



Clean Room Solutions Isolator Technology Project Management & Consultancy

#### ABOUT:

PS AIR TECHNOLOGIES INDIA we stand tall in the field of pharmaceutical industry with our wide range of products in Clean room equipment's, isolator technology and clean rooms which are precisely design and manufacture.

With the vast Work Experience in the field and the unique design we are becoming the pioneer in this fields. To provide highest quality equipment's for various applications. We represent latest and directive technologies and incorporate an up to date know how of modern techniques, through our partners worldwide.

#### VISION:

To becoming the leading manufacturer in the field of Clean room, Isolator technologies with our knowledge and quality commitments.



#### MISSION:

PS AIR TECH is committed to ensure Quality delivery of products to the clients. Being a manufacturer aim to provide Adequate and perfect solution to the customers in every field of clean room. We pledge to continue the introduction of innovative techniques and ideas.

#### **OUALITY ASSURANCE:**

Among Our core strength we keep quality at the higher state. We deliver precisely manufacture products to meet our client's requirement. In-house quality check of product at every stage assures us the only the finest of the product to be deliver.

#### **HOW WE ARE GOOD:**

With the help of our professional team in the field of design manufacturing and research we are always try to deliver the best as we can. Our core strengths are—the team with rich industry experience, understanding the customer requirements, detailed drawings, timely deliveries, knowledge of current practices and compliance with the regulatory requirements.



#### **MIST SHOWER**

The MIST SHOWER from PS AIR TECH is uniquely design for micro labs and clean room application. Mist shower is now widely use in industries for decontamination from the cloths of the user. A mixture of air and water is spray on the cloths of the users. Comes with the microprocessor or PLC unit to control the whole process. Our versatile mist shower are quite adept at controlling the level of contamination for particle sensitive processes such pharmaceutical drug testing and for research applications involving molecular biology and biochemical experiments, cell and tissue culture experiments etc.

#### **Optional Accessories:**

- Audio visual alarm indicating condition of HEPA filters
- Clean down timer with operation hold indicator
- VFD based control systems
- PLC CONTROL

#### Application:

- Microelectronics and semiconductor industries
- Biomedical research
- Life Sciences
- Aerospace industries
- Spray painting
- High precision manufacturing processes

ITEM	DESCRIPTION
TYPE	Mist Shower
МОС	SS-304/SS-316 /CUSTOMIZED
FLOW	FROM 2 SIDES
VELOCITY AT NOZZEL	25 – 30 MPS
AIR CLEANLINESS	ISO CLASS – 5
HEPA FILTER	HEPA FILTERS WHICH CONFORMS TO H 13/H14WITH EFFICIENCY OF 99.997% DOWN TO 0.3 MICRON
DOOR	SS-304 DOUBLE WALL SANDWICH PANEL WITH TOUGHNED VIEW GLASS
INTERLOCKING	INTERLOCKING BETWEEN THE DOORS BY ELECTRO MAGNETIC LOCKS
LIGHTS/SWITCHES	FLUORESCENT LIGHT & ON/OFF SWITCHES FORBLOWER& LIGHTS
VIBRATION LEVEL	MINIMUM
POWER SUPPLY	220-230 V AC/ THREE PHASE / 50 Hz

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### **ISOLATORS**

Isolator systems are designed to meet the challenges and market requirements for low OEL containment systems in Pharmaceutical, Biotechnology, Medical devices, Radiopharmaceutical and Nuclear industries. The concept of isolation technology, which is well known throughout the pharmaceutical industry, is protecting the process from the operator and/or the operator from the process. Although the development and improvement of isolator technology is continuous it should be noted that the most significant changes have been in the form of its increased acceptance, backed by guidelines and standards produced by regulatory bodies.

