

Personnel Cleaning Booths

for safe and easy dust removal



If you have employees moving between dusty work areas to clean-zones, the installation of ACI's Personnel Cleaning Booth will allow them to quickly and safely remove residue dust, powder or contaminant from all PPE and work-wear clothing.

The Personnel Cleaning Booth is guaranteed to meet or exceed OSHA requirements. It operates by utilising high-velocity, low-pressure air that is effective in dislodging all materials from clothing and much easier to use than alternative vacuum systems.

More importantly it is completely safe and avoids many of the issues associated with compressed air which has the potential to be very dangerous in this type of application due to the high air pressures involved.

For further information, please refer to ACI'S 'Dangers of Compressed Air' fact sheet.



Simple by Design:

Within a 20-30 second timeframe, workers can enter the cleaning booth door, operate and clean-down. The combination of the air-shower effect and the integrated JetBlack enables the air-flow to dislodge dust present on the operator, which is subsequently captured and filtered by a stand-alone cyclone extraction unit.

Key Features:

- Safe and easy to operate/maintain
- Modular construction
- Powerful 'air shower' effect
- Incorporates ACI's JetBlack Cleaning Station
- Includes option of stand-alone Cyclone Extractor
- Indoor/Outdoor and walk through options
- HEPA filter options

Typical Applications include:

- Quarrying / Stone / Aggregate facilities
- Fibre moulding / Materials / Textile production
- Construction sites



Personnel Cleaning Booths

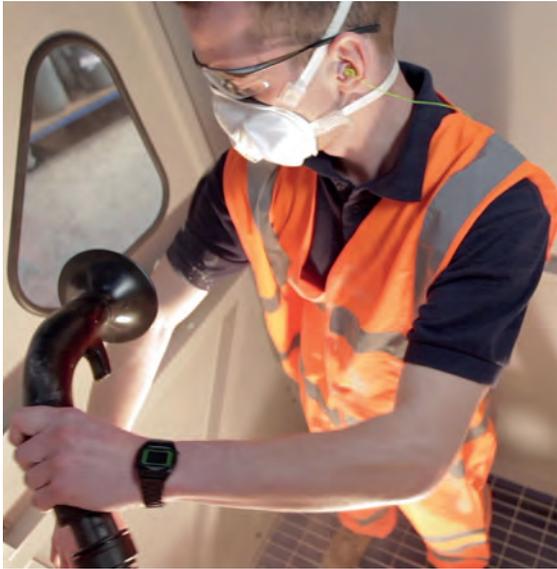
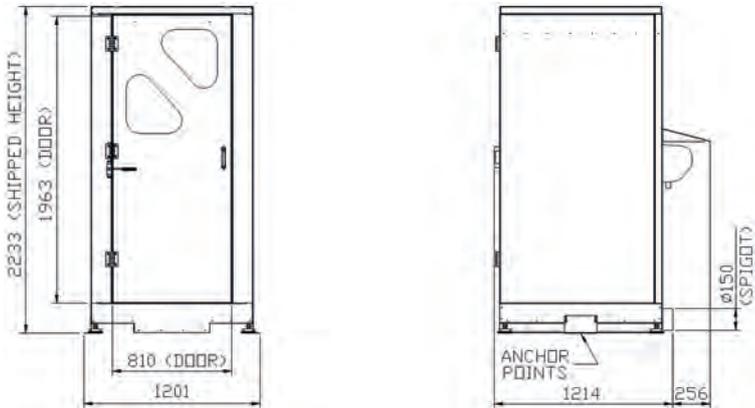
for safe and easy dust removal



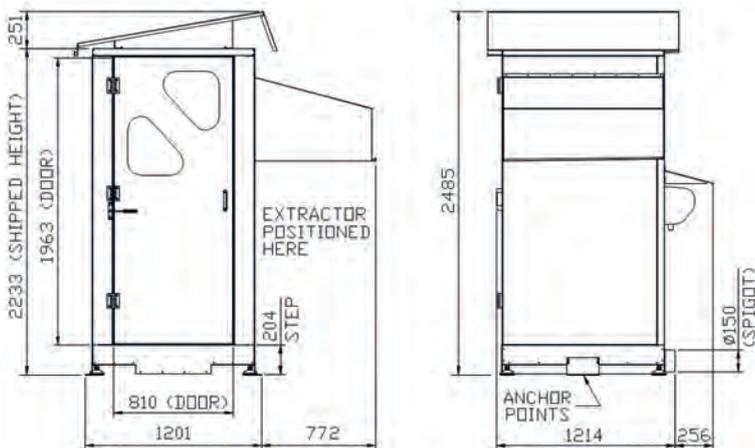
How does the Personnel Cleaning Booth operate?

