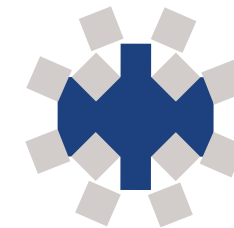




Surface Finishing
Equipment Group



Surface Finishing
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Complete Finishing Plants ♦ Equipment ♦ Spares ♦ Service ♦ Hire



Gema

ABRACLEAN
JEDTEC
RPH
TRITECH

Finishing Brands
CONCEPT

GRACO

Ponblast

rpb
respiratory
MODULAR ADVANTAGE

TriTech
Airless



Surface Finishing Equipment Group

The Surface Finishing Equipment Group incorporates:

- ◆ Abraclean Ltd - based in Manchester
- ◆ Jedtec Finishing Equipment - based in Manchester.
- ◆ Hogg Blasting & Finishing Equipment Ltd - based in Washington, Tyne & Wear
- ◆ Ercon Finishing Systems Ltd - based in Willenhall, West Midlands



The Surface Finishing Equipment Group are one of the leading designers, manufacturers and suppliers of Abrasive Blasting Equipment, Abrasive Media, Finishing Plants, Spray Painting Equipment and Powder Coating Equipment in the UK. Our group has over 100 years combined experience in this field.

We are agents for world leading manufacturers including Graco, Devilbiss, and Gema, but are not tied to a single manufacturer allowing us to provide independent and impartial advice on your application requirements.

Our comprehensive application knowledge along with a wealth of real-world experience allows us to provide a full range of solutions from the supply of the simplest consumables up to the design and installation of large multi-function production facilities. By providing our customers with a reliable, cost effective service we have concentrated on expanding our client base through repeat business, excellent referrals, and recognising the opportunities of introducing new high quality products into the local and global market.

Since our conception we have continually strived to improve the quality of our service and are proud to have achieved ISO 9001:2008 Quality System accreditation. We have the philosophy of continuous attention to detail and complete customer satisfaction from start to finish. From the initial informed selection of the correct product, through the supply and installation of field proven equipment.

We employ a dedicated team of knowledgeable engineers, who can advise you on dependable and cost effective solutions to meet your requirements from initial consultation through to the design, manufacture and installation of your chosen product or system.

Our two branches in Manchester and Washington house our manufacturing, testing, and training facilities, as well as holding large stocks available for delivery or collection from our trade counters.

Our Ercon Finishing Systems branch are designers and manufacturers of Turnkey Finishing Plant Systems. Ercon have been established for more than 20 years, having sold both in the UK and globally.

Our philosophy of providing the most efficient technology together with first class support ensures that we continue to provide the best service in the industry today.

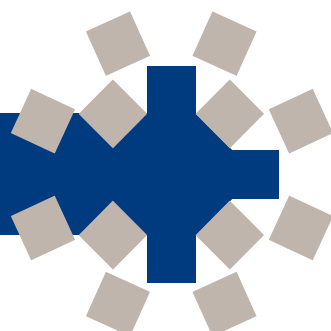


Finishing Brands
A CARLISLE COMPANY



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Surface Finishing
Equipment Group



SECTION ONE - POWDER COATING EQUIPMENT



Gema Powder Coating Systems - Superior By All Measures



POWDER COATING OVERVIEW

Powder coating is increasingly accepted as the preferred finishing process for many applications. Increasingly stringent environmental regulations, rising costs in all areas, and demands by consumers for better quality and more durable products are among the challenges facing today's finisher. Powder coatings provides a solution to these challenges and others.

Powder coating is the technique of applying dry paint to the component. The powdered paint is normally applied by using a powder feed system and gun to electro statically charge and spray the powder onto the part. For some applications, the part being coated is dipped into a fluidised bed of powder.

The coated part is then heated in an oven, or via infra red panels, to melt and cure the paint. During the curing process a chemical cross-linking reaction is triggered and it is this chemical reaction which gives the powder coatings many of its desirable properties. The final cured coating is the same as a 2-pack wet paint.

Powder Coating gives a dry, clean, durable coating, and is environmentally friendly. Unlike liquid paint finishing where solvents are used, powder does not release Volatile Organic Compounds into the atmosphere. Unlike wet spraying, in many cases the over sprayed powder can be recycled for re-use. Powder coating itself generally requires a lesser degree of skill than wet painting.

Powder coating can produce much thicker coating than convectional liquid coatings without running or sagging. Additionally a wide range of effects are easily accomplished which would be impossible to achieve with other coating processes.

Capital equipment and operating costs for powder coating lines are generally less than for conventional wet spray lines. With one of the world's largest installed bases of powder application equipment, Gema brings the confidence and expertise that comes with being the global leader in powder coating equipment. Gema continue to explore new ways to guarantee customers cost effectiveness and quality.

Gema have revolutionised the industry with products like the OptiFlex 2 manual and Opti automatic powder coating systems, advanced booth systems like the Magic Cylinder and Magic Compact, time saving products like the Colour Change Centre, and the dependability of the ZA Reciprocator. The Surface Finishing Equipment Group brings our customers the decisive advantages in powder coating technology. We have vast experience in the supply and installation of their full range of powder coating equipment.

Gema's technology, quality, and research, coupled with the local backup and support of The Surface Finishing Equipment Group has brought our customers the decisive advantages in powder coating technology.



MANUAL POWDER MACHINES

Today's Powder Coaters have the challenge of spraying a multitude of colours and chemistries. The Optiflex 2 manual powder machine has the performance and control needed to achieve the best finish and highest powder savings.



OPTIFLEX 2

OptiFlex®2

Each Optiflex2 Powder Coating Machine is supplied ready to run with: Hand Gun, Control Drawer, Injector, Powder Feed System of choice, all hoses and accessories.

- ◆ Efficient Powder Charging - a high performance integrated cascade, with up to 100,000 volts can efficiently charge all powders.
- ◆ A new generation of spray nozzles provide excellent powder distribution and penetration needed to coat difficult geometries.
- ◆ On-Gun remote control allows flexibility to adjust common parameters without looking away from the work-piece.
- ◆ Operators can choose from 3 presets programs (flat parts, complicated parts or recoats) or store up to 20 custom programs for fine control.
- ◆ The Advanced Control Unit allows you to easily apply challenging powders such as metallic or special effect. Using Precision Charge Control ensures greater accuracy and adjustability of settings below 10 microamperes.
- ◆ High Performance Powder Pump is ultra-efficient and employs the most effective angle to deliver consistent amounts of powder.

MODELS AND SPECIFICATIONS

Code	Description	Electrical Requirements	Air Pressure Requirements	Air Flow Requirements	Powder Feed	Weight (kg)
B Box	1007136	240V-140 VA	85-145psi	5cfm	Box	42
F Hopper	1007139	240V-40 VA	85-145psi	10cfm	50L Hopper	46
Hopper 5L	1008216	240V-40 VA	85-145psi	5cfm	5L Hopper	15
S Stirrer	1008025	240V-150 VA	85-145psi	5cfm	Stirrer	54

MODELS

OptiFlex®2

- ◆ **Box Feed machine - OPTIFLEX 2B**
Recommended where the operator requires frequent colour changes. Designed to use the powder directly from the powder box.
- ◆ **Stirrer machine - OPTIFLEX 2S**
Highly flexible and can handle all powder types. The hopper with stirrer arm can process powder amounts from a cup full to 10kg without leaving residue.
- ◆ **50 Litre Fluidised Hopper - OPTIFLEX 2F**
Stainless hopper with fluidized bed. Ideal for medium / large production runs with infrequent colour changes. The hopper gives very uniform powder feed.
- ◆ **5 Litre Hopper machine - OPTIFLEX 2**
The perfect solution for laboratory powder coating applications and short production runs designed for a maximum of 2.0kg of powder.
- ◆ **Application Cup machine - OPTIFLEX 2C**
Ideal for powder manufacturers or sample testing. The application Cup attaches directly to the bottom of the powder coating gun.



POWDER BOOTHS FOR MANUAL COATING



POWDER BOOTH

A spray booth is a necessity for every powder coating operation to:

- ◆ Effectively Extract material overspray from the work area.
- ◆ Control Environmental Emissions through the combination of appropriate Filtration Media and correctly specified ductwork and termination cowl.
- ◆ Comply with legal Health and Safety requirements as stipulated in Control of Substances Hazardous to Health (COSHH) regulations.
- ◆ Reducing fire hazards from combustible powder dust.

Features:

- ◆ Our Powder Booths are designed specifically for powder coating extraction and offer the optimum solution available when compared to other types of booth.
- ◆ Modular Design is available in a variety of sizes and specifications to suit your application.
- ◆ The booth's 'plug and play' design requires only an electrical and compressed air supply for installation.
- ◆ Optional Castors allow the booth to be taken around the factory for manual rework jobs where needed.

- ◆ The Booth operates on the principle that the powder laden air is drawn through filters. Clean air is extracted back to the factory, and the powder is trapped on the surface of the cartridges.
- ◆ Operating on a re-circulating airflow principle. Air is drawn evenly across the face area and towards the filter section in the back of the enclosure. Over sprayed powder is drawn from the operators breathing zone, keeping the workplace clean and usable. This self-contained closed loop system causes no emissions to atmosphere thus eliminating environmental concerns.
- ◆ Pleated cartridges with a large surface area are used to maximise life and extraction rates.
- ◆ During the cleaning cycle a partial filter by-pass damper is operated, reducing airflow across the filter cartridges. This makes for more complete cleaning, whilst still containing dust within the enclosure.
- ◆ The clean air is diffused back into the work area at high level above the working enclosure. This means no ductwork to atmosphere is required, and no holes need be cut in the building. As air is returned to the factory, no separate fans for replacement 'make-up' air are needed, and there is no heat loss from the factory.
- ◆ A single slow speed belt driven fan delivers flexible performance with maximum efficiency.
- ◆ All booths comply to ATEX requirements.
- ◆ Collection bins are built to conveniently take standard powder boxes as liners in each wheeled bin section. The box of waste powder can then be stored in the oven and normally placed in a skip saving disposal costs.



AUTOMATIC POWDER SYSTEMS



POWDER BOOTH

Gema are the recognised world leader in Automatic Powder Coating Systems, incorporating reciprocator mounted automatic powder guns, quick colour change booth, magic powder centre, bulk bag feed unit and high capacity cyclone and after filter.

Gema's technology, quality, and research, coupled with the knowledge, spares and service backup of The Surface Finishing Equipment Group bring our customers decisive advantages in powder coating technology. A selection of products from the Gema range is shown below.

OPTI AUTOMATIC POWDER GUN, OPTISTAR CONTROL UNIT, AND OPTIFLOW INJECTOR

- ◆ Integrated 100,000 volt Cascade with provides maximum charging and powder transfer.
- ◆ Sealed gun-body stops cross colour contamination.
- ◆ Large tube and range of nozzles for best coating pattern.
- ◆ Quick-change hose connector.
- ◆ Simple to use Control Unit stores up to 250 programs and allows for fast recall of all settings.
- ◆ Patented Digital Valve Control, offers high precision and repeatability.
- ◆ Optiflow Powder Pump is simple to maintain with one wear part and consistent uniform powder delivery.

QUICK COLOUR CHANGE BOOTHS AND POWDER CENTRE

Changing powder colours can be costly and time consuming. Any cross contamination between colours must be avoided.

Gema produced the Magic Booth and Opti Powder centre to minimise this downtime. A fully integrated powder management system. The Opti Centre uses the powder directly from the original 25kg bags. The internal cleaning of the suction tubes, injectors, powder hoses and guns takes place automatically. A level probe ensures an even powder output and detects when the powder container is empty.

Advantages:

- ◆ Quick Colour Change System.
- ◆ Very Short Cleaning Times.
- ◆ Plastic sandwich-wall booth surfaces are non-conductive to minimize powder accumulation.
- ◆ Easy-access booth design allows an operator to quickly perform any manual cleaning procedures from outside the booth.
- ◆ Powder quantity in the recovery system kept to a minimum.
- ◆ Optimum coating conditions in the booth for high quality work.
- ◆ Space saving design.



RECIPROCATORS

Used in powder systems worldwide to mount and move automatic powder guns. The Gema ZA reciprocators provide easily programmable and accurate automation of powder gun movement. This give best powder coverage, coating quality, and minimum powder wastage for each batch of components.

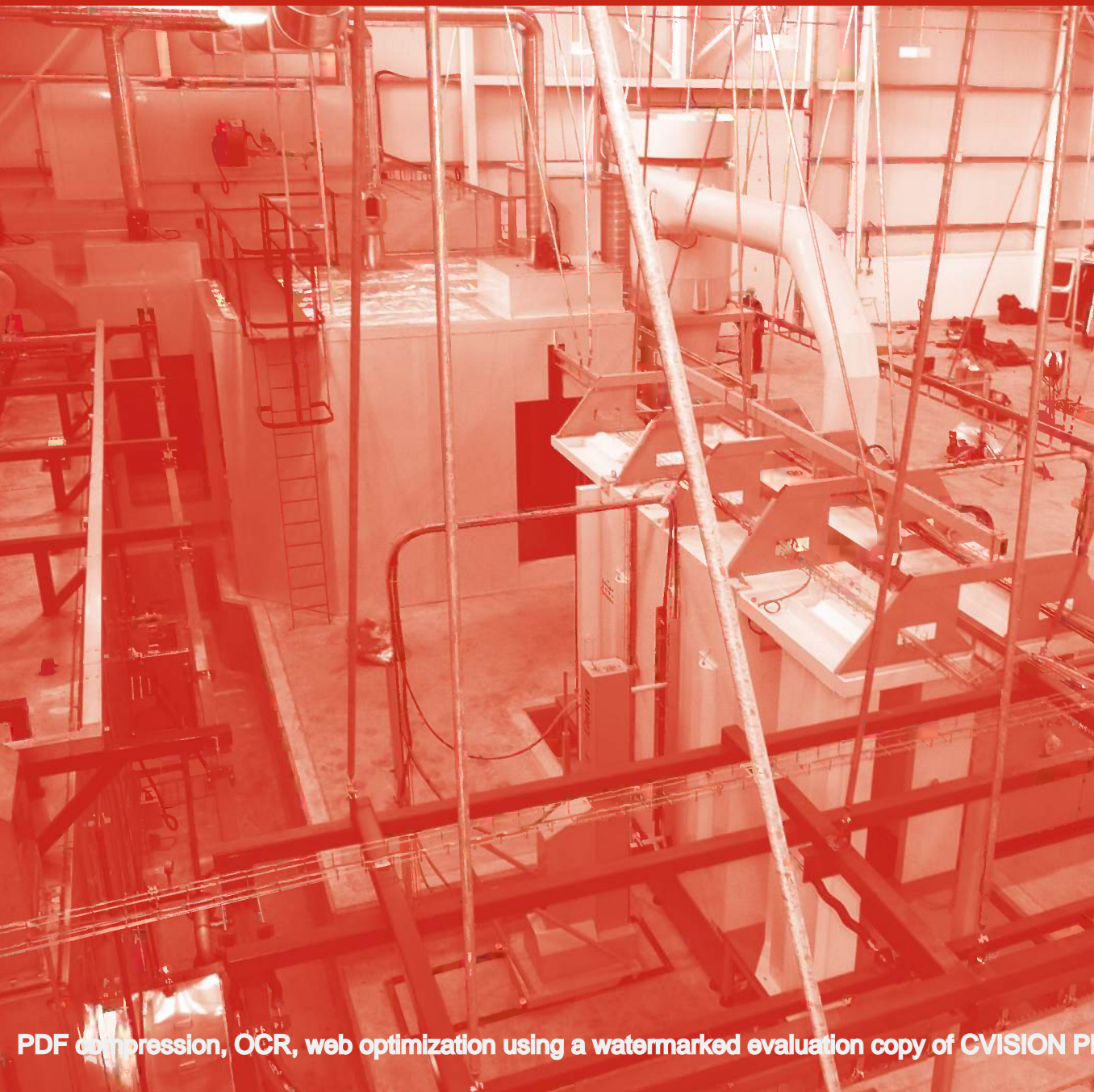
- ◆ The Gema ZA Reciprocator is an easily programmable, reliable, and maintenance friendly unit.
- ◆ Allows you to easily and precisely control gun positioning and movement for maximum flexibility.
- ◆ Displays accurate digital readouts.
- ◆ Up to 255 programmes can be stored for optimum flexibility.
- ◆ Multi axis systems are controlled by the Magic Control CM10 or the Compact opti-control CM20.





Surface Finishing
Equipment Group

SECTION TWO - COMPLETE FINISHING PLANTS



SECTION TWO - COMPLETE FINISHING PLANTS

INTRODUCTION TO COMPLETE FINISHING PLANTS

The Surface Finishing Equipment Group includes Ercon Finishing Systems who design and build complete product finishing plants and equipment including:

- Powder Coating Plants
- Electro Painting Plants
- Wet spray booths
- Box Ovens



POWDER COATING PLANTS

Centred around the market leading Gema powder application technology, Ercon design, manufacture and install complete powder coating plants which include, dip or spray pre-treatment sections, dry off ovens, powder booths, cure ovens and the conveyor system.

PRE-TREATMENT SECTION

The automatic pre-treatment sections spray the product with degreasing and etching chemicals. For larger parts such as aluminium profiles a dip pre-treatment system can be included in the plant.



DRY OFF OVEN

On a conveyorisised plant the pre-treated parts pass through a tunnel style dry off oven running at around 100 degC in order to dry the parts ready for the powder application. A dip tank style pre-treatment uses a well oven to dry the pre-treated parts for the required amount of time.



POWDER BOOTHS

Several styles of powder coating booth are available including the standard stainless steel booth for spray to waste applications or Plastic booths for fast colour change applications. Each booth is custom designed for the product size and chosen combination of manual and automatic powder spraying equipment. Access for the operator is either via an opening in the booth side or via a platform at one end of the booth to provide full walk round access.

The booth designs incorporate reciprocator slots for automatic guns and manual sprayer openings for operators using manual spray guns. All booths are linked to a cyclone and after filter to remove any surplus powder. Full powder recovery and recycling is possible using our advanced cyclone design with a bottom mounted sieve and powder pump, which returns the recycled powder back to the powder centre for re-use.



CURE OVEN

The cure oven is an air circulation type design with either single or multi-pass layouts, depending on the available space. The cure oven typically heats the product to around 180 degC for 15 minutes to melt and cure the powder.

The burner fuel can be natural gas, oil or electric depending on the availability on site. Inverters can be fitted to the burners to improve the accuracy of the temperature control and improve fuel efficiency.

Electric or gas infrared stages can be added to the oven in order to provide a pre-heat zone to achieve fast powder gelling and reduce the length of the air circulated zone. They can also be supplied as a stand-alone oven for certain applications.