### Our promise: from Design to Delivery

- 1. Design: We generate conceptual designs based upon proven solutions, before finally compiling product specifications, standard operating procedures (SOPs) and working schematics (P&IDs).
- 2. Mock up: We can create full scale, mock-ups which take into account ancillary equipment and manipulation devices. The client review follows, at which stage any necessary modifications are made.
- 3. Manufacturing: Manufactured in high quality stainless or other alloy steels the Isolator fabrications are formed, welded and polished to exacting standards and client requirements.
- 4. Factory Acceptance Testing: Only when the equipment is fully built and fully tested to design parameters is it exposed to a range of tests and standard operating procedures (SOPs). These can include, internal / external surface swabbing, dust in air monitoring, and full scale operational tests of performance, all being performed within our controlled test environment

#### Design advantages

- Ergonomic design
- Multiple Chambers
- Drum/product manipulation devices
- Inflatable seals
- Safe change "push-push" filters
- Closed loop control system
- Integration of proprietary contained transfer detail e.g. RTP, SBV's etc.
- Controlled environment re: temperature, humidity and oxygen content
- Fully integrated WIP/CIP clean systems including wash lances, rotary spray balls and solvent atomizing devices

### **Applications**

- Dispensing and sub-division
- Reactor Product Charging
- Pack Off/Off Loading
- Sampling & Heel Recovery
- Solids Charging
- Chemical synthesis
- Mills & Granulators
- Fluid Beds
- Filter Dryers

# Isolator systems provided by PS Air Tech

- RIGID ISOLATOR
- FLEXIBLE ISOLATOR
- NEGATIVE PRESSURE ISOLATOR
- POSITIVE PRESSURE ISOLATOR

### Service we provide for Isolator

- Barrier Isolator
- Isolator Products & Spares
- Isolator Validation
- Isolator Consultancy
- Isolator Documentation
- Isolator AMC
- PLC Validation
- Process Equipment
- Control Panel & PLC Programming

### Our range of Isolators

- Dispensing and Sub-division
- Sampling Isolators
- Charging and Formulation
- Process Offloading Isolators

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### **STATIC PASS BOX**

Static Pass through Boxes are used for transfer of material between two Clean Rooms that are equally clean. Static Pass Box should not be used between Clean Room and non-Clean Room. Our Pass Box has electromagnetic interlocking arrangement between the two doors with LED indication to show if any door is open. Material of Construction could be either GI with powder coated finish or fully SS 304 grade Stainless Steel. An UV lamp and CFL lamp are provided in the enclosure.



### **Optional Accessories:**

- · U.V. Light with Hour Meter
- Mechanical Interlocking

### Application:

- Space applications
- Life science
- Chemical industry
- Bio medical
- Diagnostics labs

#### Standard Model Available:

Model No.	Work Area (mm)
PS/SPB/24-24-24	610 X 610 X 610
PS/SPB/24-24-36	610 X 610 X 915
PS/SPB/36-24-24	915 X 610 X 610

ITEM	DESCRIPTION
TYPE	Static Pass Box
MOC	SS-304 /SS 316 / CUSTOMIZED
SURFACE FINISH	HAIRLINE FINISH (COVED CORNNERS ) / CUSTOMIZED
DOORS	SS – 304 DOUBLE WALLED DOORS WITH DOUBLE GLAZED VIEW PANEL
INDICATORS	INDICATOR & BUZZER IS PROVIDED FOR DOOR INTERLOCKING SIGNAL
LIGHTS/SWITCHES	LED LIGHTS & ON/OFF SWITCHES FOR LIGHTS
DOOR INTERLOCKING	ELECTRO MAGNETIC INTERLOCKING/ MECHANICAL INTERLOCKING TO ENSURE ONLY ONE DOOR OPENS AT A TIME
POWER SUPPLY	220-230 V AC/ SINGLE PHASE / 50 Hz

### DYNAMIC PASS BOX

Dynamic Pass Box is designed to allow material transfer through controlled environment without much personnel movement to minimize man /material movement & avoid cross contamination between different classified areas. This is essentially installed to minimize movement of personnel for transfer of material into and from the clean room. It aids to achieve desired classification, maintain integrity of products, process & controls ingress of particulate contaminants into clean room & between different classified areas. Our range of Dynamic pass boxes is available in various specifications as per the client's requirements.



