

Surface Preparation Module

We would like to introduce our range of high quality portable shotblasting rooms.

Shotblasting of irregular shaped components can often mean manual blast cleaning in an uncontrolled environment not meeting health & safety requirements. With increasing concerns over operator safety and environmental impact, **J.Reid Engineering** have developed a range of 'Containablast' surface preparation modules.

Converted new shipping containers, Containablast modules are manufactured in the following range. **Only the 6m module is available to hire.**

- 6m Containablast module - 4.4m long blast room
- 9m Containablast module - 6.5m long blast room
- 12m Containablast module - 9.5m long blast room

Each module has a purpose built service room housing :-

- Abrasive recovery system
- Blast machine
- Dust extraction system
- Control equipment

Unique features include :-

- Fast set up, two connections , air and electric
- Light grey polyurethane spray lining of blast room area
- LED flood lighting
- Emergency lighting



View a video of the Containablast installation at www.shotblastequipment.co.uk/containablast



Hire or buy options

Shotblasting solutions made easy. Our 6m Containablast units are readily available for short or long term hire periods.

Should your requirements be to cover the breakdown / service of your own equipment or a contract for blast cleaning, our rooms are normally available for immediate delivery.

If you decide that you would like to purchase the unit after the hire period, we can offer 25% of the hire charges refunded against the outright purchase cost.



Please contact our office for competitive hire rates—**6m room only**. All you have to supply is the compressed air and electric supplies!



Equipment supplied with all Containablast modules

Blast rooms are fitted out as follows.

- Steel plate floor with side shedder plates
- Air extraction point
- Polyurethane spray (PU) lining
- LED lighting
- Emergency lighting
- Man access door
- Blast pot isolation valve

The **Abrasive recovery system** is positioned inside the service room and comprises of the following.

- Abrasive hopper with screw conveyor
- Bucket elevator
- Abrasive airwash unit

The **Abrasive hopper with screw conveyor** is positioned at the base of the blast room bulkhead. Its is 1600mm long, collects the swept up abrasive and transports it to the bucket elevator for re-circulation.

The **Bucket elevator** transports the used abrasive into the airwash unit. It is driven by a 0.55kW direct coupled geared motor unit

The **Abrasive airwash unit** receives the collected abrasive from the elevator system.

The principle of the airwash is to remove dust and contaminants from the abrasive, controls the size of the abrasive 'working mix' Failure to do this will result in the operator blasting with a mixture of abrasive and dust resulting in a poor finish, longer cleaning time and also decreases the life of shotblast component parts such as the blast nozzle, blast hose, seals, elevator buckets etc.

There are two flexible pipes at the base of the airwash, one directs good clean abrasive back to the blast pot, the other directs the 'fines'—or waste into a sealed plastic bag.

Dust extractor unit is positioned inside the service room and forms part of the fabrication of the Containablast unit.

This is a reverse pulse jet cleaning extractor fitted with quick change cartridges.

The lower portion of the extractor is a low velocity hopper which directs the dust in to suitable plastic bags for disposal

ATEX classification. It is assumed that the dust is non explosive.

Blast machine 18A

This is a high production single chamber unit approximately 1100mm high by Ø520mm. It can hold approximately 95 litre of re-usable abrasive giving approximately 30 minutes of continuous blasting time. The machine is supplied with high quality blast hose, silicone nitride nozzle and all operator PPE.

Electrical control panel

This enclosure, rated IP 66, houses the contactors, overload and control circuit for the Containablast unit. Push buttons and switches are also rated at IP 66

Optional accessories / upgrades

Every shotblast job is different. Below are some of the accessories we can offer. Please contact us for your specific requirements.

- Side doors
- Component handling - component jigs, work benches, trestles, 250kg bogie
- 'Hi—cube' versions giving approximately 300mm higher
- Recovery system upgrades
- Personnel alarm, delay / timer
- ATEX upgrade

Location of the Containablast unit

Whilst we do recommend that our units are located indoors, we are aware that due to space constraints, it may be necessary for the unit to be positioned outdoors.

Since the introduction of spray applied PU coating to the inside of the blast room, the possibility of condensation has been greatly reduced. However on some occasions it will be necessary to provide additional protection to the roof of the container by means of a lean-to and insulation.

Condensation is caused by a drop in outside air temperature compared to the inside of the Containablast unit. When humid air comes in contact with a cold surface, droplets of water form and collect on the surface. The inevitable introduction of damp conditions, driving rain, wet feet, wet components or damp compressed air, can greatly exaggerate the issue.

In these situations we would always recommend fitting of additional weather protection to outdoor positioned units.

Tech Spec - 6m Containablast



Hire or buy!

Blast room

Dimensions	4.4m long x 2.2m wide x 2.3m high
Double hinged door opening	2.2m x 2.2m opening (approx.) Interlocked with blast pot
Man access door	1 off—interlocked with blast pot
Lining	Light grey polyurethane sprayed lining providing protection to walls, ceiling and doors.
Lighting	LED flood lights
Emergency lighting	1 off—above man access door
Extraction connection	Integral with adjustable damper

Service room

Access door	Lockable
Lighting	1 off - LED strip 1.2m
Elevator system	Belt and bucket type
Capacity	3 ton / hr (ferrous abrasive)
Abrasive airwash / conditioning unit	1 off
Abrasive hopper—single outlet	1 off
Cross screw conveyor	1 off

Dust extractor / local exhaust ventilation (LEV)

ATEX classification. It is assumed that the dust is located in a non-hazardous area and the dust is non-explosive.

