bodyshop environment, and also requires additional washing and drying facilities before the wheel can be painted and lacquered. The wetblasting process used in the Aqua WHEELBLASTER does not require a specific room for siting, eliminates the risk of dust and combines all of the preparation processes in one cabinet – ideal for the workplace.

### Features:

- Optional pneumatic lift complies with health and safety
- Internal spigot ensures ease of handling and loading
- Durable high pressure pump
- Dust-free process
- Compact cabinet design
- Blow off gun to remove excess water and media ready for painting
- Combines six processes in one machine
- Wheels can be prepared in less than three minutes

**AQUA**  
**WHEELBLASTER**  
ALLOY WHEEL FINISHING

### How the Aqua WHEELBLASTER works:

The wheel is loaded onto the pneumatic lift (optional) which is raised up to the opening of the cabinet.

The operator then loads the wheel onto the internal spigot, which is mounted on a pivoting arm to allow for easy and hassle-free loading.

Once loaded, the operator applies pressure to the foot pedal, and the water/media slurry which is contained in the cabinet sump is delivered to the manual blast nozzle via a glandless polyurethane pump. Compressed air is added at this stage to accelerate the slurry.

After contact with the alloy, the slurry drains back into the cabinet sump to create a re-circulation system, while other contaminants are fed into a sedimentation filter.



Watch the Aqua WHEELBLASTER case study video at [www.vixen.co.uk](http://www.vixen.co.uk)

# SPECIAL BUILD AQUABLAST MACHINES



Vixen prides itself on the variety of special build machines it has supplied to companies worldwide.

The diverse range of machines that Vixen has designed have enabled customers to blast a diverse range of components effectively, ranging from surgical instruments to large train engines.



## ROBO AQUA BLAST

**Vixen has launched a range of automated wetblasting machines complete with robotic blasting arms – THE ROBO AQUA BLAST.**

The ROBO AQUA BLAST uses Vixen's wetblasting technology to simultaneously blast and wash components with a fully integrated seven axis robot arm in a controlled environment.

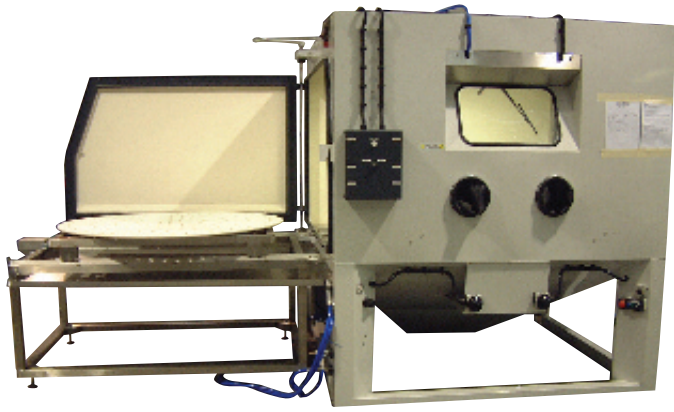
The robotic arm is particularly effective at maintaining a consistent high standard of finishing on parts in the blast chamber, and can repeat processes with extreme accuracy (up to 1mm). The machine is controlled via a teach pendant and touch screen HMI, and has the ability to store hundreds of programs in its internal memory.

The machine is totally designed with the operator in mind, and has an auto load facility to ease loading and unloading of components, which is particularly useful for larger and heavier parts.

The design team at Vixen work closely with the customer to ensure that the Robo Aqua Blast is programmed and tailored specifically for each application.



To find out more about the Robo Aqua Blast machine, or any other custom build option, contact Vixen today on **01642 769333**, or watch the videos at **[www.youtube.com/vixenuk1](http://www.youtube.com/vixenuk1)**



For applications where the standard AQUABLAST is not suitable, Vixen Surface Treatments can supply a custom built machine.

The expert in-house design department work closely with the customer and develop ideas that are specifically tailored to the individual application, or requirements of the client. These can include changes to the size, shape and colour of the Aquablast.

The automated range of custom built Aquablast machines are controlled via PLC programming. Vixen can tailor the PLC to the customer's specification, such as Mitsubishi or Siemens formatting. As well as this, the automated machines are controlled via a human machine interface unit which allows the operator to control the machine easily using a touch sensitive panel.

Vixen is also able to design machines with vertical and radial arm options which automatically blast irregular sized components that are not suitable for a standard Aquablast model. The component, which can be any size, is automatically rotated on a turntable while the blast guns move from side to side, or up and down.