### **Optional Accessories:**

- Electro-Magnetic / Mechanical Interlocking
- Floor mounted construction with three side wall structure & Door Drop Seal
- Audio Visual Alarm indicating condition of HEPA Filters
- Flame Proof Fitting

### Application:

- Space applications
- Life science
- Chemical industry
- Bio medical
- Diagnostics labs
- Pharmaceutical industry

#### Standard Model Available:

Model No.	Work Area (mm)	Airflow Velocity (Down flow)	Air Cleanliness	Air Flow
PS/DPB/24-24-24	610 X 610 X 610	0.45±0.05mps/	ISO Class 5 (ISO 14644-1:1999 (E)) /	Vertical
PS/DPB/24-24-36	610 X 610 X 915	90(fpm)	Class 100 (U.S. FED STD 209 E)	– Re-circulatory
PS/DPB/36-36-36	915 X 915 X 915			(Based on application)

ITEM	DESCRIPTION
TYPE	Dynamic Pass Box
MOC	SS-304 /SS 316 / CUSTOMIZED
VELOCITY AT GRILL	0.45+/-0.05 MPS
AIR CLEANLINESS	ISO CLASS – 5
MOTOR & BLOWER	STATICALLY & DYNAMICALLY BALANCED MOTOR BLOWER
HEPA FILTER	HEPA FILTERS WITH EFFICIENCY OF 99.997% DOWN TO 0.3 MICRON
PRE FILTER	PRE FILTER WHICH CONFORMS TO G4 GRADE WITH EFFICIENCY OF 95 % DOWN TO 5 MICRON
DOOR	SS – 304 DOUBLE WALLED DOORS WITH DOUBLE GLAZED VIEW PANEL
DOOR INTERLOCKING	ELECTRO MAGNETIC INTERLOCKING/
INDICATORS	INDICATOR & BUZZER IS PROVIDED FOR DOOR INTERLOCKING SIGNAL
LIGHTS/SWITCHES	LED LIGHTS & ON/OFF SWITCHES FOR BLOWER& LIGHTS
MAGNEHELIC GAUGE	MAGNEHELIC DIFFERNTIAL PRESSURE GAUGE ACROSS SUPPLY HEPA FILTER
DOP PORT	DOP TEST PORT FOR UPSTREAM OF HEPA FILTER
POWER SUPPLY	220-230 V AC/ SINGLE PHASE / 50 Hz

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#### **AIR CURTAIN**

PS AIR TECH air curtains range especially designed to be installed in reduced spaces to create a barrier between two different areas. They create an effective barrier up to a distance of 1.5 m. Because of the volume/power ratio, they also fulfil a purpose as a heating element.

The installation of this type of air curtains is recommended in cases such as kiosk windows, service windows that must be opened to assist the public, windows which, due to differences in temperature, have a tendency to steam up and make exterior vision difficult.

PS AIR TECH Air Curtains are the perfect way to provide your premises with a comfortable, clean and hygienic environment while saving energy with a quiet, efficient and powerful operation.



#### Standard Model Available:

Model No.	Size (mm)
PS-AC-600	Door Width 600 mm
PS-AC-900	Door Width 900 mm
PS-AC-1200	Door Width 1200 mm
PS-AC-1500	Door Width 1500 mm
PS-AC-1800	Door Width 1800 mm

### **BAG IN BAG OUT FILTER SYSTEM**

Bag in Bag Out Filter System provide a wide performance for preventing the workers from bio-hazard organisms and viruses while they are doing the regular HEPA or ULPA filter replacement work. It is the most effective equipment available for any zone, needing a special critical filtration cleanliness level and negative pressure environment.

Bag in Bag Out Filtration System includes pre-filter (and maintenance access door), HEPA or ULPA filter (and maintenance access door), inlet & outlet connecting duct flange unit, frame and mounting bracket. The equipment is full welded with argon welding except maintenance access door. It can be made not only at workshop but on site also. Magnehelic gauge becomes standard for pre-filter, and ULPA or HEPA filter.

### Application:

- Radiological Contamination
- Pharmaceutical and Biotechnological Clean Rooms
- Medical Device Clean Rooms
- Microelectronics Nanotechnology
- Hospital Suites
- Isolation Areas



#### **CLEAN ROOM AIR SHOWER**

The Air Shower from PS AIR TECH are fully self-contained units, designed to provide complete decontamination solutions for various clean room applications. They are ideally installed at the entrance of a clean room or controlled environment chamber to minimize the entry of dust and particulate matters inside the clean room via the clothes and skin surfaces of the personnel. They use highly efficient pre-filters and HEPA filters for maintaining highly sterile working environments and an integrated fan/blower assembly to provide high velocity air streams for maximum scrubbing action against dust and particulate matters adherent on the exposed skin, clothes and material surfaces.