COMPLETE FINISHING PLANTS

Arcon Finishing Systems
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CONTROL SYSTEM

Like all the other parts of plant our control systems are designed and built in house. From a basic push button control panel to a fully integrated PLC controlled HMI system our plant control systems are designed to meet the customers required level of automation and reporting. The control panels include all the motor contactors, inverters for variable speed drives, timers and interlocks to enable the plant to be run and controlled in a safe manner.

Our more advanced control systems include a touch screen interface for the operator who can see the plant status on a schematic plant layout and access historical data on plant performance and error diagnostics.



CONVEYORS

Ercon design and build the Rayridge range of conveyors which are selected to give the required capacity to carry the product around the plant. The conveyor system includes the track and chain supported from the floor or factory roof, together with the drive system and chain lubricator.

RAYRIDGE RR12 CONVEYOR

This medium duty conveyor has enclosed track and is available with either bottom or top entry. The conveyor carrying capacity is 30kg per pendant on a 300mm pitch. The chain uses custom bearings for long term reliability.

Individual pendants or flight bars can be used for more flexible loading of products or jigs.



RAYRIDGE RR8 CONVEYOR

This is our heavy duty conveyor with a standard 406mm pitch and load capacity of 63.5kg per pendant. Heavier loads can also be carried using a double pendant and a load bar.

Both types of conveyor are available in a conventional or inverted style, where the inverted style provides protection for the chain from overspray and dust is prevented from dropping onto the product.



ELECTRO PAINTING PLANTS

Made popular by the automotive industry EP plants apply specialist coatings with a very even film thickness to achieve high levels of corrosion resistance.

Various styles of plant are available for large or smaller products. These incorporate a series of dip tanks (up to 14 stages) to pre-treat the parts, rinse and coat the parts before they pass into the oven for curing.



A continuous conveyor or transporter system carries the parts from tank to tank allowing the required dwell time in each stage.



The ancillary systems on the plant include, demineralised water production, ultrafilter to clean the paint and effluent treatment.

COMPLETE FINISHING PLANTS

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Surface Finishing
Equipment Group

SECTION THREE - BLASTING EQUIPMENT



INTRODUCTION TO BLAST CLEANING



Surface Preparation is used to remove existing paints, corrosion, oxidization, or graffiti and to give the surface an etch to allow coating adhesion. In many cases Abrasive Blast Cleaning can provide the optimum method of surface preparation.



ADVANTAGES OF BLAST CLEANING

- ◆ Faster than other methods such as wire brush, chipping hammer, needle scaler.
- ◆ Fastest production of all techniques of surface preparation.
- ◆ Fully Controllable - Selection of equipment type, abrasive media used, pressures, duration of blast etc., allows for a light blast of stonework to 'full back to white metal' preparation of heavily contaminated steel.
- ◆ Can be used to both remove existing coatings and give a surface profile to ensure a strong bond with the new coating when it is applied.
- ◆ Low vibration compared to alternative methods.

TYPES OF BLASTING

- ◆ **Pressure Blast** - a pressure vessel using dry abrasive media is a popular economical and versatile method of blasting for most applications such as removing rust from bridges and other steel structures. Can be fitted with a vacuum system to provide a dustless operation.
- ◆ **Wet Blast** - in situations where dust free or a gentler blast without damaging the underlying surface is required the Satblast unit is ideal. Applications include removing graffiti from stonework, and white line removal from roads, and dustless blasting of steelwork.
- ◆ **Wheel Blast** - used in fixed installations with ball shot to clean and peen surfaces by impact.
- ◆ **Suction Blast** - used when more gentle cleaning is needed, requires less equipment.

OPEN OR CONTAINED BLASTING

- ◆ **Open Blast** - often used by on-site contractors where the media will not be recovered.
- ◆ **Blast Rooms** - provide a enclosure for containing dusts and collecting and recovering media.
- ◆ **Blast Cabinets** - normally used to blast smaller objects in a contained environment.

BLAST MEDIA

A large variety of medias can be used each with its own performance and cost trade-offs. The main categories are:

- ◆ **Expendable Abrasives** - these are low cost one use only abrasives.
- ◆ **Reusable Abrasives** - these are initially more expensive can be used several times where collection and recovery is possible.

PORTABLE ABRASIVE BLAST POTS



AH-24

AH-20

AH-14

AH-10

INTRODUCTION

Our portable blast machines have been improved and refined from years of feedback by leading contractors and industrial customers. The result is a range of rugged machines, which offer the features, and reliability users have demanded.

FEATURES

- ◆ Wide range of configurations and options to customise to your requirements.
- ◆ Designed and manufactured to the European Pressure Equipment Directive 97 / 23 / EC.
- ◆ Fully CE Marked in compliance to the Machinery Directive 2006 / 42 / EC.
- ◆ Low centre of gravity makes them ideally portable and stable for contracting or site work.
- ◆ Easy to load filling head with Safety Guard.
- ◆ Large hand-hole located for easy access to allow internal inspection and maintenance.
- ◆ Remote control deadman system with silencer for operator safety, water separator (for reduction in condensation problems), and abrasive metering valve.
- ◆ Safety Pressure Relief Valve.
- ◆ Choice of Abrasive Metering Valve types to provides precise metering of all types of media.
- ◆ Pop-up valve provides fast pressurization and quick abrasive loading.
- ◆ Available for sale or hire in sizes of 25 to 275kg capacity to suit a wide variety of applications from stone cleaning, marine, civil, metal restoration, and offshore.
- ◆ Use of the machines can be tailored to the job requirements by the selection of different blasting nozzles and heads, and the use of the appropriate abrasive type media.
- ◆ HF Version has additional pressure control features for more delicate cleaning work.
- ◆ High Pressure Versions available for increased pressure and production.
- ◆ The name plate is stamped with a unique serial number to identify each unit.

SPECIFICATIONS

Model	Capacity	Shell Diameter	Height	Dry Weight
AH-10	20L	10"	715mm	35kg
AH-14	50L	14"	1125mm	65kg
AH-20	100L	20"	1000mm	115kg
AH-24	200L	24"	1350mm	180kg

PORTABLE ABRASIVE BLAST POTS

SIZES

- ◆ **Model 10** The most compact pot in the range which can be put in the back of an estate car for easy transportation. Typically used for small jobs, touching up, or occasional blasting.
- ◆ **Model 14** This model still offers easy transportation and manoeuvrability by one man, but holds three times the abrasive of the model 10.
- ◆ **Model 20** A very popular pot with professional shot blasters. Ideal for medium to large projects and suitable for transportation in a small van.
- ◆ **Model 24** Our largest pot is ideal for large cleaning projects where downtime due to refill needs to be minimised.
- ◆ **Soda Blasting Pot** Designed for the particular demands of soda blasting and includes features to ensure smooth uninterrupted flow of soda, to give a gentle cleaning action with little or no effect to the underlying surface.



ABRASIVE METERING VALVE

- ◆ Choice of: Microvalve, Steel Grit Valve, Thompson Valve, Saunders Valve or Dry Sand Valve.
See page 31 for details on each valve.



REMOTE CONTROL SYSTEM

- ◆ Choice of: RMS100, RMV50 or Combo Valve. **See page 32 for details on each.**

HF MODELS

- ◆ **Model HF** - The blast pots listed above can be supplied as an HF model. This has an additional Pressure Regulator and air operated Abrasive Metering Valve (except Model 10). This provides exact control of blast pressure and abrasive flow as required for delicate work.



PACKAGE OPTIONS

The machines can be supplied as a bare pot or a ready to use package with a choice of accessories as shown:

- ◆ Nova Blast Helmet c/w Belt and Regulator - **see page 37, with spare visors.**
- ◆ 10m Twin Remote Lines with Deadman's Handle.
- ◆ 10m Blast Hose c/w fittings - **see page 26.**
- ◆ 10 metres breathing air line - **see page 33.**
- ◆ The hose lengths can be increased at additional cost.
- ◆ Blast Nozzle - standard or Silicone Nitride - long lasting - **see page 28.**
- ◆ Heavy Duty Gauntlets.
- ◆ Breathing Air Filter - pot mounted or Radex - free standing - **see page 40.**
- ◆ Pot Sieves - stops debris and caked abrasives from entering the pot to minimise blockages.
Pot lids - used to prevent rain and foreign objects entering the pot.



SATBLAST PORTABLE DUSTLESS BLASTING SYSTEM



THE SATBLAST SYSTEM

The versatile Satblast is a fully saturated wet blasting system which offers a modern solution for environmentally friendly blast cleaning. The Satblast has been developed to provide controllable abrasive cleaning power which is ideal for dustless blasting of all surfaces including stone, concrete, brick and steel. It is also effective in removing rubberised paints and bitumen.

- ◆ Operates at fully adjustable pressures from 20-100psi.
- ◆ Low water volume - Blasts with a mist not a water jet.
- ◆ Fixed fill of water and abrasive, no constant water supply required.
- ◆ The unit can operate at very low pressure for stone, brick and concrete cleaning avoiding water ingress into cracks and crevices and eliminating damage to the surface of the bricks etc.
- ◆ The unit also operates at high pressure for powerful blasting and cleaning to provide a key on steel and concrete.
- ◆ The Satblast is a fully pneumatically operated unit and is available in an ATEX version for use in hazardous areas such as the offshore and Oil and Gas industries.
- ◆ Can be used with a variety of medias.
- ◆ Often uses less abrasive when compared to dry blasting alternatives.
- ◆ 'Dust Free' operation protects your operatives and passers by from dust inhalation. No dry dust ingress into adjoining properties.
- ◆ Full CE Marked and designed in accordance with the Pressure Equipment Directive 97 / 23 / EC.
- ◆ Often improves production rates.

SPECIFICATIONS

Model	Capacity	ATEX Approved	Dry Weight	Standard Package Includes
SATB 50 Mk II	100L	No	120kg	Satblast Unit, 10m Blast Hose, Silicon Nitride Blast Nozzle, Operator Face Shield, and Ear Defenders.
SATB100 Mk II	200L	No	190kg	
SATB50 Mk II - Atex	100L	Yes	130kg	
SATB100 Mk II - Atex	200L	Yes	200kg	

ORDER CODES AND POPULAR SPARES

Code	Description
SAT16	Dial Air Regulator
SAT 4	Panel Mounted Gauge
SAT 6	Emergency Stop / Depressurise Button
SAT 8	Air On Off Switch
149-525SC	Thompson Valve Repair Kit
SAT7	Choke Button
SAT13	Camlock - Male
SAT14	Camlock - Female
SHC1	Safety Helmet with face shield and ear defenders
SHC4	Replacement visor only for above (SHC1)

TYPICAL USES

- ◆ **Concrete** - at low pressure for cleaning and washing away corrosive salts and / or in concrete repair at higher pressures for exposing aggregate, removing surface coatings and removing rust from Rebar.
- ◆ **Stone** - at low pressure for gentle cleaning and graffiti removal.
- ◆ **Brick** - at low pressure for gentle cleaning or removal of masonry paint.
- ◆ **Timber** - at low pressure for stripping paint from hard woods.
- ◆ **Fibreglass** - at low pressure for paint and coating removal.



BLAST & VAC DUSTLESS BLASTING SYSTEM

THE BLAST & VAC SYSTEM

Our Blast & Vac systems provide dust free blast cleaning which is ideal for the removal of hazardous coatings or for blast cleaning in sensitive areas where dust and debris are not permitted. While the blasting process is slower than open blasting the savings in dust containment time and cost often make this the ideal solution, even for non-hazardous coating removal.



Complete Blast & Vac System shown comprising of:

- ◆ Model 14 HF Blast Pot with Thompson Valve and Pressure regulator.
- ◆ Material Recovery Drum c/w lid and couplings.
- ◆ Water bath dust filter drum c/w lid and couplings.
- ◆ Coalescing filter and support.
- ◆ 10m 3" Vacuum Hose, 2 x 2" interconnecting hoses.
- ◆ 10m of Blast hose and remote lines.
- ◆ AbraVac with Silencer.
- ◆ 2m x 1" Air Line.
- ◆ No 3 B&V Head with nozzle.
- ◆ Heavy duty water separator.

This package can be tailored to suit your requirements for example with longer hose lengths.

ORDER CODES AND POPULAR SPARES			
Code	Description		
BNV1	Blast & Vac System complete with 10m hoses and No3 Head, as above		
BNV-3	No3 Blast Head complete	BNV-6	No 6 Blast Head Complete
B023	No3 Centre Tube	BNV6-CT	No 6 Centre Tube
B250	Outer brush for 3 head	B280	Brush for No 6 head
B255	Inner brush for 3 head	H250	Short Head complete
BNV-5	Right Angled Nozzle	H302	90 Deg Angled Head
B256	Outer brush for 5 head	H250	2" Vacuum Hose per m
B257	Inner brush for 5 head	H302	3" Vacuum Hose per m
BNV5-CT	No5 Centre Tube	A425S	Silencer
Note: System requires 375cfm @100psi		B506	Coalesing Filter Pad

ADVANTAGES

- ◆ Recovers abrasive **as it blasts**.
- ◆ No mess and no contamination.
- ◆ Variety of heads to work on different surfaces, inner or outer corners, edges, vertical or horizontal.
- ◆ Totally pneumatically driven without need for electrical supply.
- ◆ Ideal for removal of lead paint, asbestos and other toxic coatings and operation in sensitive areas.
- ◆ Fully adjustable blasting pressure from 15 to 100psi.
- ◆ A HEPA filtration system can also be provided to give an additional level of extra fine filtration.



USES / CASE STUDIES

- ◆ Blasting steel pipe work in Channel Tunnel, Mersey Tunnel, and many other contracts.
- ◆ Removal of lead paint from Royal Mail post boxes.
- ◆ Chemical works / food processing plants where no dust or residue is allowed.
- ◆ Asbestos removal contracts, and cement removal.



INTRODUCTION

Our BNR Blast & Recovery System is a totally dust free blast cleaning system which is ideal for the removal of hazardous coatings or for blast cleaning in sensitive areas where dust and debris are not permitted. This unit incorporates a dry cartridge filter and can be fitted with a HEPA filter to achieve a very high level of filtration.

FEATURES

- ◆ Designed specifically for blast cleaning of hazardous coatings such as asbestos, lead paint and low level radioactive material.
- ◆ Contains all used media and removed potentially toxic contaminants directly into drums for disposal with minimal operator contact, and easy disposal in the appropriate manner.
- ◆ Blasts, Vacuums and Contains used media, coatings, and contaminants in one operation.
- ◆ Option for HEPA filter on the final air discharge ensures no airborne contamination.
- ◆ System can be manufactured fully bespoke to your requirements.
- ◆ Option to recycle the media if the application allows.
- ◆ Dust Free operation protects your operatives and passers by from toxic inhalation.
- ◆ Fully adjustable blasting pressure from 15 to 100psi.
- ◆ Variety of heads to work on different surfaces, inner or outer corners, edges, vertical or horizontal.
- ◆ Options for pneumatic or electric driven vacuum generator.
- ◆ Designed to be used with virtually any type of abrasive.



APPLICATION EXAMPLES

- ◆ Widely used by Asbestos Removal contractors for the removal and containerisation of Asbestos Dust.
- ◆ Used throughout the country to remove, and contain for disposal, lead paint from steel or iron structures such as railway stations.
- ◆ Used for the removal of lead paint from Railway Structures.
- ◆ Used on contracts in Chemical Works, Food Processing Plants and Water Treatment Works, where dust and debris must be contained.



SPOT BLASTING

We offer 3 different Spot Blasting Machines which are ideal for spot cleaning of small areas.

POWER INJECTION GUN

This suction-blast tool is designed for dry abrasive blasting where the air supply is limited or the job is small. The tool is lightweight and compact and ideal where setting up a conventional pressure blast machine would be awkward or inconvenient. The Power Injection Gun can be used with all common media to clean or etch metal, clean masonry, etch glass, and other durable surfaces.




ORDER CODES AND POPULAR SPARES	
Code	Description
SG400	Complete Machine
SG403	Spare Nozzle
TECHNICAL DATA	
Air Pressure	45 - 100psi
Air Consumption	85 - 170cfm
Weight	2kg

EDUCTOMATIC

Our smallest closed-circuit tool designed for use with iron / steel grits. Dust and abrasive are trapped by the combination of the rubber boot around the blast nozzle, a vacuum, and a cotton bag for exhausting air. The operator controls blasting and recovery with a single trigger handle which has 2 stages for vacuum only or vacuum / blast. The hopper contains the abrasive and a venturi draws the abrasive into the airstream and propels it out the nozzle. The head swivels to allow blasting at any angle.



ORDER CODES AND POPULAR SPARES	
Code	Description
E10A	Complete Machine
E2004	Spare Nozzle
TECHNICAL DATA	
Air Pressure	90psi
Air Consumption	30 - 90cfm
Blast Pattern	30mm approx
Weight	3kg



IBIX

A lightweight portable blaster designed for small repair work. This unique low maintenance unit features a compact blast gun design so it is easy to operate in confined areas; this makes it ideal for automotive, shipping and offshore industries. High grade aluminium construction makes the unit very light. Wheels are fitted to allow the unit to be towed in a trolley form but the units can also be carried like a back-pack.

ORDER CODES AND POPULAR SPARES		
Code	IBIX13	IBIX28
Technical Data	Model 13	Model 28
Air pressure	2-7 bar	2-7 bar
Air consumption	25cfm - 50cfm	25cfm - 50cfm
Grit grain size	Up to 1.2mm	Up to 1.2mm
Hose length	6m (standard)	6m (standard)
Grit Capacity	13 Litre	28.7 Litre
Height	95cm	85cm
Width	45cm	45cm
Weight (empty)	12kg	29kg

BLAST ROOMS



INTRODUCTION

A blast room can be a very productive facility and a valuable asset to a business if it is designed and equipped correctly.

ADVANTAGES

- ◆ Many companies choose to purchase a blast room to offer them the control and cost advantages of bringing blast cleaning in-house.
- ◆ A blast room is used to contain both the work piece and the operator, and is designed to handle work too large even for the biggest blast cabinet - such as vehicles, or large fabrications.
- ◆ The rooms can either be located inside a building or weather proofed to enable the room to be sited outside where factory space is limited.
- ◆ Due to the abrasive being contained with the blast room, it can be recovered and recycled. Media such as chilled iron or aluminium oxide can offer significant cost savings when recycled.
- ◆ Various types of abrasive recovery system can be incorporated to collect used abrasive, remove dust and fines and return the cleaned abrasive to the blast pot for re-use.
- ◆ A dust extraction system is included to keep the blast room air clear.

