BURWELL
ENCLOSED
BLAST FACILITIES
BURWELL CUTTING-EDGE
BLAST ROOMS

As Australia’s leading manufacturer and distributor of equipment for the Surface Preparation Industry, our goal is to help improve your productivity and reduce costs.

Since 1969, Burwell have been designing and manufacturing Enclosed Blast Facilities whilst staying true to its philosophy of delivering top grade equipment.
BLAST ROOM CONSTRUCTION

Burwell’s custom design Blast Rooms are built to suit our customer’s needs.

Since 1969, Burwell have been designing and manufacturing Blast Rooms from 3mm mild steel panels. Our panel design has proven to be strong, cost effective and easy to install.

In recent years, Burwell has reacted to the market’s request for Blast Rooms fabricated from other materials. Concrete tilt-up panels, sandwich panels and welded plates have been used to meet our customer’s requirements.

For added longevity, Burwell have included wall linings to protect the structure from Blast Media, including PVC, Polyurea and Rubber.
BLAST ROOM
DOORS

There are three options available for Equipment Access Doors on a Burwell Blast Booth. Door options can be custom designed to suit individual needs.

Option 1 - Steel Split Swing Doors
Burwell’s heavy duty hinged swing doors provide the operator with easy, clear, unobstructed access to the Blast Booth. The doors are constructed from 3mm mild steel and come with Burwell’s unique locking system which enables unlocking from both inside and outside the chamber, to ensure ease of use.

Option 2 - Rubber Roll-Up Door
The Burwell Rubber Roll Up Door is by far the superior option when it comes to enhancing your investment in a Burwell Blast Room. Designed and manufactured to suit each specific room size and with internal and external electronic push button control, the Rubber Roll-Up Door is the ultimate in operator ease.

Burwell can supply Rubber Roll-Up Doors for both ends of the booth - these sturdy doors are unique to Burwell.

Option 3 - Pneumatic Lift-Up Door
On small facilities, Burwell can design a Pneumatic Lift-Up Door. With similar benefits as the Roll-Up Door, the Pneumatic Lift-Up Door alleviates manual handling required for Swing Doors.

Personnel Door
So as to be fully compliant with Australian Standards, Burwell Blast Rooms are fitted with a personnel door with viewing window and protective rubber cover.

A personnel door will be supplied near the plant room section. A viewing window with protective rubber cover will be provided on one of the access doors, at both ends.

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ABRASIVE RECLAMATION

Burwell provides an air conveyor, belt conveyor manual sweep up option for abrasive reclamation as well as a rail track system that enables the customer to blast heavy objects.

Option 1 - Burwell’s Unique Sweeper Blade System

For almost half a century Burwell has been involved with the transportation and reclamation of spent abrasive within Blast Rooms. In that time we are yet to come across a system that comes close to the Burwell Sweeper Blade Recovery Floor for cost effectiveness on both installation and operating expenses.

A major benefit of this type of system is that it only requires a shallow concrete foundation. This can create substantial savings for the customer in comparison to other types of recovery systems. It also avoids the issues created by digging foundations in areas that have high water table levels.

The entire floor system is driven by a 1.5kw motor providing significant energy savings over other Recovery Systems.
Why is the unique Burwell Sweeper Blade System so efficient?

Firstly, maintenance and repair costs are virtually eliminated. This is because grit never wears directly on floor pans and other parts. In fact a thin layer of grit covers the floor pans at all times.

The sweeper blades are set to sweep all grit above this layer. Grit against grit equals NO wear. As the sweeper blades have rubber edges, they almost never wear out.

Also, we use only one pneumatic conveyor incorporating the exclusive Burwell Magnetic Elbow to minimise wear in grit conveying.

Here’s how it works...

This unique system combines the very best features of mechanical collection with pneumatic conveying and grit cleaning. Spent abrasive falls through the floor grates into the floor pan sections.

Sweeper blades push the abrasive towards the grit conveyor on the forward stroke and retract on the return stroke. The abrasive is then pushed into the grit conveyor where a trash screen removes workshop debris and rubbish.

The grit conveyor then transfers and elevates the abrasive through Burwell’s Exclusive Magnetic Elbow (ferrous abrasive applications) to the grit cleaner where dust fines are separated and exhausted to the Dust Collector. Clean abrasive drops into the storage hopper for re-use.

Burwell’s Multi Outlet Bulk Blast Machine offers the most productive method of blasting in multi nozzle applications. Other Blast Machine configurations can be provided dependent on the particular application.