#### **Optional Accessories:**

- Audio visual alarm indicating condition of HEPA filters
- Clean down timer with operation hold indicator
- VFD based control systems
- Photohelicguage / Digital pressure gauge to monitor of pressure drop across filter.
- Sodium vaporlamps
- · Flame proof fitting

### Application:

- Microelectronics and semiconductor industries
- Biomedical research
- Life Sciences
- Aerospace industries
- Spray painting

#### Standard Model Available:

Model No.	Work Area (mm)	Suitable Person	No of Nozzle and Diameter
PS/AS/001	800 x 750 x 1920	1 Person with one side blowing	8nos nozzle one side and nozzle dia 38mm
PS/AS/002	800 x 950 x 1920	1 Person with two sides blowing	13nos nozzle two sides and nozzle dia 38mm

#### **Technical Details:**

ITEM	DESCRIPTION
TYPE	Clean Room Air Shower
MOC	SS-304/SS-316 /CUSTOMIZED
VELOCITY AT NOZZEL	25 – 30 MPS
AIR CLEANLINESS	ISO CLASS – 5
MOTOR & BLOWER	STATICALLY & DYNAMICALLY BALANCED INBUILT MOTOR BLOWER
HEPA FILTER	HEPA FILTERS WHICH CONFORMS TO H 13/H14 WITH EFFICIENCY OF 99.997% DOWN TO 0.3 MICRON
PRE FILTER	PRE FILTER WHICH CONFORMS TO G4 GRADE WITH EFFICIENCY OF 95 % DOWN TO 5 MICRON
DOOR	SS-304 DOUBLE WALL SANDWICH PANEL WITH TOUGHNED VIEW GLASS
INTERLOCKING	INTERLOCKING BETWEEN THE DOORS BY ELECTRO MAGNETIC LOCKS
LIGHTS/SWITCHES	FLUORESCENT LIGHT & ON/OFF SWITCHES FOR BLOWER& LIGHTS
VIBRATION LEVEL	MINIMUM
POWER SUPPLY	220-230 V AC/ THREE PHASE / 50 Hz

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### **AIR SHOWER TUNNEL**

The Air Shower Tunnel from PS AIR TECH is a protected passageway that allows the user to pass into controlled environment free from surface contaminants. These are designed to provide sterile air streams for the removal of dust and contaminating particles from the clothes and skin surfaces of the user as he/she stands in the tunnel or walks through it. They provide the maximum decontamination solutions for particle sensitive processes and other research applications requiring highly sterile working conditions. Our Tunnel Air Shower are easy to operate and are quite economical. They are designed to meet all the industrial specifications



### Application:

- Clean Room
- Parma Production
- Micro-Electronic Fabrications and Production Units
- Semi-Conductor Production Lines
- Basic And Applied Science Research Laboratories
- Automobile industry
- Conveyor line

#### **Technical Details:**

ITEM	DESCRIPTION
TYPE	Air Shower Tunnel
MOC	SS-304/SS-316 /CUSTOMIZED
FLOW	FROM 3 SIDES
VELOCITY AT NOZZEL	25 – 30 MPS
AIR CLEANLINESS	ISO CLASS – 5
MOTOR & BLOWER	STATICALLY & DYNAMICALLY BALANCED INBUILT MOTOR BLOWER
HEPA FILTER	HEPA FILTERS WHICH CONFORMS TO H 13/H14 WITH EFFICIENCY OF 99.997% DOWN TO 0.3 MICRON
PRE FILTER	PRE FILTER WHICH CONFORMS TO G4 GRADE WITH EFFICIENCY OF 95 % DOWN TO 5 MICRON
DOOR	SS-304 DOUBLE WALL SANDWICH PANEL WITH TOUGHNED VIEW GLASS
INTERLOCKING	INTERLOCKING BETWEEN THE DOORS BY ELECTRO MAGNETIC LOCKS
LIGHTS/SWITCHES	FLUORESCENT LIGHT & ON/OFF SWITCHES FOR BLOWER& LIGHTS
VIBRATION LEVEL	MINIMUM
POWER SUPPLY	220-230 V AC/ THREE PHASE / 50 Hz

#### **VERTICAL LAMINAR AIR FLOW**

PS AIR TECH are conceptualized to provide a work area completely bathed in high efficiency perfect air, which is free from any kind of particulate contamination or impurities. These units are ideally suited in all the applications, requiring protection of biological specimens or products from the possible contamination during the process or test. Our Laminar Air Flow is fast gaining popularity in other fields, such as pharmaceutical production, electronic industries and various other manufacturing applications.