FEATURES

In all cases a site survey and consultation is recommended to exactly determine the requirements and provide a quotation for the most appropriate system. The optimum specification will be based on several factors and trade offs between frequency of use, initial cost, and features required. Our blast rooms incorporate:

- ◆ Pressure blast pot for speed with remote control system for operator safety.
- ◆ Efficient dust extraction system to keep the work area clear for operator safety and productivity.
This is achieved using an electrically driven dust extractor and suitably positioned inlet and outlet ducts in the blast room.
The dust laden air is drawn through filter cartridges or filter bags.
- ◆ A Filter cleaning system by means of a reverse jet air pulses or via a shaker motor.
- ◆ Breathing air filtration system and air fed blast helmet for the operator.
- ◆ Abrasive recovery system - vacuum, bucket elevator, bucket elevator fed by a screw conveyor.
- ◆ Rubber lining to protect the room structure.
- ◆ Dust proof lights.
- ◆ Safety door interlock.



BLAST ROOMS

Key features of our blast rooms are shown below.

ABRASIVE RECOVERY SYSTEM

The abrasive recovery system:

- ◆ Returns the used abrasive to the blast pot ready for re-use.
- ◆ Clean and grade the abrasive to remove dust and fines.
- ◆ Provide additional abrasive storage capacity.

VACUUM DRIVEN RECOVERY

Our Vacuum Unit incorporates a vacuum generator and cartridge dust extractor unit and the storage silo and dust separation unit, which fits on top of the blast pot.

Abrasive is swept into a floor hopper in the blast room from where the vacuum system conveys it to the separation unit and storage hopper. Dust and fines are removed to the cartridge dust collector and the cleaned re-usable abrasive falls into the storage hopper ready for re-use. As the complete system is air driven the air supply normally used for the blast pot can be used to power the recovery system once blasting has stopped.



BUCKET ELEVATOR

The overall principle is similar, but instead of a vacuum being used as above, an electrical motor drives abrasive collection buckets on a belt. The initial cost is greater, but higher volumes of grit can be recovered.

SCREW CONVEYOR / SCRAPER FLOOR

In very high production environments screw conveyors can be incorporated into the floor to reduce the time to sweep the used abrasive to the recovery collection chute.

A Screw Conveyor consists of helical screws which sit in troughs below the blast room floor and move abrasive to the bucket elevator. An alternative is the Scraper Floor where a row of pneumatic cylinders drive blades across the abrasive, transferring it to the bucket elevator. Both systems are located below an open mesh floor so that all the abrasive is automatically recovered and recycled without operator intervention.



CONSTRUCTION

Blast rooms come in many shapes and sizes with various construction methods for the blast room structure. Small rooms are often made from a shipping type container with the necessary modification. Medium sizes rooms are often custom made in a similar fashion using corrugated steel panels to form a one piece blast room structure and larger rooms are assembled on site using interlocking panels.

Consideration is needed to the size, weight, and access requirements of the work-pieces being blasted.

Work pieces are generally positioned on a trestle or bogie in the middle of the room for blasting and should not be leant against blast room walls otherwise premature wear will occur.

Heavy products can be transferred into the room either by forklift truck, bogie on tracks or via overhead crane using a crane slot in the blast room roof.



CASE STUDY 1

A major North East engineering company required a doubling of their existing Powder Coating facilities in 2015 and SFEG secured the contract. This included:



- ◆ Removal and refurbishment of existing Gema Powder Coating Equipment from a sister plant in Scandinavia.

INSTALLATION, INTEGRATION AND COMMISSIONING OF:

- ◆ Gema GA02 Automatic Powder Guns, Control Drawers, and Optiflex Powder Pumps.
- ◆ Pre-treatment system - 4 stage, stainless steel; in line length 21 metres.
- ◆ Dry Off Oven - gas fired, 22 metre length.
- ◆ Curing Oven - gas fired, triple pass, air recirculation type.
- ◆ Flight Bar Conveyor system - 170 metre length, variable speed, continuous.
- ◆ Control Panel - custom built and fully integrated panel.
- ◆ Automatic powder paint booth, cyclone and after filter (using a combination of new and refurbished)

Additionally, for the same factory, the Paint Spray System was upgraded with Devilbiss Advanced Spray Guns, Honeywell Sperian Airvisor 2 Masks, and Norgren 3 Stage Breathing Air Filters.

CASE STUDY 2

A maintenance contractor in Norway required a facility to blast and paint offshore oil drilling equipment and components. SFEG worked in conjunction with our Norway Partner, Paintbox Pro, to design, manufacture, supply, and install a complete new process facility.



THE BLAST AND PAINT FACILITY ENCOMPASSED:

- ◆ Wash Down Room
- ◆ Blast Room for carbon steel, Blast Room for stainless materials
- ◆ 2 x Blast Pots, Dust Extraction, Abrasive Recovery
- ◆ Graco NXT Paint Pump
- ◆ RPB Blast Helmet, Spray Mask
- ◆ Spares and maintenance package

TO COMPLETE THE PROCESS FACILITY, PAINTBOX PRO SUPPLIED

- ◆ Spray Painting Room with AHU and Extraction
- ◆ Paint Kitchen with Extraction
- ◆ Paint Storage Room with Extraction

BLAST CABINETS

PRESSURE FEED CABINETS

Our range of Pressure Feed Blasting Cabinets are free standing, self contained blast cleaning machines suitable for removing tough coatings at a high production rate, and using wide a range of blast media.

- ◆ A Pressure Vessel provides high power blasting for a variety of applications.
- ◆ Cleans up to 5 times as fast as a suction cabinet for high production environments.
- ◆ Range of sizes and options available
- ◆ Simple foot operated on / off operation.
- ◆ Metering valve allow precise control of media entering into the air stream and enables full utilisation of a wide range of blast media sizes and types.
- ◆ Cyclone abrasive separator - automatically recovers, cleans and recycles abrasive during operation.
- ◆ Dry cartridge dust collector filters air, with reverse pulse cleaning



SUCTION FEED CABINETS

Our Suction Feed Cabinets are free standing, self contained blast cleaning machines. These are generally designed for occasional use, rather than a high production environment.

- ◆ Simple Operation using Foot Pedal on / off.
- ◆ Continuous Abrasive Recycling.
- ◆ Low Air Consumption.
- ◆ Air Pressure Regulator and Adjustable Grit Valve.
- ◆ Bottom Feed System.



TYPICAL CABINET APPLICATIONS

- ◆ De-scale and de-rust metal surfaces.
- ◆ Remove paint and powder coating (pressure only)
- ◆ Deburr, deflash castings and moldings.
- ◆ Provide decorative finishes to metals.
- ◆ Etching of glass, stone, or metals.
- ◆ Removal of release agents from moulds.
- ◆ Polishing.

INTRODUCTION TO EXPENDABLE ABRASIVES

There are 2 main classes of abrasive:

- ◆ EXPENDABLE as shown on this page.
- ◆ REUSABLE which are shown on the page opposite.

Expendable abrasives are generally designed for open nozzle blasting such as mobile blast pots, where the media is not recovered. After one use the media breaks down and is then discarded.

None of our products contain 'free silica' allowing them to be used without the hazards of silicosis, which occurs if traditional sand is used.

The Surface Finishing Equipment Group stock a wide range of types and sizes to suit your application. The type of abrasive is usually chosen dependant on the material / coating to be removed and the substrate material eg, steel, stone, brick.

A summary of the most popular abrasives is shown.



SPECIFICATIONS					
NAME	DESCRIPTION	TYPICAL USES	GRADES / GRAIN SIZE	BAG SIZE	PALLET SIZE
JBlast Supa	A synthetic mineral abrasive with a hard dense structure and many faceted angular grains to give a large number of cutting edges.	A high cleaning rate and etch acceptable for most industrial coatings e.g. ship's hulls, tank internals, pipe joints and general steel fabrications.	Grain size 0.2-1.5mm	25kg	1500kg (60 bags)
JBlast Standard	A coarse version of above.	Provides a coarse etch or anchor for cleaning heavily corroded steel, marine growth, cement build-up and prior to metal spray.	Grain size 1.4-2.5mm	25kg	1500kg (60 bags)
JBlast SupaFine	A fine version of above.	Provides a fine finish with a low profile for modern low build paints, selective coating removal, motor body repairs etc.	Grain size 0.2-0.7mm	25kg	1500kg (60 bags)
Abrablast Medium	A controlled mixture of inert recycled angular glass grit and Calcium Silicate.	A versatile media which can be used in any application where you would normally use an expendable abrasive.	Grain size 0.2-1.5mm	25kg	1500kg (60 bags)
Abrablast Fine	A finer version of above.	Ideal for use in our Satblast Wet Blast System, but also a versatile media which can be used many application.	Grain size 0.2-0.7mm	25kg	1500kg (60 bags)
Garnet	A hard angular natural mineral producing less dust than other expendable abrasives.	For high performance blasting and sites requiring low dust levels. The coarser grades may be recycled a number of times. Ideal for use in our Satblast Wet Blast System.	Fine 0.18-0.36mm Medium 0.2-0.6mm Coarse 0.5-1mm	25kg	1000kg (40 bags)
Olivine	A naturally occurring magnesium-iron silicate.	A safe alternative to silica sand as an abrasive for cleaning brick and stone. Ideal for use in our Satblast Wet Blast System.	Fine 0.12-0.5mm Medium 0.2-1.0mm Coarse 1.0-2.50mm	25kg	1500kg (60 bags)
Stonegrit EXTRA FINE	A Calcium Silicate synthetic mineral abrasive.	Suitable for natural stone and brick face cleaning, or removal of graffiti from decorative panels. Also the cleaning of special finished surfaces such as stainless steel, aluminium and others.	Grain size 0.2-0.7mm	37.5kg	1000kg (40 bags)
JBlast SC	A light coloured calcium silicate synthetic mineral abrasive.	Ideal for delicate applications include stonework, wood, brick / masonry renovation, graffiti removal, etc.	Grain size 0.6-1.0mm	37.5kg	1000kg (40 bags)

Discounted rates for full pallets.

INTRODUCTION TO REUSABLE ABRASIVES

There are 2 main classes of abrasive:

- ◆ EXPENDABLE as shown on the page opposite.
- ◆ REUSABLE which are shown on this page.

Reusable abrasives are generally used for 'closed circuit' blasting such as blast cabinets or blast chambers, where the media is collected and re-used. Although initially more expensive than Expendable, reusable abrasive only breaks down gradually after each use. Additionally a regrading process on most systems separates out the fines and dust so only good abrasive goes back to the pot / cabinet. The Surface Finishing Equipment Group stock a wide range of types and sizes to suit your application. A summary of the most popular abrasives and grades are shown. Please ask if you have requirements other than those shown below.



SPECIFICATIONS				
NAME	DESCRIPTION	TYPICAL USES	POPULAR GRADES / GRAIN SIZE	APPROX HARDNESS
Chilled Iron	A hard angular and dense abrasive which has sharp cutting edges to promote a rapid cleaning action. It quickly strips many types of surface contaminants from metal surfaces. Softer than aluminium oxide and does not fracture as easily.	Ideal for the fast cleaning and etching of painted or corroded parts such as steel fabrications, ferrous castings, and structural steelwork applications. The angular nature produces an etched surface on metal for superior adhesion of paint, epoxy, enamel, rubber and other coatings.	Fine > Coarse G07 (0.18 - 0.42mm) G12 (0.30 - 0.71mm) G17 (0.42 - 0.85mm) G24 (0.60 - 1.00mm) G34 (0.85 - 1.18mm) G47 (1.20 - 1.70mm)	8 Mohs
Aluminium Oxide Brown Standard	Brown Fused Alumina belongs to the group of electrocorundum. It is produced by controlled melting of calcined bauxite in an electric arc furnace. It is an angular, durable and can be recycled many times.	Variety of applications, from cleaning engine cylinder heads, turbine blades, cleaning and preparing parts for metalizing, plating and welding. Being lighter than metallic media, it minimizes damage to thin materials by eliminating surface stresses caused by heavier media.	Fine > Coarse FEPA (Grain size µm) 220 (53 - 75) 120 (90 - 125) 090 (125 - 180) 060 (212 - 300) 036 (425 - 600) 012 (1400 - 2000)	8.5 Mohs
Aluminium Oxide Virgin Brown	A purer and harder version of above.	Used when faster cutting rates are required than Brown Standard.	As Brown Standard	9 Mohs
Aluminium Oxide Virgin White	A white coloured version of above.	Used when faster cutting rates are required and when minimal surface discolouring is required.	As Brown Standard	9 Mohs
Glass Bead	Manufactured from lead-free, soda lime-type glass, made into a spherical shape. Glass beads are chemically inert and providing no risk of corrosion or contamination of the surface being blasted.	Primarily used in blasting cabinets for honing, polishing, peening, blending, finishing, removing light burrs and cleaning most light foreign matter. Provides a clean, bright, satin finish, with minimal alteration to the underlying substrate. Often used on stainless steel.	Fine > Coarse GB8844 (44-88 µm) GB53106 (53-106 µm) GB14974 (74-149 µm) GB150250 (150-250 µm) GB400600 (400-600 µm)	5.5 Mohs
Steel Shot	Spherical grains made of molten steel passed through a granulation process. Uses an impact rather than a cutting process, leaving minimal dust. A clean, smooth and polished surface through a peening action created by the acceleration of the shot is produced.	Both air powered, wheel blast, and floor blast systems can be used to accelerate the steel shot onto the surface of the part. Used for cleaning, and peening a metal surfaces. Used to impart compressive strength to load bearing metal parts such as crankshafts, engine turbine blades and springs.	Fine > Coarse S170: 0.42 - 0.71mm S230 0.60 - 0.85mm S330: 0.85 - 1.2mm S460: 1.20 - 1.7mm S550: 1.40 - 2.00mm	8 Mohs

Bag size is 25kg, discounted rates for 1000kg (40 bag) pallets.

SHOTBLAST HOSE



SFEG BLAST HOSE

Our standard shot blast hose has excellent abrasion resistance for conveying highly abrasive media such as copper slag, steel shot, aluminium oxide, glass bead, etc.

Features

- ◆ Antistatic construction reduces the build-up of static electricity and potential sparks.
- ◆ Working pressure 12 bar.
- ◆ Long service life due to abrasion resistant tube.
- ◆ Wear of the tube less than 60mm³ (DIN ISO 4649:2006)

Construction

- ◆ Tube: NR / SBR / BR, black, smooth, antistatic, abrasion resistant.
- ◆ Reinforcement: Textile wrapped.
- ◆ Cover: SBR, black, antistatic, cloth impression.

SPECIFICATIONS

Working Pressure	Safety Factor	Standard	Temperature Range
12 bar	3:1	EN ISO 3861:1997	-40°C / +70°C

SIZES AVAILABLE

Our code for per hose per metre	Internal size mm (inches)	External	Wall Thickness	Full Coil Length
BH4	13mm (1/2")	27mm (1-1/8")	7mm	40m
BH6	16mm (5/8")	30mm (1-3/8")	7mm	40m
BH3	19mm (3/4")	33mm (1-5/8")	7mm	40m
BH5	25mm (1")	39mm (1-1/2")	7mm	40m
BH1	32mm (1-1/4")	48mm (1-7/8")	8mm	40m
BH2	32mm (1-1/4")	54mm (2-1/8")	12mm	40m

Note: Coil Size is 40 metres. Also available in cut lengths in multiples of 10 metre i.e. 10m, 20m, 30m

ORDER CODES - BLAST HOSE ASSEMBLIES

Code	Description
BH1-ASSY-10E	1 7/8" OD Blast Hose Extension - with Claw Coupling at each end and twin remote lines
BH1-ASSY-10N	1 7/8" OD Blast Hose with Hose Coupling at one end and Nozzle Holder at the other, includes Twin Remote Control Line and Deadman's Handle
BH5-ASSY-10E	1 1/2" OD Blast Hose Extension - with Claw Coupling at each end and twin remote lines
BH5-ASSY-10N	1 1/2" OD Blast Hose with Hose Coupling at one end and Nozzle Holder at the other, includes Twin Remote Control Line and Deadman's Handle

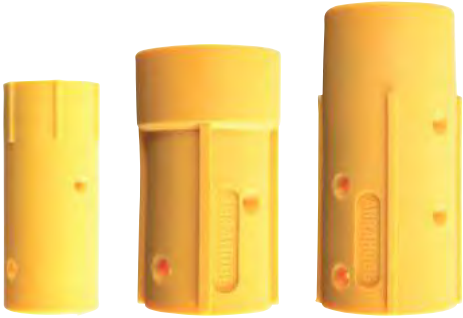
Note: For longer lengths substitute the 10 for the length required, ie, BH1-ASSY-20E for a 20m length

ORDER CODES TWIN REMOTE CONTROL LINE

Code	Description
100-138	Twin Line - Green / Yellow - per metre
AHC6	Nut and Tail 1/4 to suit
AHC7A	O Clip to suit
Full coil is 100 metres but can be sold per metre.	



BLAST HOSE COUPLINGS AND GASKETS



CHE0 NHP1 NHP2

NOZZLE HOLDERS				
Blast Hose Size Id x od	Nozzle Holder (plastic)	25mm Gasket for Nozzle	32mm Gasket for Nozzle	Threaded Aluminium Retainer
1/2" x 1-1/8"	CHE0	NG0	NG0	-
1" x 1-1/2"	NHP1	NG25	NG32	LR1
1-1/4" x 1-7/8"	NHP2	NG25	NG32	LR1
1-1/4" x 2-1/8"	CHE N3	NG25	NG32	LR1



CQP1 CQP2

PLASTIC HOSE COUPLINGS		
Blast Hose Size Id x od	Hose Coupling	Gasket
1" x 1-1/2"	CQP1	CG15
1-1/4" x 1-7/8"	CQP2	CG2
1-1/4" x 2-1/8"	CQP3	CG2



CQ0 CQ1 CQ2

METAL HOSE COUPLINGS		
Blast Hose Size Outside dia	Hose Coupling	Gasket
1-1/8"	CQ0	CG0
1-1/2"	BHC5	BHCG1
1-3/8"	BHC3	BHCG1
1-7/8"	BHC2	BHCG1
2-1/8"	BHC1	BHCG1



MP9

POT COUPLINGS				
Pot Type	Pot Coupling Metal	Gasket for metal pot coupling	Pot Coupling Plastic	Gasket for plastic pot coupling
25kg Mini Pot	MP9	CG0	NA	NA
All Other Pots	PC1	BHCG1	NPC1	CG2

COUPLING AND NOZZLE HOLDER GASKETS



CG15 CG2 CG1 CQ0 NG25

BLASTING NOZZLES

INTRODUCTION

Use of the correct Blast Nozzle is essential for an efficient blasting operation. Consideration must be given for the factors shown below.

