



RAYSHEN

INTRODUCTION TO AIR SHOWER

An air shower is a vital component in clean room operations, acting as a high-efficiency decontamination chamber designed to remove particulate matter from personnel and equipment before they enter controlled environments.

Commonly used in industries like pharmaceuticals, microelectronics, biotechnology, and medical device manufacturing, the air shower plays a crucial role in maintaining cleanroom standards by minimizing the ingress of pollutants. At Rayshen, we provide advanced, high-performance air shower systems tailored to meet the most stringent contamination control requirements.

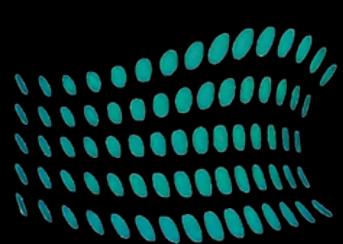


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DESIGN AND CONSTRUCTION FEATURES

Rayshen's air shower units are designed for optimal performance and durability. The structure is typically made of high-grade stainless steel or powder-coated steel, ensuring a clean and corrosion-resistant surface that aligns with GMP and ISO standards. The modular design allows for easy installation and scalability, making it suitable for a wide range of cleanroom environments.

Inside the air shower, multiple stainless steel nozzles are arranged to direct high-velocity air (up to 25 m/s) uniformly across the user's body. The automatic sensor-based doors prevent cross-contamination and ensure proper cycling of the air shower process.



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HEPA FILTRATION AND AIR FLOW MECHANISM

A critical component of the air shower is its advanced filtration system, which includes pre-filters and HEPA filters. The HEPA filters used in Rayshen's air showers have an efficiency rating of 99.99% at 0.3 microns, ensuring that even the finest airborne particles are removed effectively. These filters are crucial in maintaining the integrity of cleanroom environments by preventing the transfer of dust, lint, and other contaminants.

The filtered air is recirculated within the air shower to create a closed-loop system.

When a user enters, the high-velocity air jets activate, striking the person from multiple angles and dislodging contaminants.



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APPLICATIONS AND INDUSTRY USE CASES

The air shower is indispensable across multiple sectors where contamination control is mission-critical. In pharmaceutical manufacturing, it helps maintain the integrity of sterile production lines by removing particulate matter from personnel before they enter aseptic zones. In semiconductor fabrication, it protects sensitive microelectronic components from dust, which can cause defects and reduce product reliability.

Hospitals and biotech labs also use air showers to enhance biosafety protocols. In food processing and packaging industries, air showers prevent foreign particles from contaminating production lines.



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WHY CHOOSE RAYSHEN'S AIR SHOWER SOLUTIONS

When choosing an air shower, reliability, efficiency, and support are key considerations. At Rayshen, we focus on delivering robust cleanroom equipment backed by years of industry experience and innovation. Our air shower units come with easy-to-maintain components, customizable features, and user-friendly controls, making them a trusted choice for professionals seeking dependable contamination control. We provide end-to-end solutions, from design consultation to installation and after-sales support. All our systems undergo rigorous quality checks and adhere to international standards.