### Types of Laminar Air Flow System:

- HANGING TYPE LAMINAR AIR FLOW
- STAND MOUNTED TYPE LAMINAR AIR FLOW
- MOBILE TYPE LAMINAR AIR FLOW
- FLP TYPE LAMINAR AIR FLOW

### **Optional Accessories:**

- U.V. Light with hour meter.
- 55 304 cock for gas and air.
- Foldable polycarbonate front door.
- Clean down timer with operation hold indicator.
- Flame proof fitting.

### Application:

- Chemical
- Medical
- Food manufacturing
- Food industry
- Forensics
- Entomology
- Pathology

#### Standard Model Available:

Model No.	Hepa Filter Area (mm)	Airflow Velocity (Down flow)	Air Cleanliness
PS/CSVLAF/36-24	915 x 610		
PS/CSVLAF/48-24	1220 x 610	0.45±0.05mps/	ISO Class 5 (ISO 14644-1:1999 (E)) /
PS/SMVLAF/36-24-30	915 x 610	90(fpm)	Class 100 (U.S. FED STD 209 E)

### **Technical Details:**

ITEM	DESCRIPTION
TYPE	Vertical Laminar Air Flow System
MOC	SS-304/SS-316/CUSTOMIZED
VELOCITY AT GRILL	0.45 ± 0.05 MPS
AIR CLEANLINESS	ISO CLASS – 5
HEPA FILTER	HEPA FILTERS WHICH CONFIRMS TO H 13/ H14 WITH EFFICIENCY OF 99.9997% DOWN TO 0.3 MICRON
PRE FILTER	PRE FILTER WHICH CONFORMS TO G4 GRADE WITH EFFICIENCY OF 95 % DOWN TO 5 MICRON
BATTERY/BACKUP-	STD MAKE- AMRON/EXIDE/EQUIVALENT/ 2-4 HOURS
INVERTER	STD MAKE INVERTER
TROLLEY WHEEL	PU WHEEL WITH LOCKING ARRANGEMENT
MAGNEHELIC GUAGE	MAGNEHELIC DIFFRENTIAL PRESSURE GUAGE ACROSS SUPPLY HEPA FILTER
PAO PORT	PAO TEST PORT FOR UP STREAM OF HEPA FILTER
POWER SUPPLY	220-230 V AC/ SINGLE PHASE/ 5 Hz

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### HORIZONTAL LAMINAR AIR FLOW

PS AIRTECH Horizontal Laminar Flow workstations are designed to protect the product within the work area from airborne particulates in the ambient air. The regulated efflux of custom made laminar airflow supplies the work zone with ISO Class 5 air cleanliness to offer the best product production by a clean bench in the industry. The Horizontal Laminar Flow workstations pushes the air through a HEPA filter and directs the filtered air horizontally over the work surface at a constant speed, toward the operator.



### Optional Accessories:

- U.V. Light with hour meter
- SS 304 cock for gas and air
- Foldable polycarbonate front door
- Audio visual alarm indicating condition of HEPA filters
- Clean down timer with operation hold indicator
- Sodiumvaporlamps
- Flame proof fitting

#### Application:

Chemical
 Microbiology and Tissue

Medical culture lab

Food manufacturing • Entomology

Food industry
 Veterinary and seed sciences

Forensics • Pathology

#### Standard Model Available:

Model No.	Working Area (mm)	Airflow Velocity (Down flow)	Air Cleanliness	Air Flow
PS/HLAF/36-24-24	915 x 610 x 610			
PS/HLAF/48-24-24	1220 x 610 x 610	0.45±0.05mps/	ISO Class 5 (ISO 14644-1:1999 (E)) /	
PS/HLAF/48-24-30	1220 x 610 x 760	90(fpm)	Class 100 (U.S. FED STD 209 E)	Horizontal