- ◆ **Nozzle Shape:** Our standard nozzles utilise a venturi bore to create a wide blast pattern and increase abrasive velocity as much as 100% for a given pressure. This can give a 40% increase in productivity compared to straight bore nozzles. Our straight bore nozzles give a narrow concentrated blast pattern for spot blasting or cabinet work.
- ◆ **Nozzle Bore:** A large bore nozzle will allow high production rates if the volume and pressure of the air supply from the compressor is sufficient. If the nozzle bore does not match the compressor output the media will not leave the nozzle at high enough velocity to ensure blasting efficiency resulting in wasted abrasive and slowed rates - see opposite page for details.
- ◆ **Nozzle Material:** As the nozzle wears, the air requirement increases and if the air supply is not sufficient, the pressure will drop and blasting efficiency will reduce.

SILICONE NITRIDE

Our highest performance silicone nitride venturi nozzles are designed to potentially give many advantages over alternative materials. They can offer service life and durability similar to tungsten carbide, typically 20 times more wear resistant than boron alloy, are only about half the weight of tungsten carbide, and resist shatter better than silicon carbide. Complete with protective polyurethane jacket. Ideal for use with hard abrasives such chilled iron, and aluminium oxide.



BORON ALLOY

Our lowest cost venturi nozzle. Ideal for contractors using expendable abrasives such as J Blast, or Stonegrit. Requires the use of an LR1 Retainer to clamp the nozzle into the Nozzle Holder.

Also available in a side outlet version.



BLAST CABINET NOZZLES

A range of straight nozzles suitable for concentrate, and detail work. Our range suits both pressure blast cabinets, and suction feed cabinet guns.



ANGLED NOZZLE

A range of single and multi-outlet angled nozzles suitable for applications such as blasting in box sections. Tungsten Carbide.



WET BLAST HEAD

Wetblast attachment fixes to the end of the blast nozzle and injects an even supply of water into the abrasive stream immediately as it leaves the nozzle. This suppresses the dust, but is not as efficient as our Satblast System - [see page 6](#).



ORDER CODES

Description	Orifice Diameter	1/8" 3mm	3/16" 5mm	1/4" 6mm	5/16" 8mm	3/8" 10mm	7/16" 11mm	1/2" 12mm
Silicon Nitride	Full sized, venturi			SN-4/50	SN-5/50	SN-6/50	SN-7/50	SN-8/50
Tungsten Carbide	As above 45 angled				SANS5			
Boron Alloy	Full sized, venturi				CBSD-5	CBSD-6	CBSD-7	CBSD-8
Boron Alloy	Angled				CBSD-51			
Tungsten Carbide	Mini sized, straight	CT2L	CT3L	CT4L	CT5L	CT6L	CT7L	CT8L
Ceramic	For CS48				200-075	200-076		
Angled	1-3 outlets	Price on application						
Wet Head				WB-1				

AIR CONSUMPTION CHART

COMPRESSOR SIZE IS VERY IMPORTANT

Keep your productivity up - Maximise your compressed air pressure and volume.

A blast cleaning operation's productivity level directly depends on the volume and pressure of the air passing through the nozzle. In operations with slow production rates, there's usually not enough air volume (cfm) and pressure (psi). A larger compressor will provide more air to support a larger nozzle, and a larger nozzle gets the job done faster. Also ensure air lines and blast hoses are of the correct size to minimise pressure losses.

HOSE AND NOZZLE SELECTION GUIDE FOR BLASTING AT 100PSI NOZZLE PRESSURE					
Nozzle number	No. 4	No. 5	No. 6	No. 7	No. 8
Nozzle Size	1/4"	5/16"	3/8"	7/16"	1/2"
CFM at 100psi	103	158	229	312	407
Air Hose ID - minimum	25mm (1")	38mm (1 1/2")	38mm (1 1/2")	50mm (2")	50mm (2")
Blast Hose ID - minimum	20mm (3/4")	25mm (1")	32mm (1 1/4")	32mm (1 1/4")	38mm (1 1/2")

AIR CONSUMPTION (CFM) PER BLAST NOZZLE								
NOZZLE SIZE	NOZZLE PRESSURE							
	50psi	60psi	70psi	80psi	90psi	100psi	120psi*	140psi*
No. 4 (1/4")	57	66	75	84	93	103	119	136
No. 5 (5/16")	89	103	117	131	145	158	186	214
No. 6 (3/8")	129	149	169	189	209	229	269	309
No. 7 (7/16")	176	203	230	258	285	312	367	422
No. 8 (1/2")	229	265	300	336	371	407	478	549
Relative Efficiency	47%	55%	64%	74%	86%	100%	130%	165%

*Note: Ensure equipment is rated for these higher pressures

AIR SUPPLY HOSES

Get the most productivity from your air hose - use a larger ID hose.

When it comes to air compressor hose, bigger is always better. Running a large I.D. air line (1 1/2" or 2") from your compressor to your blast pot reduced the friction pressure loss caused in smaller, more restrictive sizes. Air pressure drops have a large impact on production. One 2" hose is better than 4 x 1" hoses.

Shorter is better. Don't loose pressure

Keep your air hose and blast hose lengths short. Put your compressor as close to the blast pot as possible, and keep your pot near your blasters to shorten the distance the air has to travel and keep pressure drops to a minimum. It's especially helpful to keep blast hose length short since pressure drops are even greater than in air hose because you're pushing abrasive and compressed air through the line.

MINIMUM COMPRESSOR AIR LINE SIZES	
NOZZLE ORIFICE SIZE	MINIMUM AIR LINE ID
1/4" (6.5mm)	1" (25mm)
5/16" (8mm)	1-1/4" (32mm)
3/8" (9.5mm)	1-1/2" (38mm)
7/16" (11mm)	2" (50mm)
1/2" (12.5mm)	2" (50mm)

THE GOLDEN RULE OF THUMB

Every 1psi below 100psi pressure at the nozzle equates to a 1.5% LOSS of blasting efficiency**

from	94psi	to	100psi	achieves*	9.4%
	90psi		100psi		16%
	80psi		100psi		35%
	70psi		100psi		57%



* Ensure equipment is rated for these pressures

** Approximate calculated efficiency - actual efficiency realised will vary, depending on abrasive types, abrasive size, nozzle size, nozzle wear, hose size, hose wear moisture content of compressed air, temperature of the compressed air, etc.

COMMUNICATIONS SETS AND AIR RECEIVERS

COMMUNICATIONS SETS

- ◆ Allows essential communication between blast operators, pot man and supervisor.
- ◆ Wireless systems have a headset connected to a VHF handset via a PTT (push to talk) button. These are ideal for most sites and have a range of up to 2 miles.
- ◆ Older style wired sets are also available for use in areas where a radio signal may be lost or poor.
- ◆ Variety of options for number of users, and cable lengths.



AIR RECEIVERS

Our Air Receivers or 'Air Pigs' have 2 functions:

- ◆ Act as a manifold to allow a single air source from a compressor to be distributed to several pieces of equipment.
- ◆ Act as a reservoir to hold air pressure and minimise fluctuations in air volume and pressure which could effect the operation of the equipment.
- ◆ Small receivers are often used to distribute air to air tools.
- ◆ Larger receivers also act as a water separator and are used to supply blast pots etc.
- ◆ The manufacture conforms with 97 / 23 / EC Pressure Equipment Directive.
- ◆ A Safety Pressure Relief Valve is fitted for safety purposes.
- ◆ Variety of sizes available and can be fitted with a choice of valves and hose connections.



WATER SEPARATOR

- ◆ An efficient water separator is essential to prevent abrasive getting damp as then it will cause blockages and lost production.
- ◆ Three sizes of Water Separators are available to suit all blast pots.

Code	Used on	Connection Size
WSR13	Model 10 blast pot	1/2" BSP
WSR40S	Models 14 and 20	1 1/2" BSP
WSR40	Model 24	1 1/2" BSP



ABRASIVE METERING VALVES

Our abrasive metering valves are used to efficiently control the amount of abrasive media entering the air stream during blasting operations. Each valve has it's own features and advantages. A selection are shown below.



MICRO VALVE

Typical Uses: Fitted to Portable Blast Pots for use with all types of medias. Accurate abrasive control and long life. Thread Size: 1-1/4 bsp.

ORDER CODES AND POPULAR SPARES

Code	Description
MV-A	Standard Micro valve complete (as shown)
125-8U	Urethane Sleeve



GRIT VALVE - RUBBER LINED

Typical Uses: Fitted to Portable Blast Pots for use with all types of medias.

ORDER CODES AND POPULAR SPARES

Code	Description
GV2	Standard Full Sized Steel Grit Valve complete (as shown)
GV1	Mini Steel Grit Valve complete for AH-10 Blast Pot
GV2A	Replacement Rubber Liner for Full Sized Valve
GV1A	Replacement Rubber Liner for Mini Steel Grit Valve



THOMPSON VALVE

Air operated abrasive metering valve which opens to the preset position on receiving an air signal, eliminating the initial surge of abrasive. Typically fitted to our Satblast, Blast & Vac, or standard Blast Pots.

ORDER CODES AND POPULAR SPARES

Code	Description
TVC-A	Thompson Valve with 1-1/4 Threads and Tungsten Carbide Seat
TVPU-A	Thompson Valve with 1-1/4 Threads and Urethane Seat
149-SC13	Tungsten Carbide Sleeve
149-13U	Urethane Sleeve
149-525SC	Repair Kit



SAUNDERS VALVE

Typically fitted to our smallest AH-10 blast pot.

ORDER CODES AND POPULAR SPARES

Code	Description
EGV1	Saunders Valve Complete - 1/2"
EGV1A	Replacements Diaphragms for above





REMOTE CONTROL SYSTEMS

A remote control system, popularly known as a 'Deadman' system, is essential for safe and convenient operation of a blast vessel. All our blast pots are fitted with this system. In operation a 'Deadman Handle,' attached to the blast hose, is held closed by the operator to keep the blast process operating. When the operator releases the handle (intentionally or in the event of an accident) an air signal is broken via control hoses to a valve on the blast vessel. This depressurises the machine and stops the blasting process.



RMS-100 REMOTE CONTROL VALVE

Typical Uses: Fitted to most of our Portable Blast Pots as standard.

ORDER CODES AND POPULAR SPARES

Code	Description
RCV-2	Complete Valve 1-1/4 and Silencer as shown
RCV-1RKT	Seal Repair Kit for above
RCV1-23	Silencer and Core for above
RCV1-31	Union Elbow and Nipple for above
RCV-2RKF	Repair Kit with silencer core for RMS-100

UNI-SK UNI FLOW VALVE FOR MINI POTS

Typical Uses: Fitted to most of our AH-10 25kg Mini Blast Pots as standard.

ORDER CODES AND POPULAR SPARES

Code	Description
UNI Complete Valve	Complete Valve as shown in picture
UNI-SK Seal Kit	Seal Repair Kit for above
UNI-EP	Silencer

KOMBI REMOTE CONTROL VALVE

A alternative to the RMS 100 remote valve.

ORDER CODES AND POPULAR SPARES

Code	Description
ComboV-A	Complete Valve as shown in picture
223-525	Seal Repair Kit for above

AUTO AIR VALVE

Typical Uses: Fitted to our Satblast machine as a control valve via a pilot signal.

ORDER CODES AND POPULAR SPARES

Code	Description
AAV 125	Air Valve Normally Closed 1 1/4 bsp Complete (as shown)
123 525	Repair Kit for above

DEADMANS HANDLES - All handles work with all Valves above except Auto Air Valve



RM21	
Fitted to many of our blast machines.	
Code	Description
RM-21A	Handle Complete
RM22	Button Washer
RM27	Spare Spring



NON BLEED	
This handle does not bleed air when in the open position saving air consumption.	
Code	Description
100-263	Handle Complete
263-525	Repair Kit



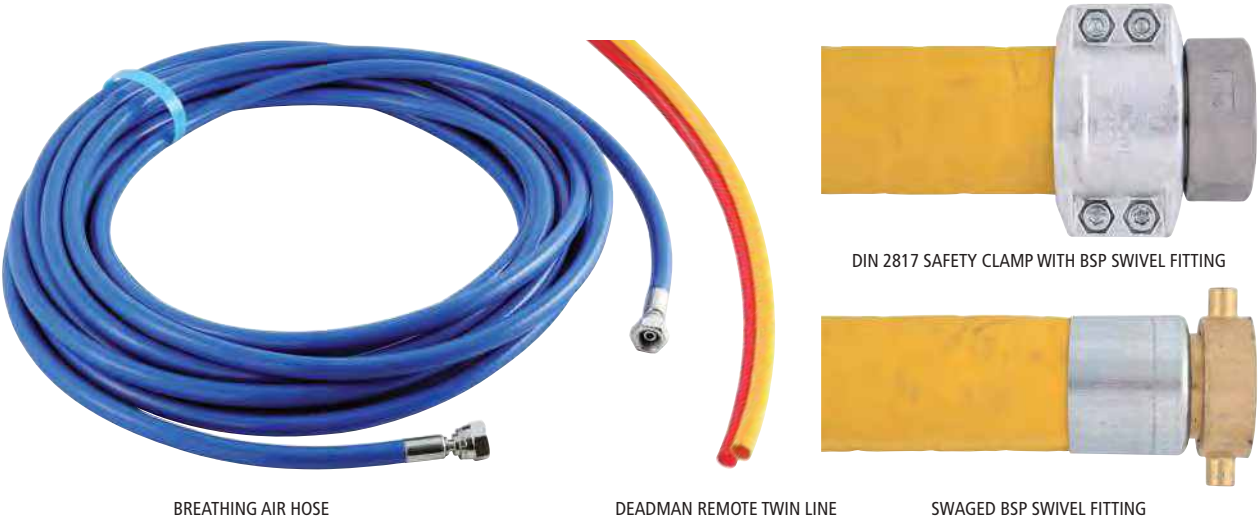
STANDARD	
A rugged cast aluminium handle.	
Code	Description
DMH150	Handle Complete
DMHR1	Button Washer



SAFETY	
Safety catch to prevent accident closure.	
Code	Description
SDH-1	Handle Complete
SDH1-6	Button Washer

AIR HOSES

ABRA CODE	DESCRIPTION
JH14040RS	Airline - 1/4 bore rubber - per metre
JH11008	Airline - 1/2 bore rubber - per metre
AH1-10BL/B/R/Y	10m x 1/4" Air Lines black, blue, red, yellow, 1/4 ends
AH1-20BL/B/R/Y	20m x 1/4" Air Lines black, blue, red, yellow, 1/4 ends
AHR5M516	5m x 5/16 Rubber Airline with 1/4 ends
AHR10M516	10m x 5/16 Rubber Airline with 1/4 ends
AHR15M516	15m x 5/16 Rubber Airline with 1/4 ends
AH315C3/4	15m x 3/4 inch Airline with Safety Claws
AH415MWB	15m x 1" Airline (mandrel wrapped)
AH4-15MWC	15m x 1" Airline c/w claws and clamps (mandrel wrapped)
AH1-BA-10B	Breathing Airline - 10m
100-138	Twin Line - Green / Yellow or Red / Yellow - per metre



BREATHING AIR HOSE

DEADMAN REMOTE TWIN LINE

SWAGED BSP SWIVEL FITTING

MISCELLANEOUS VALES AND FITTINGS



BALL VALES 1/4" BSP - 2" BSP

QUICK RELEASE COUPLINGS
VARIOUS TYPES AND CONNECTIONS

CLAW COUPLINGS WITH MALE OR
FEMALE BSP THREAD - VARIOUS SIZES

BLAST POT HAND HOLE GASKETS
VARIOUS TYPES

1/4" BRASS NIPPLES, NUTS, TAILS AND CLIPS

BLASTING QUALITY INSPECTION

Determining the quality of the shot blasted surface is essential to prevent potential costly future coating failure and rework. We supply a range of products designed to determine the quality of the blasted substrate. All of the products shown can be supplied with calibration and / or conformance certificates at additional cost.



SURFACE PROFILE - TESTEX GAUGE

The Testex Gauge is used in conjunction with Testex Tape to measure the average maximum peak-to-valley height of the blasted profile. Testex Tape is compressed onto the blasted area using a burnishing tool. The Tape is then placed into the anvil of the Gauge to give the reading. Additionally the Tape can be labelled and kept as a record. Complies with International Standards: ISO DIS 8503-3, BS 7079-C5, ASTM D 4417-C and NACE RP 0287-95.



ROUGHNESS COMPARATOR

The Surface Roughness Comparator is a 4 segment Plate that conforms to International Standard ISO 8503 and ASTM D4417 for grit and shotblast surface roughness comparison measurement. The Comparator is viewed alongside the test surface under a magnifier. The nearest profile to the Comparator determines the standard of finish.

DIGITAL SURFACE PROFILE GAUGE

The Surface Profile Gauge allows the peak-to-valley height of blast-cleaned surfaces to be accurately measured within 1 micron in accordance with the ASTM D4417 Standard. The gauge is zeroed and then placed on the blasted area. The foot sits on top of the peaks and the stylus travels to the bottom of the valleys allowing the gauge to display the peak-to-valley height. Range of measurement is 0 - 1000 micron.

HYPODERMIC NEEDLE GAUGE

A simple way of measuring the blast pressure just before the nozzle. Essential for knowing the efficiency of the blast process as a 1psi loss in pressure reduces production by 1.5%.

BLAST LIGHTS

Clear visibility during blasting operations is critical to ensure blaster safety and the quality of the blast finish. Efficient dust extraction is very important as is adequate lighting. Our range of blast lights includes our 12 volt blast hose mounted light which has a rubber housing and can be connected to a portable compressor battery or similar and our larger 110 volt light which uses PAR38 bulbs mounted in a bright yellow fibre glass housing.



RUBBER LAMPS - 12 VOLT

Code	Description
600081	Rubber blast light 12v c/w 5m cable
600085	Bulb 12 volt 20w
600089	Lens
600091	Spring Clip



YELLOW FIBREGLASS LAMPS - 110 VOLT

Code	Description
JH374	Yellow Blast light – 110 volt
JHLAMP	Par 38 bulb for above



BRISTLE BLASTER

The Monti Bristle Blaster® is a hand held tool, which is capable of Surface Preparation comparable to conventional blasting under the correct conditions. It can be offered where a conventional grit blasting processes is not practical or not permitted due to waste, space, or hazardous conditions. Blasting under the correct conditions. It can be offered where a conventional grit blasting processes is not practical or not permitted due to waste, space, or hazardous conditions.