- Step 1:** Upon entering the booth, the interior light and cyclone extractor will automatically turn-on.
- Step 2:** Air is immediately drawn through the holes in the roof of the booth, creating an air-shower effect.
- Step 3:** To begin removing dust and contamination from clothing, the JetBlack nozzle needs to be switched on via the touch-switch. (This is pre-set to run for 30 seconds.)
- Step 4:** Any displaced dust is drawn down to the floor grille, extracted by a vacuum effect and collected by the dust extractor where it can be disposed of, or alternatively recycled.

Outline Drawing - Internal Booth version:



Outline Drawing - External Booth version



Dynamic Engineering Australia
 7/52 Kent Street
 Cannington WA 6107.
 Tel: +618 9356 7633
 Fax: +618 9356 7644
 Email: sales@dynamiceng.com.au

www.personnelcleaning.com

Personnel Cleaning Booths

for safe and easy dust removal

Dynamic Engineering Australia

Extraction Options:

ACI offers two extraction options with the Personnel Cleaning Booth.

1. Stand-alone Cyclone Extractor

This is a mobile cyclone dust extractor capable of handling most types of dusts. Quiet in operation, it features automatic filter cleaning providing consistent airflow and is fitted with a simple manometer giving a quick, visual indication of performance. The wheeled waste bin makes the task of waste disposal easier and the unit features a 0.2 micron polyester cartridge filter, plastic collection bag and steel impeller.

Features include:

- Motor Power 1.5kW (1Ph, 230V, 50Hz as standard)
- 2,700m³/hr air flow performance
- Nett Weight – 131Kg
- Supplied with 0.2 micron polyester cartridge filter, plastic collection bag and steel impeller
- Automatic filter cleaning for consistent performance
- Low noise levels - 74dB(A) @ 3m
- Large 123 litre / 35 gallon drum
- Filter cartridge captures 99% of dust from 0.2-2 microns in size
- Steel impeller in close housing gives exceptional performance



2. Extraction Fan Unit

Where an existing dust extraction system may already be installed, ACI offer a powerful centrifugal fan unit.

Features include:

- Motor Power 1.1kW (5Hp)
- 1 or 3Ph with a range of voltages available
- 1500m³/hr air flow performance
- Additional ducting can be supplied if required
- Please note - no filtration is supplied with this option



www.personnelcleaning.com

www.dynamiceng.com.au

Personnel Cleaning Booths

for safe and easy dust removal

Case Study: Octavius Hunt

Founded in 1870, Octavius Hunt has unrivalled technical expertise in the development and production of smoke products and widespread experience in working with a range of insecticides, fungicides, acaricides and other substances. Products are simple and ready-to-use, reaching normally inaccessible areas such as roof spaces, inside machinery, cracks, and crevices. The smoke used is both non-tainting and leaves no residual odour which means there is little environmental impact and exposure times to operators is kept to a minimum.

The production of dust during the manufacturing process of smoke products is unavoidable, and managing its containment in and around their manufacturing facility is a vital process for the company – dust can easily be deposited onto workers overalls which can then migrate around the factory, finding its way even into high risk zones if an effective method of removing it is not employed. However, the company has installed a personnel de-dusting unit to minimise dust being spread across the factory, both safely and efficiently.

Octavius Hunt takes a robust approach to continuously managing and mitigating all potential impacts so installing an ACI Personnel Cleaning Booth builds upon this approach. The company had previously tried a number of different solutions, but none provided a practical or user-friendly solution and de-dusting overalls was a cumbersome task. The company chose the ACI Personnel Cleaning Booth following extensive research.

“The Company had already undertaken considerable measures to reduce the spread of dusts” states Earl Coates, Quality/Health & Safety Manager for Octavius Hunt. “The minimal dusts present on disposable protective suits caused low level build-up of contaminated dusts within the disrobing areas. The disrobing activity was believed to be possibly creating exposure by inhalation of dust and/or by skin contact with contaminated surfaces within the hygiene areas. The use of ACI's dedusting booth allowed us to reduce dusts transferred both to the hygiene and disrobing areas. Subsequent inspections of hygiene areas confirms considerable reduction in dust levels and a reduction in risk of worker exposure to chemicals.”

Due to the nature of the dust being removed at Octavius Hunt, an air fed mask point within the booth has also been fitted which further minimises the risk of exposure by inhalation.

Dynamic Engineering Australia



Dynamic Engineering Australia

7/52 Kent Street

Cannington WA 6107.

Tel: +618 9356 7633

Fax: +618 9356 7644

Email: sales@dynamiceng.com.au

www.personnelcleaning.com