#### Technical Details:

ITEM	DESCRIPTION
TYPE	Horizontal Laminar Air Flow System
МОС	SS-304/SS-316/CUSTOMIZED
FLOW	HORIZONTAL
VELOCITY AT GRILL	0.45 ± 0.05 MPS
AIR CLEANLINESS	ISO CLASS – 5
MOTOR/BLOWER	STATICALLY AND DYNAMICALLY BALANCED MOTOR BLOWER
HEPA FILTER	HEPA FILTERS WHICH CONFIRMS TO H 13/ H14 WITH EFFICIENCY OF 99.9997% DOWN TO 0.3 MICRON
PRE FILTER	MAKE PRE FILTER WHICH CONFORMS TO G4 GRADE WITH EFFICIENCY OF 95 % DOWN TO 5 MICRON
WORK TABLE	STAINLESS STEEL WORK TABLE WITH REINFORCEMENT
SIDE PANEL	ACRYLIC / POLYCARBONATE
ADDITIONAL	5/15 AMPERE SOCKET AND SWITCHES FOR EXTERNAL EQUIPMENT
LIGHTS/SWITCHES	LED LIGHT & ON/OFF SWITCHES FOR BLOWER & LIGHT

### MEDICAL LAMINAR AIR FLOW SYSTEM

The Medical Laminar Air Flow System provides a safe and clean environment for compounding of hazardous and sterile drug preparations. The special design of our versatile laminar flow cabinet allows safe manipulation of sterile products with an inward air barrier that increases operator safety. The mild steel constructed Medical Laminar Air Flow System can be used for a wide variety of applications including sterility testing, cell culture, molecular biology, veterinary science, drug preparation, operation theatres, PCR (in active mode with UV light and timer option), food industry and assembly of optical and electronic components.



#### **Application:**

- Sterility testing
- Tissue culture
- Molecular biology
- Microbiology
- Food industry
- PCR
- Haematology, oncology and pathology clinics
- Entomology

#### **Technical Details:**

ITEM	DESCRIPTION	
TYPE	Medical Laminar Air Flow System	
MOC	SS-304/SS-316/CUSTOMIZED	
FLOW	VERTICAL	
VELOCITY AT GRILL	0.45 ± 0.05 MPS	
AIR CLEANLINESS	ISO CLASS – 5	
SURFACE FINISH	HAIR LINE FINISHED/ CUSTOMIZED	
HEPA FILTER	HEPA FILTERS WHICH CONFIRMS TO H 13/ H14 WITH EFFICIENCY OF 99.9997% DOWN TO 0.3 MICRON	
LIGHTS/SWITCHES	LED LIGHT & ON/OFF SWITCHES FOR BLOWER & LIGHT	
MAGNEHELIC GUAGE	EQUIVALENT MAKE MAGNEHELIC DIFFRENTIAL PRESSURE GUAGE ACROSS SUPPLY HEPA FILTER	
PAO PORT	PAO TEST PORT FOR UP STREAM OF HEPA FILTER	
VIBRATION LEVEL	MINIMUM	
POWER SUPPLY	220-230 V AC/ SINGLE PHASE/ 5 Hz	

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### **BIOLOGICAL SAFETY CABINET**

PS AIR TECH Biological Safety Cabinet are widely used for day to day clean room activities involving high risk pathogens, etiological agents, non-volatile radio nuclides and limited degree of low toxic chemicals for various applications in research labs of all the branches of medical, agriculture, basic and applied science.

We specialize in both standard and customized models of Biosafety Cabinet specially designed to meet the challenging demands of various scientists for individual and specialized research applications. With standard magnehelic gauges and controls. The floor standing & portable cabinet provides access for passage of materials inside through working table with upside sliding glass door. With Duct connected on the top of the Biosafety for Exhaust.