- ◆ Removes corrosion or old coatings, cleans surfaces, and creates an etch for repainting.
- ◆ Ideal for spot-repair, site rework, and touch-up jobs such as weld seam preparation.
- ◆ Lightweight, Portable, Hand Held tool for jobs where access may be limited
- ◆ Abrasive free process limits dust produced
- ◆ Safer than Angle Grinding and produces superior results to Needle Scaling
- ◆ Patented Accelerator Bar increases impact torque of the bristles
- ◆ Can produce a surface quality that is comparable to grit blasted surfaces
- ◆ Cleanliness of SA 2.5 and Profile of 40-120µm can be optimally achieved
- ◆ Replaceable Bristled Belts in 11 or 23 mm width and carbon or stainless steel materials
- ◆ Pneumatic Version is ATEX Approved for use in Zone 1 areas
- ◆ Pneumatic Version has air cooling and dust exhaust
- ◆ Electric Version in 110 v / 230 V available (non ATEX)

TYPICAL APPLICATIONS

- ◆ Offshore Constructions such as Oil Rigs / Wind farms, Pipeline Construction and Repair
- ◆ Wind Turbine Maintenance, Ship Repair - such as weld seams
- ◆ Hydraulic Engineering, Bridges, Petrochemical Plants

CARRY CASE INCLUDES

- ◆ Bristle Blaster – pneumatic or electric
- ◆ 5 x 23 mm + 5 x 11mm Belts
- ◆ Belt Holder and Accelerator Bar
- ◆ Air Pressure regulators for pneumatic version

SPECIFICATIONS

Model	BRISTLE BLASTER® INDUSTRIAL PNEUMATIC
Weight	1.2kg / 2.6lbs
Required Air Pressure	6.2 bar (90 PSI) for Bristle Blaster® Belt 23 mm 5.2 bar (75 PSI) for Bristle Blaster® Belt 11 mm
Average Air Consumption	Approx. 17.5 CFM (0.5 m³/min)
Free Speed	0 - 3500 min -1
Air Inlet Size	R 1/4"
Required Hose Size	3/8" ID (9.5 mm)
Model	BRISTLE BLASTER® INDUSTRIAL ELECTRIC - 120V
Weight	2.3kg / 5.1lbs
Voltage	120 V ± 10 %
Free Speed	0 - 3200 min -1



Surface Finishing
Equipment Group

SECTION FOUR - PERSONAL PROTECTIVE EQUIPMENT





RPB NOVA 3 BLAST HELMET

The selection and use of the correct PPE is essential to effectively protect employees from risk or harm by creating a barrier against workplace hazards. As part of a system our RPB Nova 3 Blast Helmet provides essential protection from impact of abrasive, noise, and respiratory hazards. The RPB Nova 3 Blast Helmet is our flagship helmet, and combines breakthrough protection technology with advanced comfort, convenience, and safety.

- ◆ Worlds most advanced shot blast helmet
- ◆ Extra large Viewing Window provides excellent vision
- ◆ Patented Inner Lens replacement takes around 10 seconds.
- ◆ Large Tough Window Latch can be released wearing gloves
- ◆ Tear Off Lens System ensures one outer lens is removed at a time
- ◆ Motorcycle padded fit helmet, ensures highest levels of comfort, and turns with your head.
- ◆ Waterfall Air distribution, eliminates lens fogging, and keeps head cool
- ◆ Bellow Seal System keeps dusts and particles out
- ◆ Field Serviceable - all parts can be either replaced by hand or using an Allen Key
- ◆ Option - 4000-01 Cool Air Tube
- ◆ Option - RPB® C40 Climate Control Device - the ultimate climate control device, which can Heat or Cool the supplied air - with the slide of a lever
- ◆ **Note** - picture shows with Optional Blast Light.

SPECIFICATIONS				
Applicable Respiratory Standards	Assigned Protection Factor	Air Supply Requirements	Air Supply Quality Requirements	Weight
BS EN 14594	1000	235 - 425 litres / min	EN 12021 or better	1.49kg

ORDER CODES AND POPULAR SPARES			
Code	Description	Code	Description
NV3-713	Helmet with cool air tube, cape, and muffler.	NV3-735	Head Liner Foam Padding
NV3-725	Tear Off Lens - Pack 50	NV3-726	Visor Kit incl. Hinge and Latch
NV3-722	Inner Lens	NV3-732-A10	Side Padding Foam - Standard
NV3-724	Intermediate Lens - Pack of 50	NV3-732-A15	Side Padding Foam - Thick
NV3-750	28 Nylon Cape	NV3-733	Side Padding Covers - 5 pairs
NV3-751	38 Nylon Cape	NV3-731	Side Padding Frames - Left and Right



ADDITIONAL BLAST HELMETS



NOVA 2000 BLAST HELMET

The Nova 2000 is a proven favourite.

- ◆ Air duct system diffuses an even air flow through the helmet.
- ◆ Protection via outer, intermediate (optional), and inner viewing lenses. Luxurious foam padding ensures helmet sits comfortably on your head.
- ◆ Low Flow Indicator in view shows if air flow drops below minimum.
- ◆ Sound deadening foam makes helmet one of the quietest on the market.
- ◆ Tough nylon cape and detachable inner muffler.

SPECIFICATIONS

Applicable Respiratory Standards	Assigned Protection Factor	Air Supply Requirements	Air Supply Quality Requirements	Weight
BS EN 271:1995	1000	> 170 l/min	EN 12021 or better	2.88g

NOVA 2000 SPARES

Code	Description
NV200HC	Nova 2000 Helmet Complete with Cape and Climate Control Tube
NV2017	Tear Off Outer Visor - pack 50
NV2018	Inner Visor - Pack 10
NV2002/XL	Nylon Cape - standard / X-Large
NV2016CE	Belt / Regulator



DEFENDER II BLAST HELMET

The Defender is a popular choice with contractors due to its simple rugged design.

- ◆ Fully CE Marked with low airflow indicator.
- ◆ Lightweight, robust, rubber coated, glass fibre re-enforced polyester construction.
- ◆ Triple protection screen system consisting of a polycarbonate inner, glass intermediate, and protective wire mesh.
- ◆ Detachable cape and muffler.

SPECIFICATIONS

Applicable Respiratory Standards	Assigned Protection Factor	Air Supply Requirements	Air Supply Quality Requirements	Weight
BS EN 271:1995	1000	> 130-220 l/min adjustable	Air supply to EN 12021 standard or better	2000g

ORDER CODES AND POPULAR SPARES

Code	Description
JH40210	Defender Helmet complete with air flow regulator, and heavy duty cape and muffler.
JH40220	Mesh Outer - each
A000308	Cape with muffler
JH40230	Glass Intermediate - each
A001979	Window Frame
JH14010P	Inner Lens - each
A160472	Regulator and Silencer



APOLLO 60 AND 600 HELMETS

Code	Description
APH60CE	Apollo 60 Helmet complete with air flow regulator, cape, and muffler
APH0002	Outer Lens - Pack 6 tear offs for APH60
APH0002/100	Outer Lens - Pack 100 tear offs for APH60
APH4367	Inner Lens - each
VS10/100	Single Outer Lens - pack of 100
APH4373	Intermediate Lens - pack 100
APH600E	Apollo 600 helmet complete with air flow regulator, cape and muffler
APH600T6	Outer Lens - Pack 6 tear offs for APH600

BLASTING AND PAINTING PPE AND AIR TESTING

The selection and use of the correct Personal Protective Equipment is essential to effectively protect employees from risk or harm by creating a barrier against workplace hazards.



BLAST SUITS			
Our blast suits protect the operator from the impact of rebounding abrasive. Cuffs and ankles are secured with a buckle to stop abrasive from entering the suit.			
ORDER CODES AND POPULAR SPARES			
Code	Description		
NV3-755	RPB Blast Suit in Nylon and Cotton		
IN-B5-Size	Blast Suit in Leather and Cotton		
DESCRIPTION	CHEST SIZE	DESCRIPTION	CHEST SIZE
Medium	52"	XX-Large	58"
Large	54"	XXX-Large	60"
X-Large	56"		

HAND PROTECTION	
Code	Description
GL1	Blasters Gauntlets (Leather / Cotton) per pair
GL2	Rigger Gloves (Leather / Cotton) per pair
RG1	24" Rubber Gauntlets per pair
RG4	24" Rubber Gauntlets - heavy duty - per pair
DWG-8	Nitrile Gloves - pack 100

OTHER SAFETY EQUIPMENT	
Code	Description
SCH1	Hard Hat - complete (for use with Satblast and Blast & Vac)
SCH3	Visor Carrier
SCH4	Visor
SCH5	Ear Defenders
DP-M/L/XL	Tyvek Classic Coverall - Medium / Large / X-Large
EP3	Ear Plugs - with corded
EP4	Ear Plugs - non corded
EARDEFEND	Ear Defenders
PELTOR-H510F	Ear Defenders - folded
EYS1	Safety Glasses
EYG1	Safety Goggles
DH1	Disposable Tyvek painters hood
JH14203B	Bedford Cord blasters hoods

BREATHING AIR FILTERS



RADEX FILTER

The Radex Breathing Air Filter is a 6 stage cartridge filter which can remove oil / water mists and particulate pollutants down to 0.5 micron from the compressed air stream. The ideal companion to the NOVA 2000 Blast Helmet.

- ◆ Removes moisture and particulates down to 0.5 micron and odour from the compressed air stream.
- ◆ Date Sticker - ensures you can schedule filter cartridge replacement.
- ◆ Safety Valve safeguards the filter / respirators from over pressure.
- ◆ Outlet Pressure Regulator.
- ◆ Can be mounted in a wall or floor position via twist and lock mount.
- ◆ Drain Tap - Allows easy draining of collected condensates.
- ◆ Can be supplied with a variety of inlet / outlet options such as claw coupling.

SPECIFICATIONS

Filtration	6 Stage
Capacity	1-2 helmets in standard form
Safety Valve	125psi
Standard Inlet / Outlet	1" bsp / Quick Release Couplings

ORDER CODES AND POPULAR SPARES

Code	Description
04-900	Radex Breathing Air Filter as shown for 1-2 helmets
04-960	Conversion kit to run up to 6 helmets
APF3100	Replacement Cartridge for Radex - flanged style (Also fits Bullard type filters)
4F70433	Claw Coupling for Inlet fitting
04-916	Safety Valve
CPF03547	Replacement Cartridge for Clemco Type Filters - non flanged



NORGREN FILTER

The Norgren Breathing Air Filter is a popular two stage breathing air filter often fitted to our Portable Blast Pots.

SPECIFICATIONS

Filtration	2 stage Coalescing and Carbon
Capacity	1 helmet
Standard Inlet / Outlet	1/4 bsp female

ORDER CODES AND POPULAR SPARES

Code	Description
JHAAF1	Norgren Filter with mounting bracket, metal bowls and auto drain
BAF-40S	As above with polycarbonate bowls
BAF1	Service Kit with 3 filter elements, o rings and drain

- ◆ The filters above do not remove toxic gases such as carbon monoxide / carbon dioxide.
- ◆ The filters only provide the correct protection when used in accordance with manufacturer's instructions which are enclosed with each purchase.



AIR QUALITY TEST EQUIPMENT

AIR QUALITY TEST KIT

COSHH states there is a responsibility under HSE requirements to provide fit for purpose safety equipment for all employees that may work in an environment or carry out a process which may be hazardous to the employee's health.

Breathing air quality must be tested every 3 months or whenever a portable compressor is moved to a new location - whichever is the shortest period. To ensure that the air quality being supplied to a respirator helmet is safe to breathe in accordance with the requirements under BS EN 12021 and COSHH Respiratory Code of Practice we supply our Breathing Air Quality Test Kit. Using disposable chemically reactive tubes which change colour upon presence of contaminants, this can be used to spot check the content of compressed air for:

- ◆ Airflow.
- ◆ Carbon Monoxide.
- ◆ Carbon Dioxide.
- ◆ Water Vapour.
- ◆ Oil Vapour.



ORDER CODES			
Code	Description		
BATK1	Breathing Air Test Kit including a set of four x 10 gas detection tubes		
DAVT-1103/10	Carbon Monoxide Test Tube x10	DAVT-1104/10	Carbon Dioxide Test Tube x10
DAVT-1105/10	Oil Mist Test Tube x10	DAVT-1106/10	Water Vapour Test Tube x10



RPB® GX4 GAS MONITOR

Dangerous levels of toxic gases can cause fatal injury or death. The GX4 is an intelligent gas monitor that has the ability to detect up to 4 gases, giving you peace of mind.

- ◆ View your air quality from any device.
- ◆ Check readings from the informative illuminated display on the unit.
- ◆ Results are displayed in real time.
- ◆ You also have the ability to download logs and more.
- ◆ Connect from your laptop, tablet, phone or via a network.
- ◆ Pre-calibrated gas sensors that last for up to 2 years.

PERSONAL PROTECTIVE EQUIPMENT

Surface Finishing Equipment Group
www.sfeg.co.uk
Email: info@sfeg.co.uk

PAINT SPRAY MASKS



AIRVISOR 2 AIR FED MASK

The Airvisor 2 face mask is supplied from a suitable compressed air supply. The positive pressure inside the head-piece ensures the sprayer only breathes clean air. The use of such systems with isocyanates paints is a legal requirement in the UK. A practical solution for operator respiratory protection in paint shop, powder coating application, or industrial spraying environments where a high level of protection is required from a wide variety of paints including isocyanates, dusts, powders.

- ◆ Low Air Flow warning device / whistle.
- ◆ Diffuser provides optimum airflow inside headpiece.
- ◆ Belt flow regulator and activated carbon filter.
- ◆ Disposable Visor Covers - protect the main visor and maintain optimum vision.
- ◆ Wide variety of spares available.

SPECIFICATIONS

Applicable Respiratory Standards	Assigned Protection Factor	Air Supply Requirements	Air Supply Quality Requirements	Weight	Air Inlet
EN14594:2005	40	260-290 l/min	Air supply to EN 12021 standard or better	1100g	Series 25 Style QR Coupling

ORDER CODES AND POPULAR SPARES

Code	Description
DMAK-0023E	Air Visor 2 Air Fed Respirator complete with air flow regulator, carbon filter and full face headpiece
MPV-44	Tear Off Outer Visor - pack 50
DAVS-1404	Carbon Cartridge - each
25AAK13	High Flow Quick Release Body 1/4" male
DTVS-1504	Inner Visor - each



RPB T100 AIR FED HOOD

Standard package includes a Tychem® full face hood, air tube, and belt mounted airflow regulator. It provides a practical solution for operator respiratory protection in powder coating, paint shop, or industrial spraying environments. The DuPont® Tychem® lightweight hood offers superior comfort compared with a conventional, tight full-face respirator. The hood can be supplied with either Head Harness straps, or Hard Hat.

Code	Description
07-102-S	T100 Hood System - Full Face Tychem Hood, Head Harness. Hose from Belt to headpiece. Belt Mounted Flow Control Regulator.
07-202-S	As above but with Hard Hat
07-123	Peel off lens for T100 Mask - Pack 50



FULL FACE CARTRIDGE RESPIRATORS

Our full face cartridge respirators use disposable cartridges, and also offer eye and face protection. The Triplex glass screen can be cleaned to remove overspray.

Code	Description	Code	Description
5511987	Full Face Visor with Triplex Glass Screen	AFCK1	Air fed conversion kit
A2P3	Filter cartridge to suit	TRIPLEX	Spare Glass



T150 FULL FACE MASK

The T150™ supplied air respirator is an ergonomically designed full face respirator offering superior comfort and functionality. Suitable for a wide range of applications - to spray painting and coating applications. Polycarbonate construction is robust and lightweight, and a Panoramic lens offers users an unobstructed view of their surroundings.

Code	Description
11-902-C	T150 Full Face Mask System – Full Face Mask, Head Harness, Hose from Belt to headpiece, Belt Mounted Flow Control Regulator.
11-924	Peel off lens for T150 Mask - Pack 50

Honeywell



Surface Finishing
Equipment Group

SECTION FIVE - HIRE AND SITE EQUIPMENT

SECTION FIVE - HIRE AND SITE EQUIPMENT



INTRODUCTION TO HIRE EQUIPMENT

The majority of the equipment we sell can be supplied for both short and long terms hire periods. Delivery and collection can also be arranged throughout the UK.



HIRE FLEET EQUIPMENT

- ◆ Standard Abrasive Blasting Equipment - Blast pots - small to large capacity.
- ◆ Wet Blasting Equipment - Satblast - dust free wet blast machines.
- ◆ Towable Diesel Air Compressors - 170cfm, 265cfm, 375cfm, and 400cfm (Manchester Branch)
- ◆ Dust Free Vacuum Blasting Equipment - Blast & Vac full size, Eductomatic - small sized.
- ◆ Electric Abrasive Recovery Equipment - Munkebo grit recovery systems with collection hopper.
- ◆ Pneumatic Abrasive Recovery Equipment - Hoggajet recovery systems with collection hopper.
- ◆ Blast Rooms.
- ◆ Site Shotblast Dust Extraction Units.
- ◆ Air Extraction - Site Air Mover and Site Paint Fume Extractor.
- ◆ Dehumidifier - our desiccant site unit is suitable for drying the air before blasting and painting operations.
- ◆ Powder Coating Equipment - Gema.
- ◆ Paint Spraying Equipment - Graco Electric or Petrol spray units for decorating or contractor.
- ◆ Paint Spraying Equipment - Graco NXT / King Pneumatic Airless paint spray units.
- ◆ Texture Coating Equipment - Portaspray Gun and Pot.
- ◆ Pressure Washers - Petrol powered heavy duty.
- ◆ Other equipment - Portable Breathing Air Sets, Transformers, Spray Lance extensions, needle guns etc.
- ◆ Personal Protection Equipment - We can also supply all the necessary PPE you need such as helmets, masks, coveralls and gloves.



WHAT WE NEED TO KNOW

- ◆ What power source is available - electric 110v, 240v or 415v compressed air, or neither.
- ◆ What type of paint / materials you are going to spray or blast.
- ◆ What length of hose is required from the machine to the gun or nozzle.

With this information we can recommend the best machines and accessories for your project and ensure the equipment meets your expectations.

WHAT WE REQUIRE

If you hold a trading history or credit account:

- ◆ Official Purchase Order on letterhead.

If you do not hold a credit account:

- ◆ Deposit and 1 weeks hire up front, payable by credit card.
- ◆ Two forms of ID (such as photo driving licence and passport).
- ◆ Company letterhead if applicable.

INSURANCE AND TERMS OF HIRE

- ◆ Insurance - Customers are responsible for the security of any equipment until back at our premises. Insurance cover should be 'NEW' for 'OLD'.
- ◆ Terms and conditions - All hire is subject to The SFEG Group Terms and Conditions of Hire a copy of which can be provided on request.
- ◆ Training - Under most circumstances we can give brief instructions on using the equipment. Full training courses if required are also available.
- ◆ Emptying / cleaning / damage - a charge is applicable to any equipment not emptied or cleaned / flushed through before return, or damaged.

DUST EXTRACTION UNITS FOR BLASTING OPERATIONS

The extraction of dust generated by abrasive blasting is an important issue due to visibility, environmental impact, and operator safety.



