

Cleanroom air shower

BROCHURE



Introduction

Air Showers are self-contained chambers installed at entrances to cleanrooms and other controlled environments. They minimize particulate matter entering or exiting the clean space. Personnel and materials entering or exiting the controlled environment are “scrubbed” by high velocity HEPA-filtered air jets with velocities of 20-22m/s (4000-4300fpm).

Contaminated air is then drawn through the base within the unit, filtered and recirculated. Cleanroom applications: The greatest source of particulate contamination in a cleanroom is the operator. Air showers are installed between gowning areas and the cleanroom. The air shower enhances cleanroom operating protocol by serving as a reminder to all operators that they are entering a controlled environment.

Personnel therefore develop the habit of gowning up properly before entering the air shower.

Pharmaceutical and lab animal research applications: Air showers keep pharmaceutical production and lab animal breeding areas clean and also minimize egress of hazardous

substances and allergens from the controlled environment

Main Features

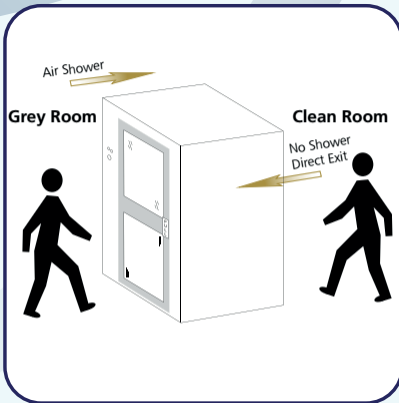
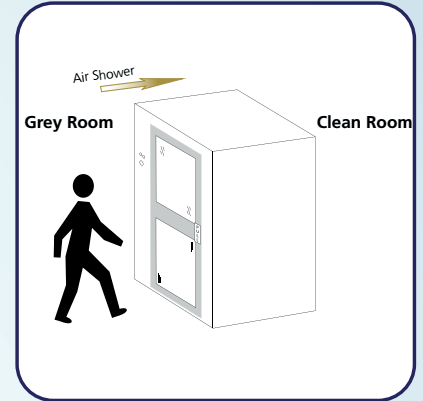
- High velocity shower jets in excess of 20 m/s ensure efficient scrubbing action to remove particulate matter.
- Operating modes can be programmed in the field.
- HEPA filtration achieves > 99.99% typical efficiency at 0.3-micron particles.
- A disposable pre-filter with 85% arrestance extends the life of the main filter.
- An emergency stop button is mounted on both sides of the shower.
- Permanently lubricated direct drive centrifugal blowers are used in conjunction with air nozzles.

Air Shower Operating Sequences :

Unlike Conventional air showers which are delivered with a fixed operating sequence, the Esco Air Shower's operating sequence may be selected from three pre-programmed sequences

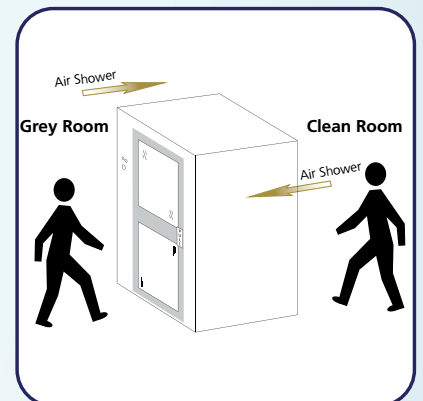
One-Way:

personnel may enter the controlled environment but not exit through the air shower. At the idle state, the clean side door is locked while the grey side is unlocked. This mode of operation is useful for controlling traffic patterns into and out of the controlled environment



Two-Way One-Way :

Personnel may enter or exit the controlled environment through the air shower. When entering the controlled environment the shower is activated. When exiting the shower is disabled to reduce throughput time. The air shower program is able to detect if the person is entering or exiting the controlled environment via door sensors and a time-sequenced control.



Two-Way:

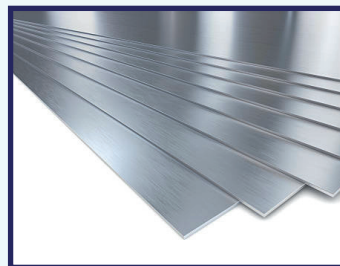
Personnel may enter or exit the controlled environment through the air shower. In both directions the air shower is activated. This mode of operation is useful in pharmaceutical and lab animal research applications to prevent the egress of hazardous substances and allergens from the controlled environment.

Finished Material:

You can select your RAL Preferred color



Aluminum cladding



Stainless steel



Polycarbonate panel

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