#### **Biosafety Cabinet Types**

- Biosafety Cabinet Class 1
- Biosafety Cabinet Class 2
- Biosafety Cabinet Class 3

### **Optional Accessories:**

- Front door with gloves and glove port arrangement
- Transfer hatch for material movement
- PLC based control system
- U.V. Light with hour meter
- Sodium vaporlamps
- Flame proof fitting

### Application:

- Pharmaceutical
- Health care
- Chemical
- Medical application
- Laboratory application
  Bacteria, virus and
- other pathogen handling

#### Standard Model Available:

Model No.	Working Area (mm)	Airflow Velocity (Down flow)	Air Cleanliness	Air Flow
PS/BSC/36-24-24	915 X 610 X 610	0.45±0.05mps	ISO Class 5 (ISO 14644-1:1999 (E)) /	Vertical -
PS/BSC/48-24-24	1220 X 610 X 610	90(fpm)	Class 100 (U.S.FED STD 209 E)	Recirculatory

#### Technical Details:

ITEM	DESCRIPTION	
TYPE	Biological Safety Cabinet	
MOC	SS-304 /SS- 316 / CUSTOMIZED	
FLOW	VERTICAL RECIRCULATORY	
VELOCITY AT GRILL	0.45 +/- 0.05 MPS	
AIR CLEANLINESS	ISO CLASS -5	
MOTOR & BLOWER	STATICALLY & DYNAMICALLY BALANCED INBUILT MOTOR BLOWER	
HEPA FILTER	HEPA FILTERS WHICH CONFORMS TO H 13/H14 WITH EFFICIENCY OF 99.997% DOWN TO 0.3 MICRON	
HEPA FILTER (EXHAUST)	HEPA FILTERS WHICH CONFORMS TO H13 WITH EFFICIENCY OF 99.997% DOWN TO 0.3 MICRON	
PRE FILTER	PRE FILTER WHICH CONFORMS TO G4 GRADE WITH EFFICIENCY OF 95 % DOWN TO 5 MICRON	
SIDE FRAME	SS-304 DOUBLE WALLED	
FRONT DOOR	UPSIDE SLIDING GLASS DOOR WITH MANUAL OR MOTOR POWER.	
EXHAUST	SMALL EXHAUST DUCT	

### **GARMENT STORAGE CABINET**

PS AIR TECH Garment Storage Cabinet for Clean Room is designed to maintain the cleanliness integrity of clean room garments during storage. It can effectively purge and remove particles such as lint and dust ingress on the clothing fabric.Garment Storage Cabinetfeatures a quiet, direct drive, variable- speed blower mounted above a HEPA filter rated 99.99%0.3m, and delivers a continuous horizontal flow of clean air that block the inrush of contaminants into the storage area, as a result, helps garments virtually free of particulates. Door of the scientific equipment is made available to make movable and curtain type.



#### **Optional Accessories:**

- U.V. Light with Hour Meter
- 6/15 amp single-phase switch socket for external equipment
- Electro-Magnetic / Mechanical Interlocking
- Audio visual alarm indicating condition of HEPA filters
- Sodium vaporlamps
- Flame proof fitting

### Application:

- Electronic Industry
- Pharmaceuticals
- Food Processing
- Chemical

#### Standard Model Available:

Model No.	Work Area (mm)	Airflow Velocity (Down flow)	Air Cleanliness	Air Flow
PS/GSC/24-24-24	610 X 610 X 610	0.45±0.05mps/	ISO Class 5 (ISO 14644-1:1999 (E)) /	Vertical /
PS/GSC/24-24-36	610 X 610 X 915	90(fpm)	Class 100 (U.S. FED STD 209 E)	– Re-circulatory
PS/GSC/36-24-24	915 X 610 X 610			(Based on application)

#### Technical Details:

ITEM	DESCRIPTION	
TYPE	Garment Storage Cabinet	
MOC	SS-304/SS-316/CUSTOMIZED	
FLOW	VERTICAL	
VELOCITY AT GRILL	0.45 ± 0.05 MPS	
AIR CLEANLINESS	ISO CLASS – 5	
MOTOR/BLOWER	STATICALLY AND DYNAMICALLY BALANCED MOTOR BLOWER	
HEPA FILTER	HEPA FILTERS WHICH CONFIRMS TO H 13/ H14 WITH EFFICIENCY OF 99.9997% DOWN TO 0.3 MICRON	
PRE FILTER	PRE FILTER WHICH CONFORMS TO G4 GRADE WITH EFFICIENCY OF 95 % DOWN TO 5 MICRON	
TROLLEY WHEEL-	PU WHEEL WITH LOCKING ARRANGEMENT	
ADDITIONAL	5/15 AMPERE SOCKET AND SWITCHES FOR EXTERNAL EQUIPMENT	
LIGHTS/SWITCHES	LED LIGHT & ON/OFF SWITCHES FOR BLOWER & LIGHT	
MAGNEHELIC GUAGE	EQUIVALENT MAKE MAGNEHELIC DIFFRENTIAL PRESSURE GUAGE ACROSS SUPPLY HEPA FILTER	