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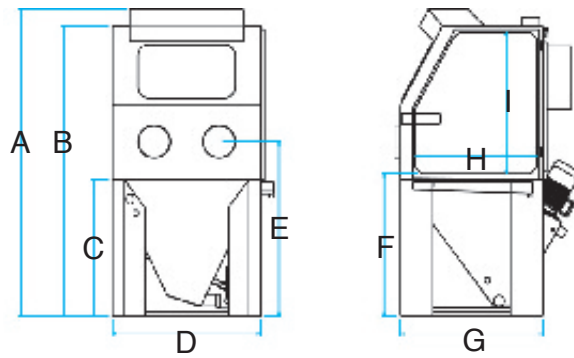


Magnetic Shields Ltd  
Peter Harden said:

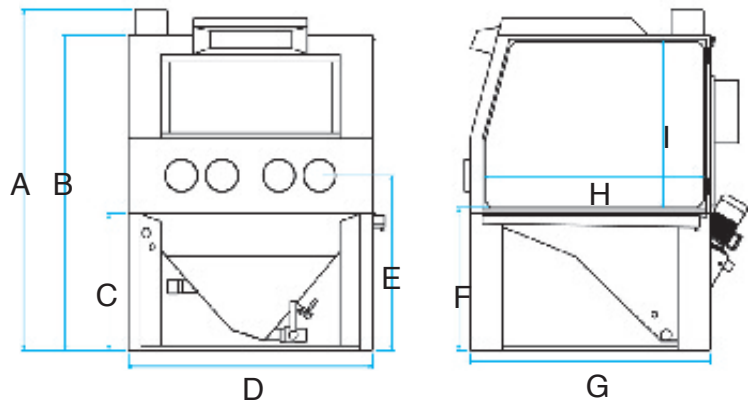
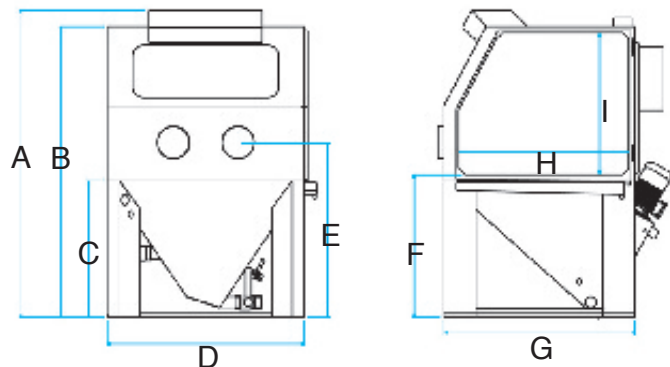
"By using different types of media in our Vixen machine, we now have the ability to offer our customers different types of finishes for their shields, which we were unable to do with sandblasting units. This will ultimately enable us to expand our business further and attract new customers."

Vixen are a leading manufacturer and supplier of quality blast cleaning and degreasing equipment, with a well established customer base:

- BAE Systems
- Black & Decker
- Dunlop Aviation
- Ebara
- Edwards
- Federal Mogul
- Ford Motor Company
- Fiskars
- Hampshire Tobacco
- Hotpoint
- ICI
- IMI Group
- Kawasaki
- London Underground
- Matthew Algie
- Metron Technology
- Mitras Automotive
- Royal Ordnance
- Sharp Electronics
- Triumph Motorcycles
- TRW Automotive Systems Ltd.
- Weetabix Ltd.
- West Riding Pressings



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MODEL DIMENSIONS (mm).	A	B	C	D	E	F	G	H	I
915	1891	1789	840	915	1075	878	880	750	873
1215	1891	1789	840	1215	1075	878	1180	1050	873
1515	2094	1939	840	1500	1075	878	1480	1350	1023

ELECTRICAL	415v 3 PHASE + NEUTRAL 240v SINGLE PHASE		
AIR SUPPLY	7 bar (100psi) 1.14m <sup>3</sup> /min (40cfm) 1/2" BSP / 12.5mm CONNECTION		
WATER SUPPLY	2-6 bar (30-80psi) 1/2" BSP / 12.5mm CONNECTION		
DRAIN	FLOOR LEVEL- APPROX 10 LITRES/ MIN		
VENTILATION	4" 110mm DUCT TO OUTSIDE ATMOSPHERE		
SUMP CAPACITY	915	1215	1515
WATER MEDIA	50 LITRES	100 LITRES	150 LITRES
LOAD	80 / 100 KG	250 KG	250 KG

Vixen are a leading manufacturer and supplier of quality blast cleaning and degreasing equipment, worldwide.