DUST EXTRACTORS

Our portable dust extractors offer a purpose built solution, and are based on our Air Pulse Cartridge Dust Collector with adaptations to suit the rigors of site conditions. On many large site jobs the structure to be blast cleaned such as bridge steelwork is totally enclosed using an enviro-wrap system and our dust extractors can then be connected via flexible ducting to the enclosure to effectively remove the dust.

- ◆ Available for both sale or hire.
- ◆ Portable - our dust extractors are skid mounted and have lifting eyes and can be moved to and from and around site by a fork lift, crane, or hiab.
- ◆ Waste Disposal - Our robust portable extractors feature either collection bins (with plastic bag liners) designed to be emptied whilst the collector is still in operation to minimise downtime, or plastic bags on the bottom of the extractor ready for disposal.
- ◆ Flexible ducting - is used to connect the extraction unit to the blasting enclosure and extraction rates are typically 6,000cfm.
- ◆ Power - the extraction fan has a higher pressure rating than many extractors, allowing for long lengths of flexible ducting commonly used on site applications.

MODEL	6000cfm
Dimensions (metres)	2.90 high x 2.2 long x 1.4 wide
Dry Weight (kg)	1100kg
Power Required	11 Kw - 415 V 3 phase
Generator Required	60 KVA
Generator Breaker Required	63 amp Type D Breaker
Power Connection	32 Amp 5 Pin Plug
Duct Size	18"
Application	Dust extraction from shot blasting process. Not suitable for paint fumes
Solids to be handled	Abrasive Dust
Filter type	Reverse Jet Filter
Dust disposal method	Dust storage bags
Explosion rating	Non-explosive



HIRE AND SITE EQUIPMENT

Surface Finishing Equipment Group
www.sfeg.co.uk
Email: info@sfeg.co.uk

ABRASIVE RECOVERY SYSTEMS

Our pneumatic and electric abrasive recovery units allow the clean up, and transport of used blast media. Re-usable abrasive can then be recycled or expendable abrasive emptied into a skip for safe disposal.



MUNKEBO

The Munkebo abrasive recovery unit is designed for the retrieval and transport of abrasive media. The machine is electrically powered and designed to substantially reduce abrasive retrieval and site cleaning costs.

The units are driven by a high powered electric induction motor coupled to a heavy duty vacuum pump. The cyclone filter section is fitted with safety relief valve and automatically sequenced reverse jet filter system.

The Munkebo can recover spent abrasive up to 75 metres (using the MB3000), depending on abrasive size and type.

The recovered media is collected in a storage silo where it can either be re-used or emptied into a waste skip, as required.

The Munkebo is available for sale or hire in 2 sizes and is normally used in conjunction with a media Storage Silo.

MODEL	A6-55	MB2000	MB3000
Dimensions (metres)	1.6 x 1.5 x 2.6	2.3 x 1.5 x 2.4	3.0 x 1.5 x 2.4
Dry Weight (kg)	2000kg	2100kg	2850kg
Power Required	55Kw - 3 phase	45Kw - 415V 3 phase	75Kw - 415V 3 phase
Generator Required	150KVA	125KVA	200 KVA
Generator Breaker Required	150 amp	125 amp Type D Breaker	200 amp Type D Breaker
Recovery Rates	Up to 3-10 T/Hr	3-10 T/hr	3-15 T/hr
Max Recovery Distance	Up to 45m	40m	70m



HOGGAJET

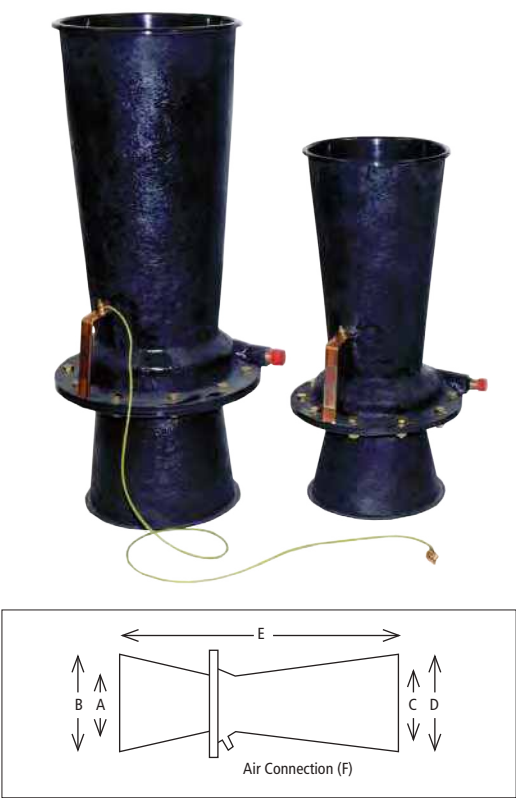
The Hoggajet is an air operated abrasive recovery system which has been tried and tested over many years in arduous situations and found to be efficient, and cost effective machine for the recovery of both expendable and re-usable abrasives.

Material is recovered through the gulper suction head and is drawn via the hose into the cyclone. The cyclone separates the dusts from the reusable grit which falls under gravity into the hopper for re-use.

Dusts are drawn into the filter box which filters the air through Filter Socks. Clean air is discharged through the JetPump and silencer to the surrounding atmosphere.

Available for Sale or Hire.

HOGGAJET	
Dimensions Filter Box	79" x 53" x 52"
Dimensions Cyclone	86" overall height x 43" x 37"
Dry Weight (kg)	540kg
Compressed Air Required	250cfm @ 100psi
Suction Hose	2.5" dia
Recovery Rate	upto 2.5 T/hr



VENTURI AIR MOVERS

Our site air movers offer a portable and simple way to extract dust and fumes.

- ◆ Fully air driven.
- ◆ No moving parts - works on Venturi effect.
- ◆ Air Inlet 3/4 bsp male or claw.
- ◆ Can be used as an exhaust unit for dusts or fume.
- ◆ Can be used as a blower unit to provide fresh air.

Normally used with flexible ducting to channel the exhaust air.

- ◆ Standard Version in fiberglass.
- ◆ Anti Static Version included conductive fiberglass and earth strap and is Ideal for use in hazardous environments.

DIMENSIONS	A	B	C	D	E
Code	8"	11"	12"	14"	34"

WEIGHT	EXTRACTION @ 60psi	EXTRACTION @ 100psi
8kg	2000cfm	3400cfm



GREEN SUCTION HOSE

Typical applications: Abrasive recovery and transport.		
Code	Description	Coil Size
JH224HD20	Suction Hose 2"	30m
JH224HD25	Suction Hose 2-1/2"	30m
JH224HD30	Suction Hose 3"	30m
JH224HD40	Suction Hose 4"	10m
JH224HD50	Suction Hose 5"	10m



CLEAR SUCTION HOSE

Typical applications: A very flexible suction hose used on our Blast & Vac systems for Dust Transport. Coil Size: 10m.	
Code	Description
H250	2.0" DIA Urethane Hose x 10m
H255	2.5" DIA Urethane Hose x 10m
H302	3.0" DIA Urethane Hose x 10m



HEAVY DUTY EXTRACTION DUCTING

Typical applications: Used for shotblast dust extraction on units such as our Portable Dust Boxes, and Vacuum Air Movers. Coil Size: 10m.	
Code	Description
DUCT16	Duct 400mm x 10m
DUCT20	Duct 500mm x 10m
DUCT24	Duct 600mm x 10m



Surface Finishing
Equipment Group

SECTION SIX - SERVICE AND TRAINING





SCHEDULED MAINTENANCE AND CALL OUT SERVICE

Our back-up support includes a team of factory trained service engineers who have many years of experience in the service and maintenance of blasting, painting, and powder coating equipment. We only use genuine manufacturer spares and by regular servicing you can ensure:

- ◆ Highest operating efficiency of your equipment.
- ◆ Lowest abrasive / paint usage.
- ◆ Optimum quality of your blasting or painting.
- ◆ Optimum speed of work.
- ◆ Lowest downtime.
- ◆ Safe operation.

We offer the following services:

- ◆ Scheduled Maintenance on Spraying and Blasting Equipment.
- ◆ Authorised Graco and Gema Service Centre.
- ◆ Planned preventative maintenance contracts.
- ◆ Emergency machinery breakdowns.

BLAST POT PRESSURE TEST SERVICE

We can carry out Pressure Testing on all types of Blast Pots from all manufacturers.

- ◆ A Blast Pot is a pressure vessel and is subject to inspection as required by legislation and your insurance company. The blast pot owner is obliged to observe regulations governing pressure vessels of this type.
- ◆ We can carry out an internal and external visual inspection and Hydraulic Pressure Test on your blast vessel. After the inspection we will either pass and certify the blast pot, or give you a report on the recommendations required to repair.
- ◆ We recommend hydraulic pressure testing should be carried out at least once of every 12 months, or in accordance with your local, company, or insurance regulations, whichever is sooner. Should any damage occur to the vessel in between inspection then it should be taken out of service immediately and contact us for advice.

LOCAL EXHAUST VENTILATION TESTING

- ◆ It is a legal obligation of an employer who uses local exhaust ventilation to control dust or fume, vapour to ensure that it is operating effectively and is in good repair.
- ◆ HSG258 'Controlling airborne contaminants at work: A guide to local exhaust ventilation' states that COSHH tests must be carried out at least once every 14 months on Local Exhaust Ventilation Systems.
- ◆ This includes Spray Booths, Spray Rooms, and Blast Rooms.
- ◆ We can carry out this service on either extraction supplied by ourselves or an existing installation. We can inspect and test to ensure that it is operating effectively and provide certification.
- ◆ If the extraction fails the test we will provide advice and recommendations on necessary improvements.

BREATHING AIR QUALITY TESTING SERVICE

- ◆ Breathing air quality must be tested every 3 months or whenever a portable compressor is moved to a new location - whichever is the shortest period. This is to ensure that the air quality being supplied to the helmet is safe to breathe and in accordance with the legal requirements under BS EN 12021 and COSHH Respiratory Code of Practice.
- ◆ While most portable or wall mounted breathing air filters can remove Oil mist, Water Vapour and Particulates, they may not remove harmful gases such as Carbon Monoxide and Carbon Dioxide.
- ◆ We can perform tests at any air point on your site to meet your legal obligations, covering:
Air Flow, Oil Mist, Water Vapour, Carbon Monoxide, Carbon Dioxide, Oxygen levels.

We provide documentation of the results. If any test exceeds the recommended maximum contaminant we will give advice and recommendations on necessary improvements.

TRAINING COURSES

Our comprehensive training courses normally quickly pay for themselves through the improvement in efficiency generated by the knowledge of achieving the best results from the correct equipment, media choice and set-up.



LOCATION

Courses are normally at our training facilities in Manchester but can be at the customers premises if required.

SHOTBLASTING TRAINING COURSES - DESCRIPTION

- ◆ Trainees learn the most efficient selection and use of equipment.
- ◆ All courses incorporate essential Safety Instruction.
- ◆ All Trainees Receive a Certificate of Attendance.
- ◆ Courses can be run for Minimum 3 People up to Maximum 8.
- ◆ Bespoke courses can be arranged to meet customers specific needs, covering particular topics or equipment.
- ◆ Questions will be encouraged at any time, including site specific queries. Attendees will be shown an overview of alternative types of equipment including common problem solving.
- ◆ The emphasis will be on safe operation and good housekeeping at all times.
- ◆ Our training courses are attended by both operatives completely new to the industry or by experienced blasters and painters who need a refresher course.
- ◆ All Course Dates are planned to suit customer requirements.

EXAMPLES OF COURSE CONTENT

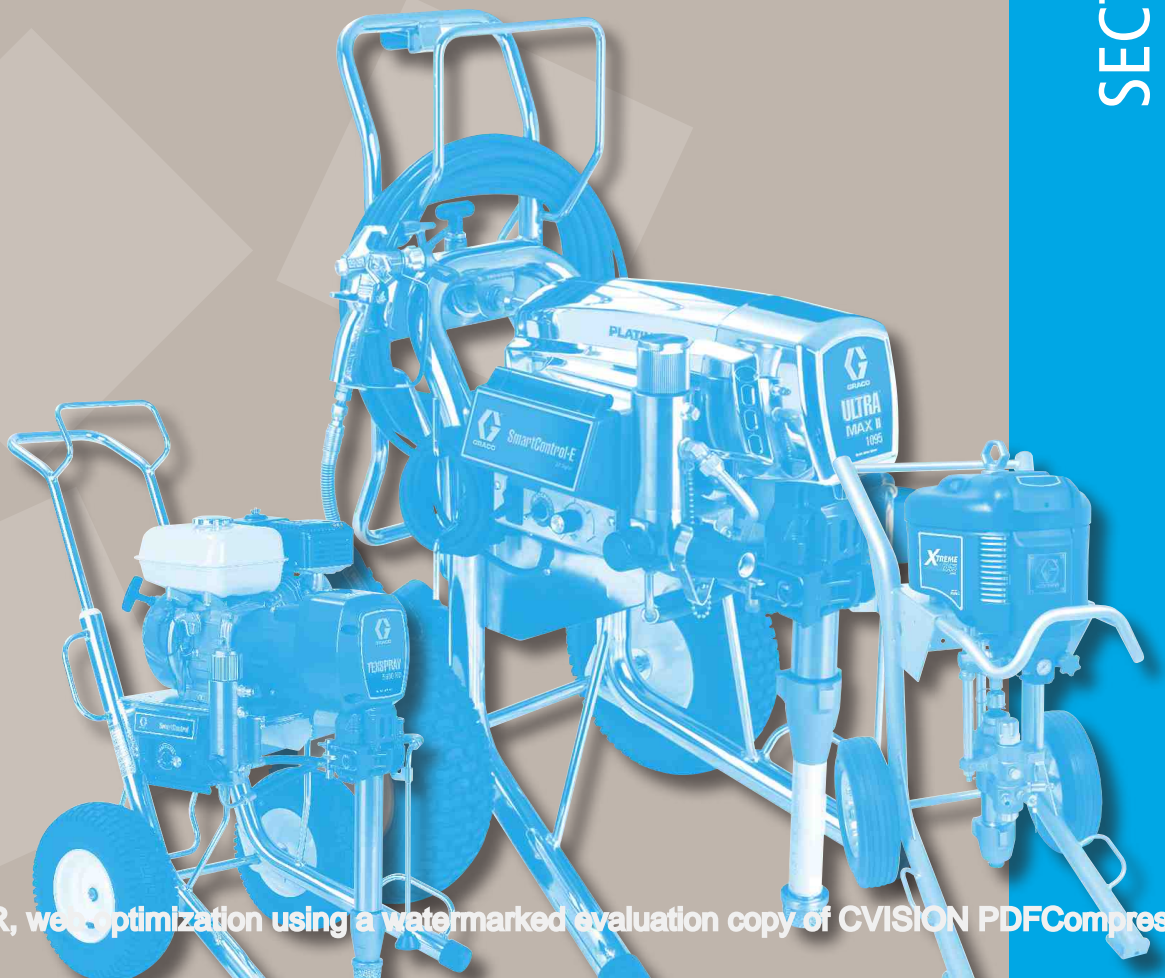
Blast Pot Operation, Safety and Maintenance - 1 Day

- ◆ Purpose and Alternative Methods of Surface Preparation.
- ◆ Advantages of Blast Cleaning.
- ◆ Types of Blast Cleaning Equipment - Dry, Wet, Vacuum etc.
- ◆ The Principles and Layout of a Pressure Blast Pot.
- ◆ Valves and Safety Systems.
- ◆ Air Supply Requirements.
- ◆ Use of Hose and Accessories.
- ◆ Nozzle Selection.
- ◆ Choice of Abrasive.
- ◆ Safe Operation - Awareness of Risks associated with Blasting and Blast Equipment, Do's and Don'ts, Use of Safety Deadman Remote Control System, Use of correct CE marked PPE, Air Quality, Noise, COSHH.
- ◆ Inspection and Testing of Finished Surface - Standards and Measuring Equipment Practical Session.
- ◆ Equipment Set Up, Operation and Maintenance.
- ◆ Questions.
- ◆ Troubleshooting.
- ◆ Routine Cleaning and On Site Maintenance.



Surface Finishing
Equipment Group

SECTION SEVEN - SPRAY PAINTING EQUIPMENT



SECTION SEVEN - SPRAY PAINTING EQUIPMENT



GRACO PORTABLE SPRAY UNITS



GRACO PORTABLE SPRAY UNITS

- ◆ Manufactured by Graco– the world-wide leader in painting equipment, and Fully CE Marked
- ◆ Electrically powered self contained units do not require the use of an air compressor.
- ◆ Petrol machines are powered by Robust Honda Petrol engines free from electric power concerns
- ◆ Supplied ready to go with Gun, Line, Tip, Toolkit, bottle of TSL oil.
- ◆ Can be provided as a compact Stand Mount unit for easy transport or Cart Mount for mobility.
- ◆ Max spray pressure 3300psi.
- ◆ Replaceable Filters stop debris from entering pump, or going onto job
- ◆ Pro-Contractors models feature Hose Reel, LED Display, Fast Flush, and Watchdog

There are 3 main ranges to suit all applications :-

- ◆ ST Max units are the perfect solution for residential applications and light commercial jobs.
- ◆ Ultramax II are ideal for the professional doing interior or exterior painting jobs – such as renovation, new construction, and commercial contractors.
- ◆ Mark V models can do everything the ST Max / Ultramax can do and are also suitable for heavy materials such as fire retardant intumescent coatings

MODELS AND SPECIFICATIONS

Model	Code	Type	Max Tip Size 1 gun (Th)	Type	Motor (HP)	Weight (kg)
390 Classic PC Stand	17C347	Electric	21	Stand	0.625	14
ST Max 495 PC Pro Stand	17C375	Electric	25	Stand	1.2	15
ST Max 595 PC Pro Hi-Boy	17C383	Electric	27	Cart	1.6	33
Ultramax 695 Pro-Contractor	16Y638	Electric	31	Cart	2.3	43
Mark V Pro-Contractor	16Y866	Electric	39	Cart	2.8	68
Gmax 7900 Pro-Contractor HD	16W888	Petrol	47	Cart	200 cc	69

- We also stock a full range of Spares and Accessories such as repair kits, lances, and tips.