Blast Room ventilation is handled by Burwell’s High Volume End Draught System. This provides the most efficient dust extraction available ensuring maximum operator visibility, safety and productivity.

Dirty air from the Blast Room and the grit cleaner is filtered through the Burwell High Performance Jet Pulse Cartridge Dust Collector ensuring safe clean air is returned to the atmosphere satisfying all EPA and Workcover Regulations.

Option 2 - Manual Sweep Up Floor

For applications where continual blasting is not always required or the floor area is extremely large (which can make sweeper blade recovery impractical), Burwell can simply provide a Manual Sweep Up Floor.

This is done by lining the Blast Room floor with a flat steel plate allowing the spent abrasive to be manually swept or blown into the abrasive feed-hopper for recycling.
CUSTOM DESIGN OPTIONS

Burwell Blast Rooms are custom designed specifically for your particular application. Work piece size, abrasive type, production rates, number of blast operators and handling options are just a few of the considerations when planning and designing a Blast Room installation.

With hundreds of installations around Australia and overseas, you can rely on Burwell’s experience to assist you in every facet of Blast Facility design and application. Burwell offers you a range of unique and innovative features such as Rubber Roll Up Doors and the exclusive Burwell Magnetic Elbow, not available from other manufacturers. Our technical knowledge and expertise are second to none.
CONTAINER BLAST ROOMS

Container Blast Rooms are available in a range of size and operational configurations. Manual Sweep Up, Partial Recovery or Fully Automated Under floor Grit Recovery is available in both 40’ or 20’ container sizes.

Blast Machine and Grit Recovery Systems are also optional dependent on the abrasive type and application. Burwell’s superior industry expertise will assist you in designing a Container Blast Room specifically for your application.

Work piece handling options include in floor rail and trolley systems. The Burwell Jet Pulse Cartridge Dust Collector ensures maximum operator safety and visibility.

JET PULSE CARTRIDGE DUST COLLECTORS

Burwell’s experience in the demanding Dust and Fume Extraction/Filtration industry has provided a thorough knowledge of air pollution control.

Our experience in the design, manufacture, service and installation of dust collection systems for many applications, coupled with a continuing evaluation of industrial ventilation systems has helped Burwell create an unequalled Dust Collector design.
BLAST ROOM
DESIGN FEATURES

Auto Jet Pulse Control
Infinitely Adjustable Automatic Electronic Timer Control fires a shot of compressed air through high volume diaphragm valves to the Eductor Tubes.

Access Ladder and Platform
Railings in compliance with Australian Standards.

Easy Access
Access Doors are within convenient reach to allow for safe and simple cartridge changes from outside the Collector. Service and adjustment is a breeze, so there are no confined workspace issues.

Cartridge
Long Life Pleatkeeper Cartridge with CX22 fabric maximises sub-micron particle filtration. Self aligning and integrally gasketed to eliminate leaks.

Rotary Lock
Constant waste dust expulsion.

Dust Receptacle
For waste dust collection.

Eductor Tube
Performance designed Eductor Tube guarantees total cartridge dust cake removal ensuring constant performance under all dust loading conditions.

CARTRIDGE INSTALLATION

www.burwell.com.au
1. Objects that require Blasting are placed on the **Equipment Trolley**

2. Trolley is wheeled along the **Rail Track System** into Blast Room

3. The **Storage Hopper** is filled with desired Abrasive

4. Blasting begins after the Doors are closed via the **Multiple Outlet Bulk Blast Machine**

5. Spent Abrasive that passes through the **Grated Work Surface** is swept into the **Automatic Under-Floor Recovery System** by the **Sweeper Blade**

6. A **Grit Conveyor** separates Abrasive from general workshop debris and rubbish

7. Abrasive is transferred to the **Pneumatic Air Lift and Recycling System** where dust fines are separated and exhausted to the **Automatic Jet Pulse Dust Collector**

8. Clean Abrasive drops into the **Storage Hopper** for re-use

9. The **Blast Room Ventilation Ducting** extracts dust to allow high visibility, safety and increased productivity

10. Dirty Air from the Blast Room and the Grit Cleaner is filtered through the **Jet Pulse Cartridge Dust Collector**

11. Safe and clean air passes through the **Silenced Dust Extraction Fan** and is returned to the atmosphere
BURWELL’S QUALITY SERVICE DIVISION

If you have any issues or questions, our Service Division can help.

The Service Division is available for your peace-of-mind - ensuring you are operating at the maximum capacity is very important to us.