Volume flow	2548m ³ / hr
Resistance	1.75 Kpa
Air changes from room	105 air changes / hr
Cartridge type	25m ² 80/20
Cartridge quantity	3 off
Total filter area	75m ²
Filter speed	34m ³ / m ² /hr
Dust disposal	2 off—Sealed plastic bags

Blast machine

Type	18A 45°
Abrasive capacity	95 litre
Blast hose	Ø25mm x 7.5m long
Blast nozzle	Ø8mm silicon nitride
Air consumption (based upon a Ø 8mm nozzle)	Min. 150 cfm @ 100psi clean and dry

Operators equipment

Helmet	Nova 2000 - CE marked
Breathing air filter	AC010A 1/4" 6 liter/s Domnick Hunter
Blasters suit / gauntlets	Included

Electrical requirements

Total power	4 kW
Power supply	415v 3 phase , neutral & earth

Tech Spec - 9m Containablast

Blast room

Dimensions	6.5m long x 2.2m wide x 2.3m high
Double hinged door opening	2.2m x 2.2m opening (approx.) Interlocked with blast pot
Man access door	1 off—interlocked with blast pot
Lining	Light grey polyurethane sprayed lining providing protection to walls, ceiling and doors.
Lighting	LED flood lights
Emergency lighting	1 off—above man access door
Extraction connection	Integral with adjustable damper

Service room

Access door	Lockable
Lighting	1 off - LED strip 1.2m
Elevator system	Belt and bucket type
Capacity	3 ton / hr (ferrous abrasive)
Abrasive airwash / conditioning unit	1 off
Abrasive hopper—single outlet	1 off
Cross screw conveyor	1 off

Dust extractor / local exhaust ventilation (LEV)

ATEX classification. It is assumed that the dust is located in a non-hazardous area and the dust is non-explosive.

Volume flow	4247m ³ / hr
Resistance	2.2 Kpa
Air changes from room	120 air changes / hr
Cartridge type	25m ² 80/20
Cartridge quantity	6 off
Total filter area	150m ²
Filter speed	28.3m ³ / m ² /hr
Dust disposal	3 off—Sealed plastic bags

Blast machine

Type	18A 45°
Abrasive capacity	95 litre
Blast hose	Ø25mm x 7.5m long
Blast nozzle	Ø8mm silicon nitride
Air consumption (based upon a Ø 8mm nozzle)	Min. 150 cfm @ 100psi clean and dry

Operators equipment

Helmet	Nova 2000 - CE marked
Breathing air filter	AC010A 1/4" 6 liter/s Domnick Hunter
Blasters suit / gauntlets	Included

Electrical requirements

Total power	5 kW
Power supply	415v 3 phase , neutral & earth

Tech Spec - 12m Containablast

Blast room

Dimensions	9.5m long x 2.2m wide x 2.3m high
Double hinged door opening	2.2m x 2.2m opening (approx.) Interlocked with blast pot
Man access door	1 off—interlocked with blast pot
Lining	Light grey polyurethane sprayed lining providing protection to walls, ceiling and doors.
Lighting	LED flood lights
Emergency lighting	1 off—above man access door
Extraction connection	Integral with adjustable damper

Service room

Access door	Lockable
Lighting	1 off - LED strip 1.2m
Elevator system	Belt and bucket type
Capacity	3 ton / hr (ferrous abrasive)
Abrasive airwash / conditioning unit	1 off
Abrasive hopper—single outlet	1 off
Cross screw conveyor	1 off

Dust extractor / local exhaust ventilation (LEV)

ATEX classification. It is assumed that the dust is located in a non-hazardous area and the dust is non-explosive.

Volume flow	5900m ³ / hr
Resistance	2.2 Kpa
Air changes from room	115 air changes / hr
Cartridge type	25m ² 80/20
Cartridge quantity	6 off
Total filter area	150m ²
Filter speed	39.3m ³ / m ² /hr
Dust disposal	3 off—Sealed plastic bags

Blast machine

Type	18A 45°
Abrasive capacity	95 litre
Blast hose	Ø25mm x 7.5m long
Blast nozzle	Ø8mm silicon nitride
Air consumption (based upon a Ø 8mm nozzle)	Min. 150 cfm @ 100psi clean and dry

Operators equipment

Helmet	Nova 2000 - CE marked
Breathing air filter	AC010A 1/4" 6 liter/s Domnick Hunter
Blasters suit / gauntlets	Included

Electrical requirements

Total power	7 kW
Power supply	415v 3 phase , neutral & earth

Optional Extras



Blast room observation window



'Door and a half' for service room



ATEX upgrade for explosive atmospheres



Manometer to give indication of filter cartridge condition



Centre screw conveyor



Bogie on rails for easy loading

Optional Extras



3.8m Side opening doors



Full floor recovery