SPARES AND ELECTRICAL PUMPS



LOWER PUMP REPAIR KITS	
Code	For Models
235703	Graco 390ST, 395ST, 495ST
244194	Graco ST Max 490-495-595, Ultramax 695
248212	Graco Ultramax II 695, 795
248213	Graco Ultramax II 1095 and Mark V

FILTERS	
Code	For Models
244067	Easy Out - for Ultramax II / GMax II - 60 mesh - medium - black
243080	Easy Out - for ST Max - 60 mesh medium - black
181072	Suction Strainer - 1 inch - for NXT / 695 / GMax II
181073	Suction Strainer - 1/2 inch - for / 695 / GMax II

TRI-TECH ELECTRIC SPRAYERS



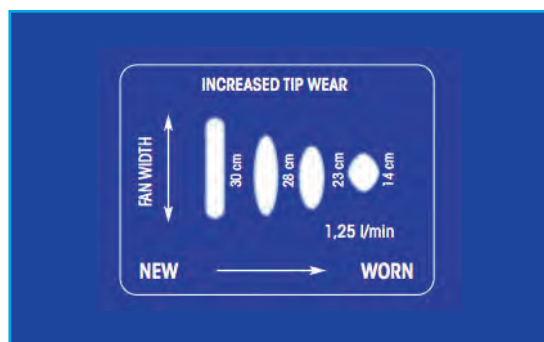
TRI-TECH ELECTRIC SPRAYERS

The perfect solution for residential applications and light commercial jobs.

- ◆ Manufactured by TriTech – a group which manufacturers parts for aerospace components.
- ◆ Fully CE Marked 110 Volt Model.
- ◆ Precision built, ultra-reliable, long lasting airless sprayers.
- ◆ Supplied ready to go with Gun, Spray Line, and Tip.
- ◆ Can be provided as a compact Stand Mounted unit for easy transport or cart mounted for mobility.
- ◆ Unique Design enables easy servicing.

MODELS AND SPECIFICATIONS							
Model	Code	Stand / Cart	Max Tip Size	Spray Type	Max Flow (L/min)	Motor (kW)	Weight (kg)
T5	600-800	Stand	25	Airless	2.27	0.82	16.8
T7	600-834	Cart	27	Airless	2.65	1.05	34.9

AIRLESS SPRAY TIPS



Tip size - Thou. Inch	Material
007 – 009	Dyes
009 – 011	Ink
011 – 013	Stains Lacquers Oils
011 – 015	Enamels
013 – 015	Urethanes
015 – 019	Latex
015 – 019	Acrylics
017 – 021	Emulsions
023 – 031	Block fillers
029 - 035	Intumescent
031 – 043	Epoxies

AIRLESS SPRAY TIPS INFORMATION

An airless spray pump pressurises the material being sprayed and forces it through the small orifice of the spray tip under high pressure. This process atomizes the paint in a controlled fan width and flow rate.

Choosing the correct tip will decrease overspray, provide the correct finish at the correct thickness, provide more control, and use less paint.

Tip Wear:

- When a spray tip wears the orifice gets rounder which makes the fan pattern smaller. When a tip with a 12 inch wide fan pattern wears to a 9 inch fan pattern it uses 30% more paint over a 25% less area.

Getting the most from your spray tip depends on several factors:

- Fan width - picked to match the size of the object being sprayed.
- Orifice size - suited to the type of paint you are spraying and thickness required.
- Pump Output - each pump can only handle a tip up to a certain size.

SIZE CODES EXPLAINED

XHD 5 21

First 3 Digits "XHD" = Type of Tip

4th Digit - spray angle - "5" is 50% angle, or multiply by 5 to get the fan width eg 5 x 5 = 25cm fan

5 and 6 digits = Tip Orifice Size e.g. 21 Thousands of an inch

ORDER CODES

Description	Code	Colour	Typically used with	Max Pressure	Size Range (thou)	Holder Code	Seals / Seat Kit
Reversible Tips - can be turned through 180 degrees to clear blockages							
XHD RAC	XHD-xxx	Grey	NXT Pneumatic Pumps	7250psi	7 - 81	XHD001	XHD010
RAC X Fine Finish	FFA-xxx	Green	Electric Pumps Petrol Pumps Merkur / G40 Air-Assisted Pumps	4050psi	8 - 14	246215	246453 Standard
RAC X Standard	PAA-xxx	Blue		4050psi	15 - 25	246215	248936 Strong Solvents
RAC X HD	HDA-xxx	Brown	Electric or Petrol Pumps	4050psi	27 - 71	246215	
Linellazer	LL5-xxx	Yellow	Linellazer	4050psi	13 - 55	243161	243281
Non Reversible Tips - flat or button type							
Button Tip AA	GG4-xxx	Metal	G15 / G40 Air Assisted		7 - 39	24D439	
Button Tip Fine	163-xxx	Metal	All pumps	4050psi	08 - 32	220251	166969 Thin 162863 Thick
Button Tip	269-xxx	Metal	All pumps	5000psi	11 - 35	220251	



GRACO XTREME HEAVY DUTY SPRAYER



NXT XTREME SPRAY PAINTING PACKAGE

The Graco NXT is the worldwide industry standard for airless spray painting. The name 'airless' derives from the fact that the material being sprayed is atomised by hydraulic pressure at the spray tip. Working at high pressures, the NXT is designed to cover large surfaces quickly. By varying the tip size a variety of coatings can be applied.

- ◆ Graco NXT is tested to out perform and outlast all other sprayers.
- ◆ Available in variety of models, configurations, flow rates and pressures.
- ◆ Handles the toughest coatings.
- ◆ Typical uses: application of protective coatings on ships, bridges, construction vehicles, railcars, or containers, as well as interior and exterior painting and decorating, and the application of fire protective coatings.
- ◆ Easy access air controls for quick, easy adjustments.
- ◆ De-icing model reduces downtime due to freeze-ups.
- ◆ Heavy-duty cart with semi-pneumatic tyres.
- ◆ Hardened Cromex™ coated piston.
- ◆ Supplied as a ready to go package - complete with XTR Spray Gun, Delivery Hoses, Suction Hose, Filters and Reverse-a-Clean Spray Tip.
- ◆ Optional: Data Trak Pump Monitor provides material usage data and system diagnostics.

MODELS AND SPECIFICATIONS						
Model	Description	Air Inlet Size	Output at 60 cpm (l/min)	Max Working Pressure (psi)	Weight (kg)	Gun Included
X60DH3	Cart Mounted Package	3/4 NPTF	12.9	6000	110	XTR7
X70DH3	Cart Mounted Package	3/4 NPTF	11.0	7250	110	XTR7
X90DH3	Cart Mounted Package	3/4 NPTF	8.7	7250	110	XTR7

POPULAR SPARES



MANIFOLD FILTERS AND SUPPORT			
Code	Description	Code	Description
167024	30 mesh (coarse)	167026	100 mesh (fine)
167025	60 mesh (medium)	186075	Support for filter



SUCTION HOSE - WAND & STRAINER (Fits all pump models above)	
Code	Description
181072	1" inlet strainer
197682	Suction Wand
247301	Suction Hose



FOR SPRAY TIPS
AND PAINT HOSES
SEE PAGES 58 AND 60

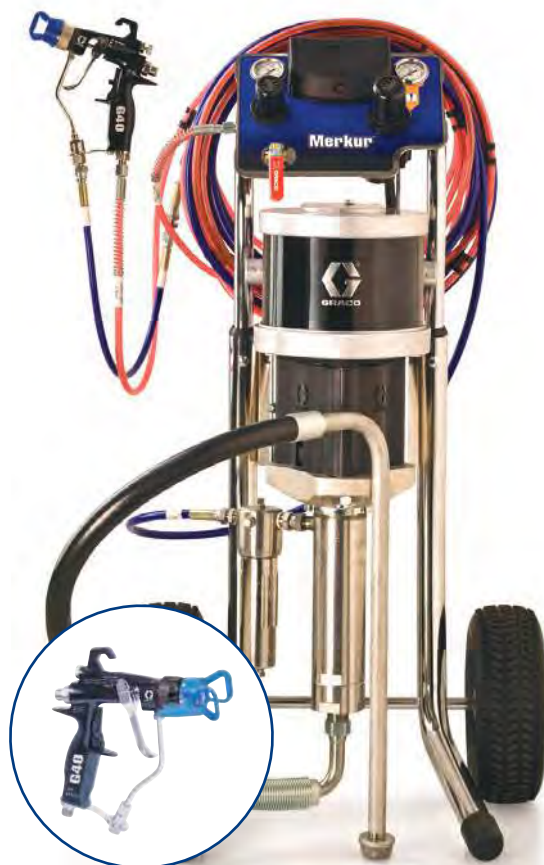


LOWER PUMP REPAIR KITS (Contains upper and lower packings, glands, o rings, balls)		
Code	For Pump Model	Description
24F967	NXT 60:1 - 220cc	Standard - Xtreme - UHMWPE/Leather - for abrasion resistance
24F968	NXT 60:1 - 220cc	Tuff Stack - Carbon Filled PTFE - for chemical / temp. resistance
262793	NXT 60:1 - 220cc	X-Tuff - UHMWPE/ PTFE - for chemical resistance
24F969	NXT 70:1 - 180cc	Standard - Xtreme - UHMWPE/Leather - for abrasion resistance
24F970	NXT 70:1 - 180cc	Tuff Stack - Carbon Filled PTFE - for chemical / temp. resistance
262792	NXT 70:1 - 180cc	X-Tuff - UHMWPE/ PTFE - for chemical resistance





AIR ASSISTED SPRAYER



GRACO MERKUR PAINTING PACKAGE

The Graco Merkur Air Assisted Airless with G40 Gun package combines hydraulic airless pressure at the spray tip, plus the introduction of air into the fluid stream at the face of an air cap. The dual atomisation results in a fine spray pattern, giving a high quality finish that standard airless systems does not produce, whilst still maintaining a fast coverage speed.

Ideal for fast, professional fine finish spraying with light viscosity, water and solvent based materials. Typical uses are furniture manufacture, and joiners.

Features:

- ◆ Stainless steel pump for solvent and water based materials.
- ◆ High efficiency coverage saves paint.
- ◆ Low pulsation output / Self adjusting pump packings.

Package includes:

- ◆ Choice of Cart, Stand, or Wall Mounted Pump.
- ◆ G40 Gun with Fixed or Reversible Spray Tip.
- ◆ Air and Paint Hose, Suction Hose and wand.
- ◆ 3 stage Replaceable Filter System from suction to gun.

MODELS AND SPECIFICATIONS

Model	Description	Output at 60 cpm (l/min)	Max Working Pressure (psi)	Weight (kg)	Air Consumption @ 20 cpm
G45C19	45:1 Package Cart Mounted Complete with Gun	3.0	4000	48	20 - 30cfm
24C855	G40 Gun Only with Flat Tip	NA	4000	0.45	5 - 10cfm

POPULAR SPARES



MANIFOLD FILTERS

Code	Description	Code	Description
167025	60 mesh (medium)	167026	100 mesh (fine)



INLET STRAINER

(Fits all pump models above)

Code	Description
181073	1/2" inlet strainer



GUN FILTER

Code	Description
205264	100 mesh fine
205265	60 mesh medium



FOR AA SPRAY TIPS AND PAINT HOSES
SEE PAGES 58 AND 60



GRACO XTR-7

Typical Uses: Industrial Contractor with Pneumatic NXT / XP70 Pumps.

SPECIFICATIONS

Max Pressure	Filter	Hose Swivel	Fluid Inlet	Diffuser	Weight
7250psi	Built In	Built in	1/4 npt	7/8 UNF	688g

ORDER CODES AND POPULAR SPARES

XTR703	Gun Complete with filter, swivel, tip, guard
248837	Repair Kit with Diffuser, Needle, Seals
287032	Filter - 60 mesh standard
287033	Filter - 100 mesh fine



GRACO CONTRACTOR

Typical Uses: Decorating Contractor with Electric Airless Pumps.

SPECIFICATIONS

Max Pressure	Filter	Hose Swivel	Fluid Inlet	Diffuser	Weight
3600psi	Built In	Built in	1/4 npt	7/8 UNF	630g

ORDER CODES AND POPULAR SPARES

288475	Contractor Gun with filter, swivel, tip, guard
288488	Repair Kit with Diffuser, Needle, Seals
287032	Filter - 60 mesh standard
287033	Filter - 100 mesh fine



GRACO SILVER PLUS

Typical Uses: Industrial Contractor with medium pressure Pneumatic Pumps.

SPECIFICATIONS

Max Pressure	Filter	Hose Swivel	Fluid Inlet	Diffuser	Weight
5000psi	Option	Option	1/4 npt	7/8 UNF	688g

ORDER CODES AND POPULAR SPARES

235460	Silver Plus Gun without tip, Holder (order separately)
235474	Repair Kit with Diffuser, Needle, Seals
204940	Hose Swivel - optional accessory - see page 61
210500	Filter - optional accessory - see page 61



GRACO G40 AIR ASSISTED AIRLESS GUN

Typical Uses: low overspray with fine finish, light to medium materials, joineries.

SPECIFICATIONS

Max Pressure	Filter	Hose Swivel	Fluid Inlet	Air Inlet
4000psi	Built in	Built in	1/4-18 npsm	1/4-18 npsm

ORDER CODES AND POPULAR SPARES

G40 Gun	Gun with filter, swivel (order Tip and Guard separately)
24C855	G40 Gun with Flat Tip
24C857	G40 Gun with Reversible Tip
205264	Filter - 100 mesh
205265	Filter - 60 mesh



FOR SPRAY TIPS, PAINT HOSES AND ACCESSORIES
SEE PAGES 54, 60 AND 61





GRACO PLURAL COMPONENT SYSTEMS

The trend for the protective coatings industry is toward high solids, 2 component coatings. Formulated with less solvent, these coatings reduce VOC emissions and speed production with faster cure times, and tough protective qualities. The Graco XP70 and XM machines are designed to accurately feed, meter, and mix the paint and hardener at the correct ratio before pumping the mixed material to the spray gun.

FEATURES AND ADVANTAGES

- ◆ Reduces material costs - only mix as much material as you need to spray.
- ◆ Reduce solvent costs - you only need to flush the static mix tube and hose to the gun.
- ◆ Provides consistent material quality to reduce rework.
- ◆ Materials are proportioned by precision pumps and mixed on-ratio at the mix manifold.

TYPICAL APPLICATIONS AND COATINGS

- ◆ Applications - Tanks, Pipes, Marine / shipbuilding, Bridges, Wind towers, Railcars, Water towers, Wastewater treatment, Structural steel, Refineries, Roof coatings.
- ◆ Coatings - Environmentally-friendly high solids coatings, with little or no solvent.
- ◆ Hybrid polyurethanes, Epoxies, very high solids coatings - up to 100% solids content materials.

GRACO XP70



- ◆ Offers all the advantages listed above in the most economical package where primarily fixed mix ratios are used.
- ◆ Easy to operate - only minimal instruction required.
- ◆ Six ratios are available: 1:1, 1.5:1, 2:1, 2.5:1, 3:1 and 4:1.
- ◆ Change the mix ratio by changing pump lowers.

GRACO XM AND XM PFP



- ◆ Offers all the advantages listed above where mix ratios may need to be changed for each job.
- ◆ Change the mix ratio using digital display.
- ◆ Provides real time display of pressure, temperature, ratios, and flow with USB computer interface for data download to computer.
- ◆ The XM PFP (Passive fire protection) is a modified XM which is specifically designed to handle two-part epoxy intumescent fireproofing coatings.

BASE MODEL SPECIFICATIONS

Model	Mix Ratios	Weight (kg)	Fluid Viscosity Range without feed pumps	Gun Supplied
XP70	1:1, 1.5:1, 2:1, 2.5:1, 3:1, 4:1	192 - 260	200 - 20,000cps	XTR7
XM	1:1 to 10:1 in 0.1 increments	526 - 725	200 - 20,000cps	XTR7

CUSTOMISATION OPTIONS

Select your exact system - no more, no less - to complete your jobs accurately and reliably.

Options include:

- ◆ Material Heaters.
- ◆ Remote mix manifold.
- ◆ Agitators, Solvent Flush pumps.
- ◆ Feed pumps or hoppers.



GRACO PROMIX PLURAL COMPONENT PROPORTIONERS

The Graco Promix Electronic plural component proportioners are ideal for solventborne, waterborne and acid catalyzed materials. The range includes 4 families.



M2K

A low cost, entry level, fixed ratio mechanical proportioner. Available in 1:1 – 6:1 mix ratio's and ideal for mixing and applying the same material (or materials of the same ratio), where the sophistication of the electronic units is not required. Available in low pressure (conventional spray) and high pressure (air-assisted airless spray) options, the M2K is a simple to use introduction to plural mix spraying.

PROMIX 2KE

Entry level electronic unit with options of built in pumps or flowmeter control with separate dedicated feed pumps. The 2KE records spray data and provides out of ratio and pot life condition alarms, along with timed flush sequences which can reduce your VOC consumption. The built in pump option is ideal for single material feed, whilst the Meter option can accommodate one or three colours with single catalyst.

PROMIX 2KS

Higher level electronic unit with full colour expansion capability, up to 30 colours and 4 catalysts can be added to one system. Downloadable system data and network communication with a choice of sequential or dynamic mixing. The 2KS has manual and automatic options and is ideal for robotic integration.

PROMIX PD2K

The PD2K is the highest level electronic 2k system. Utilising positive displacement pumps, the unit is ideal for short pot life materials and multiple colour changes, as the mixer is fitted to the sprayer's belt or directly to the robot arm. By moving the mixing point closer to the gun, the ProMix PD2K can reduce solvent use and mixed material waste by up to 80%. The unit also includes a high efficient monitoring and reporting package.

SPRAY PAINTING EQUIPMENT



Surface Finishing Equipment Group
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PAINT HOSES - HIGH PRESSURE

Selection of the correct hose to join the delivery pump and spray gun is essential. Consideration must be given for the factors shown.



HOSE FACTORS

- ◆ Pressure Rating - what is the maximum working pressure you will use. This will be determined by the delivery pump and air supply pressure into the pump.
- ◆ Safety - legislation states spray hose should have a min. burst pressure of 4 times the max. working pressure.
- ◆ Length - what is the required length.
- ◆ Bore - the internal diameter of the hose affects fluid flow rates. Small diameter hoses reduce flow rates. Additionally longer hoses and high material viscosity also reduce flow rates.
- ◆ Construction - high pressure hoses require more layers of reinforcement in there construction.
- ◆ Flexibility and Weight - larger bore and higher pressure hoses are both heavier and less flexible.



- ◆ Connection Threads - the most popular connection threads are 1/4 npt and 3/8 ntp female swivel.

We supply a range of hoses to meet these quality criteria. A selection of the most popular hoses are shown but bespoke specifications can be manufactured on request.

TEXTILE BRAIDED HOSE

Typical Uses: Electric / Petrol Sprayers e.g. Graco St, Ultramax, or Gmax.

Model	Bore	Length	Threads npt (f)	Max Working Pressure	Min Burst Pressure	Standard Colour	Construction
SPR230.4.0200.N4	1/4" (6mm)	2m	1/4	3300psi	13200psi	Light Blue	Nylon Core with Twin Braided Synthetic Fibre Reinforcement
SPR230.4.1500.N4	1/4" (6mm)	15m	1/4	3300psi	13200psi	Light Blue	
SPR230.6.1500.N6	3/8" (10mm)	15m	3/8	3300psi	13200psi	Light Blue	



1 WIRE BRAIDED HOSE

Typical Uses: Medium Pressure Pneumatic Sprayers e.g. NXT 45.

Code	Bore	Length	Threads npt (f)	Max Working Pressure	Min Burst Pressure	Standard Colour	Construction
PA1.4.0300.N4	1/4" (6mm)	3m	1/4	4700psi	18800psi	Mid Blue	Nylon Core with One Braided Metal Reinforcement
PA1.4.0750.N4	1/4" (6mm)	7.5m	1/4	4700psi	18800psi	Mid Blue	
PA1.4.1500.N4	1/4" (6mm)	15m	1/4	4700psi	18800psi	Mid Blue	



2 WIRE BRAIDED HOSE

Typical Uses: High Pressure Pneumatic Sprayers e.g. NXT 60.

Code	Bore	Length	Threads npt (f)	Max Working Pressure	Min Burst Pressure	Standard Colour	Construction
PA2.4.0300.N4	1/4" (6mm)	3m	1/4	6890psi	27560psi	Red	Nylon Core with Twin Braided Metal Reinforcement
PA2.4.0750.N4	1/4" (6mm)	7.5m	1/4	6890psi	27560psi	Red	
PA2.4.1500.N4	1/4" (6mm)	15m	1/4	6890psi	27560psi	Red	
PA2.6.1500.N6	3/8" (10mm)	15m	3/8	6500psi	26000psi	Red	



ARAMID BRAIDED HOSE

Typical Uses: Very High Pressure Pneumatic Sprayers e.g. NXT 90.

Code	Bore	Length	Threads npt (f)	Max Working Pressure	Min Burst Pressure	Standard Colour	Construction
HD2.4.0300.N4	1/4" (6mm)	3m	1/4	10150psi	40600psi	Black	Nylon Core with One Layer Braided Metal and Twin Aramid Reinforcement
HD2.4.1500.N4	1/4" (6mm)	15m	1/4	10150psi	40600psi	Black	
HD2.6.1500.N6	3/8" (10mm)	15m	3/8	8100psi	32400psi	Black	

AIRLESS ACCESSORIES

We stock a range of fittings and accessories to complement your existing electric, petrol or pneumac spray units.



IN LINE FILTER

These filters fit between the gun handle and the paint hose. They act as a final level of filtration before the gun to remove paint and debris which may have travelled along the hose. This reduces tip blockages and improves quality.

SPECIFICATIONS

Code	Description	Max Working Pressure	Thread
210500	Inline Filter Housing	5000psi	1/4" npt M x F
QF0561100	Combined HP Filter & Swivel	7250psi	1/4" npt M x F
205264	Fine Element 100 Mesh	205265	Medium Element 60 Mesh



GUN PENCIL FILTERS

These filters serve the same purpose as the ones above but fit inside the gun handle itself.

SPECIFICATIONS

Code	Description	For use in Guns
287032	Filter - 60 mesh medium	Graco Contractor II and Graco XTR
287033	Filter - 100 mesh fine	



GUN SWIVELS

These swivels attach between the gun handle and the paint hose. They allow more freedom of movement.

SPECIFICATIONS

Code	Description	Max Working Pressure	Thread
120-260	Compact HP Swivel	7250psi	1/4" npt M x F
269663	Standard Swivel	3600psi	1/4" npt M x F



GUN EXTENSION LANCES

These lances or extensions attach to your airless spray gun and allow the easy painting of floors, or ceilings. Hinged heads can also be added so the Tip can be positioned to spray at a better angle.

SPECIFICATIONS

Code	Description	Max Working Pressure	Thread
106024	Extension Pole - 1.8m	3600psi	Graco 7/8" M x F
243297	Extension Pole - 0.5m	4050psi	Graco 7/8" M x F
101515	Hinged Head for above		Graco 7/8" M x F
181085	Adapter - Wagner to Graco	4050psi	11/16F x 7/8 M



HIGH PRESSURE BALL VALVE

Used to turn fluid flow on / off on spray systems or drain valves.

SPECIFICATIONS

Code	Description	Max Working Pressure
210657	Ball Valve - 1/4 npt	7250psi
210658	Ball Valve - 3/8 npt	7250psi
210659	Ball Valve - 1/2 npt	7250psi



CONNECTORS AND ADAPTERS

A selection of connectors and adaptors used for purposes such as hose joining.

SPECIFICATIONS

Code	Description	Thread
156971	Nipple	1/4 npt Male x 1/4 npt Male
157350	Nipple	1/4 npt Male x 3/8 npt Male
156849	Nipple	3/8 npt Male x 3/8 npt Male

CONVENTIONAL SPRAY PAINTING EQUIPMENT

DEVILBISS / FINISHING BRANDS - SPRAY GUNS

Devilbiss air atomising spray guns are acknowledged favourites of finishers the world over. They can achieve the finest atomisation and highest quality finish of any spraying method. The pattern width and atomising air can be adjusted at the gun whilst spraying for a high degree of flexibility.

Typical Applications:

- ◆ Automotive spraying, furniture or plastics spraying.
- ◆ Conventional Models give standard high quality spray.
Trans-Tech models operate at lower air cap pressures for low overspray and paint savings.
- ◆ We also stock spares such as service kits, filters, nozzles, and air caps.

DEVILBISS MANUAL SPRAY GUNS

Features:

- ◆ Gravity or Suction Cup Guns are ideal for quick colour changes.
- ◆ Pressure Feed Guns are fed using a separate pressure pot or pump.
This can double fluid flow and is best for high production rates, or more viscous materials. It also gives more spraying time between refills.
- ◆ Guns are available in full sized, mid sized and compact guns for touch-up / spot repair.

Popular Models:

- ◆ **Advanced** - Excellent all round model, with wide range of nozzle / cap set-ups.
- ◆ **GTi Pro Lite** - full sized model, with enhanced ergonomics and light weight
- ◆ **JGA HD** - updated versions of the classic guns used by generations of spray painters.



Finishing Brands
 A CARLISLE COMPANY

DEVILBISS AUTOMATIC SPRAY GUNS

The Devilbiss AG-360 range of spray guns are available in various gun body formats to provide an all-encompassing and universal automatic finishing solution for all Industrial low pressure applications.

Automatic guns are used on Rotary Machines, Reciprocators & Robots. Using the acknowledged market leading Air Atomisation technology from Devilbiss, the range of Automatic Guns have been developed to provide a blend of finish quality, engineering robustness and superior Transfer Efficiency.

Designed to function in the tough working environment of the modern finishing industry, these guns give you maximum productivity with minimum downtime.

Popular Models:

- ◆ **AG-361** - General Purpose automatic spray gun
- ◆ **AG-362** - Automatic Gun with Quick Release Manifold
- ◆ **AGMD Pro** - High Precision Model with Certified Air Caps for Robotic Applications



Finishing Brands
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PRESSURE POTS AND DIAPHRAGM PUMP PUMPS

Pressure Feed Pots and Diaphragm Pumps are used to feed low pressure spray guns such as the Devilbiss Advanced Gun. When compared to suction or gravity feed methods, pressure feed reduces time between fill-ups, increases application rate, allows the spray gun to be held at any angle and any allows higher viscosity materials to be applied.

DOUBLE DIAPHRAGM PUMPS

Double Diaphragm Spray Package comprising:

- ◆ Cart Mounted pump (optionally tripod, or wall mounted).
- ◆ Spray Gun.
- ◆ Set of air and paint lines.
- ◆ Regulators for pump pressure control on cart.
- ◆ Regulators for gun pressure control on cart.
- ◆ Suction hose with wand, and coarse filter.
- ◆ Pulsation damper with Medium Mesh Filter.

Advantages

- ◆ Quicker colour changes than with a pressure pot.

Typical uses

- ◆ Applying primers, base coats and top coats for general metal fabrication, construction, truck and bus, automotive components and touch-up.
- ◆ Spraying stains, sealers, lacquers and top coats for wood furniture.



PRESSURE FEED TANKS

Pressure pots are used to supply paint to a spray gun in order to save refilling time, compared to cup guns. Various sizes are available with and without agitators.

- ◆ Capacity - From 2 Litre Pots, up to 10 Litre, 20 Litre, 40 Litre and 60 Litre Floor Standing Tanks.
- ◆ Materials - galvanised construction for standard paints, or stainless steel construction for all paints.
- ◆ Agitation - No agitation, hand stirrer, air driven agitator options.
- ◆ Outlet - Standard Top Outlet via Suction Tube, or Bottom outlet available for heavy materials.
- ◆ Liners - Optional semi disposable liners reduce cleaning time and save coating material.



ELECTROSTATIC SPRAY GUNS

The main benefit offered by an electrostatic painting system is transfer efficiency. This high efficiency translates into significant cost savings due to reduced overspray.

A phenomenon of electrostatic finishing known as 'wrap' causes some paint particles that go past this workpiece to be attracted to the back of the piece, further increasing transfer efficiency.

RANSBURG RANSFLEX ELECTROSTATIC SPRAYGUN

The Ransflex is a low pressure air atomising electrostatic spraygun.

Features:

- ◆ Best in class atomization in a compact, lightweight gun.
- ◆ Powered by an inbuilt air driven turbine which eliminates the need for an electrical supply, and control box.
- ◆ Light weight, and Ergonomic fit, feel, balance and controls

Typical applications:

- ◆ Aerospace industry, Commercial and off Road Vehicles, Intricate metal components and parts



CAN COMPACTOR

Empty paint and solvent tins can obstruct working areas, and incur heavy disposal costs. A convenient solution is the simple to operate Can Compactor.

It reduces most cans and pails of up to 30 litres to a fraction of their original size. This reduces waste skip transport charges to landfill sites, and helps maintain a safer, tidier workspace.

Operation:

The empty can is placed within the crushing compartment. Closing and securing the door catch starts the crushing cycle. The door can be opened and the crushed Pail removed once the crushing cycle has completed.

Features:

- ◆ CE and ATEX rated.
- ◆ Safe and easy operation.
- ◆ Safety interlocks ensure the door cannot be opened until the crushing cycle is complete.
- ◆ ATEX rated and pneumatically powered for increased safety, and to eliminate the need for electrical wiring.
- Low Maintenance.



PAINT TESTING EQUIPMENT

Determining the quality of the painted surface is essential to prevent potential costly future failure, recall and rework. This requires checks both before, during, and after painting. We supply a range of products designed to determine this quality. All of the products shown can be supplied with calibration and / or conformance certificates at additional cost.



PAINT THICKNESS METER

The Eban 4000 Coating Thickness Meter measures dry film thickness of coatings on metallic substrates. Can be used in a simple pass / fail mode or also can be used to calculate statistics such as batch averages. All models are supplied in an Foam-Filled Carrying Case with flexible lead Measuring Probes, set of 8 Calibration Foils and Zero Disks. Ferrous models are suitable for steel / iron, and non ferrous for aluminium. A variety of models are available shown in the table below. Optionally the meter can be supplied with software to download to a computer.

ORDER CODES

Code	Description
C4001	Meter for ferrous substrates with straight probe 0 - 1000 micron
C4002	Meter for ferrous substrates with 90 degree probe 0 - 1000 micron
C4005	Meter for non-ferrous substrates with straight probe 0 - 1000 micron
C4008	Meter for ferrous and non-ferrous with straight probe 0 - 1000 micron



DEWPOINT METER AND MAGNETIC THERMOMETER

The RH Digital Dewpoint Meter allows the determination of the relative humidity, dew point and air temperature before the application of a coating. Specifications detail that the relative humidity and the dew point temperature must be strictly adhered to. In conjunction with the magnetic thermometer the surface temperature of the substrate can be measured and determine if the environmental conditions allow the coating to be applied safely.

ORDER CODES

Code	Description
H2005	Digital Dewpoint Meter in carry case
T1003	Magnetic Thermometer - -30c to +50c
T2003	Digital Thermometer (not shown) - -50c to +300c
H2001 & H1002	Whirling Hygrometer and Dewpoint Calculator (not shown)



CROSS HATCH CUTTER AND ADHESIVE TAPE

The Cross Hatch Cutter is a multi-blade cutting tool which allows an assessment to be made of the adhesion resistance of coatings to separation from substrates when a right-angled lattice pattern is cut into the coating and penetrates through to the substrate. The Cutter is used In conjunction with Adhesion Test Tape has an adhesive strength of 9.5N per 25mm width and is transparent to ensure correct adhesion to the coating.

ORDER CODES

Code	Description
X2001	Cross Hatch Cutter - with 1mm Blades for coatings under 60 micron. Supplied in a Case with Adhesion Tape and Illuminated Magnifier.
X2002	As above with 2mm blades for coatings over 60 micron
XA001	Adhesion Test Tape - 60 metre roll



BRESTLE SALT TEST KIT

A Chloride Test or Salt Test on steel using the Bresle Patch method will help to prevent coating failure due to salts such as chlorides and sulphates contaminating the surface prior to the coating application. This contamination can be tested quickly and simply using the Bresle Method to ensure the correct surface cleanliness. Complying with International Standards: ISO 8502-6 and ISO 8502-9.

ORDER CODES

Code	Description
P2005	Kit in Industrial Case with 50 Standard Bresle Patches, 50 High Adhesion Bresle Patches, Conductivity Meter, Calibration Solution, 3 x 5ml Syringes, 25ml Beaker and 500ml Distilled Water
PS001	50 x Spare Bresle Patches of Standard Adhesion
PS002	50 x Spare Bresle Patches of High Adhesion
PS003	Spare Deionised Water

SPRAY EXTRACTION BOOTHS

A spray booth is a necessity for every spray painting operation to:

- ◆ Effectively Extract material overspray from the work area.
- ◆ Control Environmental Emissions through the combination of appropriate Filtration Media and correctly specified Ductwork and Termination Cowl.
- ◆ Comply with legal Health and Safety requirements as stipulated in Control of Substances Hazardous to Health (COSHH) regulations.
- ◆ Reduce fire hazards from combustible fumes.

DRY FILTER BOOTH



Our Dry Filter Spray Booth offers the simplest and most economical extraction answer in many installations and can be supplied as a full height booth or compact bench booth for small objects. The paint laden air is drawn by an exhaust fan through a layer of filter media before being exhausted to atmosphere. The filters are easily replaced when contaminated with spray material.

WATERWASH BOOTH



Our Waterwash Spray Booths are ideal for medium and high production applications. The paint laden air is drawn, via an exhaust fan, through ducts, where water jets efficiently scrub the air. A water curtain on the booth face also initially catches overspray. The over-sprayed paint is contained in the water which cycles back into the tank. The clean air exhausts to atmosphere.

FEATURES AND ADVANTAGES OF BOTH BOOTH TYPES

- ◆ Technical specifications fully meet EPA and CE accreditation requirements.
- ◆ Airflow through booth spraying area is 0.7m / sec (140/min) as specified by EH9 guidelines.
- ◆ Range of sizes available to suit most applications.
- ◆ Standard Modular Range gives high quality production and easy installation.
- ◆ Bespoke range for individual customer requirements such as additional height or depth, dividing panels.
- ◆ Externally mounted (out of air-stream) motors with belt driven impellers.
- ◆ Choice of Axial or Centrifugal Fan for reduced noise levels.
- ◆ Option for Lighting inside booth canopy behind wired safety glass.

OPTIONAL INSTALLATION SERVICES

- ◆ Delivery to your site.
- ◆ Mechanical Assembly and Installation.
- ◆ Supply and installation of Ductwork and Cowl.
- ◆ Electrical Installation.

LEV TESTING

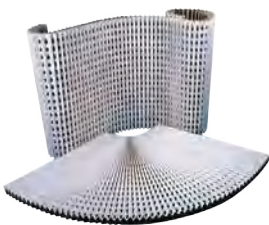
It is a legal obligation of an employer to carry out regular testing of all extraction systems including spray booths. The LEV test interval is every 14 months for most spray booths. We can carry out this service on either a booth supplied by ourselves or an existing booth. We can inspect and test to ensure that it is operating effectively and provide certification. If the extraction fails the test we will provide advice and recommendations on necessary improvements.

EXTRACTION FILTERS AND SPRAY BOOTH CHEMICALS



EXTRACTION FILTERS

The demand for efficient air filtration systems in industry has never been greater. Stringent specifications for clean, pollution free environments have to be maintained, and at the most economical cost. We supply a range of filter types for your spray booth, powder booth, or blast room extraction.



ORDER CODES			
Code	Description	Typically use	Size
PAINTSTOP	Paintstop Roll is design to collect paint overspray in spray booths. Constructed from continuous filament glass fibres with an open weave pattern. Recognised by its green and white colour.	Spray Booth Extraction	1m x 20m
PST290	A dual stage synthetic product often used as an alternative to paint stop.		1m x 20m
B207229	Pleated Spray Booth Filter.		0.9m x 9.2m
B207229SEF	High efficiency version of above with additional synthetic media.		0.9m x 6.0m
ORANGETAG	Combination filter with layered card and a synthetic backing.		1m x 10m
FDC	Pleated Cartridge Filters - Typically used for filtering dusts. Their pleated construction allows them to be very compact relative to the amount of airflow passing through them.	Shot-blasting or Powder Coating extraction dusts	Variety of sizes to suit application.
TA600	An high efficiency air input filter normally used in spray room roofs.	Spray Room Input Filtration	Various
GP	Box Filters containing paintstop glass fibre media.		0.6m x 0.6m and other
PP	Box Filters containing pleated panel media.		



BOOTH CHEMICALS

We supply a variety of products to ensure the efficient and safe operation of the spray booth.

ORDER CODES		
Code	Description	Pack
C-130	Liquid Denaturant - added to water wash booths to treat and denture paint. Helps prevent clogging of pipes and jets.	25 Litre
C-135	Foam Suppressant - minimises build up of foam in water wash booths.	20 Litre
C-190	Oven Coating - a tacky liquid applied to oven walls to trap airborne dusts and contamination.	25 Litre
C-200	Peelable Booth Coating - a protective coating which is sprayed onto booth surfaces. It dries into a plastic film, which can be peeled away when solid.	25 Litre
C-240	Alternative Versions of C-200: Heavy Duty Floor Coating	25 Litre
C-250	Alternative Versions of C-200: Clear Coating for Lights	25 Litre
T-600	Tack Cloths - for preparing a dust free surface prior to painting.	50

CONTACT DETAILS AND LOCATION MAP



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Surface Finishing Equipment Group

DISCLAIMER - Information in this brochure is provided as a guide only.
Please refer to the equipment operating instructions for safe operation and use.