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### **MOBILE TROLLEY**

Mobile Trolley cabinet is designed to maintain the cleanliness integrity of clean room garments during storage. It can effectively purge and remove particles such as lint and dust ingress on the clothing fabric.

Clean Room Stoker features a quiet, direct drive, variable- speed blower mounted above a HEPA filter rated 99.99%0.3m, and delivers a continuous downstream that block the inrush of contaminants into the storage area, as a result, helps garments virtually free of particulates. The work area is continuously supplied with positive pressure HEPA filtered re-circulated vertical / horizontal air flow.



#### **Optional Accessories:**

- U.V. Light with Hour Meter
- 6/15 amp single-phase switch socket for external equipment
- Electro-Magnetic / Mechanical Interlocking
- Audio visual alarm indicating condition of HEPA filters
- Clean down timer with operation hold indicator
- Sodium vaporlamps
- Flame proof fitting

#### Application:

- Electronic Industry
- Pharmaceuticals
- Food Processing
- Chemical

#### Standard Model Available:

Model No.	Work Area (mm)	Airflow Velocity (Down flow)	Air Cleanliness	Air Flow
PS/GSC/24-24-24	610 X 610 X 610	0.45±0.05mps/	ISO Class 5 (ISO 14644-1:1999 (E)) /	Vertical /
PS/GSC/24-24-36	610 X 610 X 915	90(fpm)	Class 100 (U.S. FED STD 209 E)	– Re-circulatory
PS/GSC/36-24-24	915 X 610 X 610			(Based on application)

#### **Technical Details:**

ITEM	DESCRIPTION
TYPE	Mobile Trolley
MOC	SS-304/SS-316/CUSTOMIZED
FLOW	VERTICAL
VELOCITY AT GRILL	0.45 ± 0.05 MPS
AIR CLEANLINESS	ISO CLASS – 5
MOTOR/BLOWER	STATICALLY AND DYNAMICALLY BALANCED MOTOR BLOWER
HEPA FILTER	HEPA FILTERS WHICH CONFIRMS TO H 13/ H14 WITH EFFICIENCY OF 99.9997% DOWN TO 0.3 MICRON
PRE FILTER	PRE FILTER WHICH CONFORMS TO G4 GRADE WITH EFFICIENCY OF 95 % DOWN TO 5 MICRON
BATTERY/BACKUP-	STD MAKE- AMRON/EXIDE/EQUIVALENT/ 2-4 HOURS
INVERTER-	STD MAKE INVERTER
TROLLEY WHEEL-	PU WHEEL WITH LOCKING ARRANGEMENT
ADDITIONAL	5/15 AMPERE SOCKET AND SWITCHES FOR EXTERNAL EQUIPMENT

#### DYNAMIC DRESS CABINET

DYNAMIC DRESS CABINETfeature a quiet, direct drive, variable-speed blower mounted above a HEPA filter, rated 99.99% efficient at removing particles 0.3µm and larger. This blower/filter module delivers up to 120 linear feet/minute (0.61 m/s) of Class 10 air, a continuous downstream that blocks the inrush of contaminants into the storage area and helps to keep garments and other materials particle-free. An air outlet located at the bottom of the storage area discharges air along with any contaminants that may have entered the cabinet.



#### **Optional Accessories:**

- U.V. Light with Hour Meter
- Electro-Magnetic / Mechanical Interlocking
- SS 304 removable grills on side walls for return air
- Audio Visual Alarm indicating condition of HEPA Filters

### Application:

- Space applications
- Life science
- Chemical industry
- Bio medical
- Diagnostics labs
- Pharmaceutical industry

#### **Technical Details:**

ITEM	DESCRIPTION
TYPE	Dynamic Dress Cabinet
	WALL MOUNTED
MOC	SS-304 /SS 316 / CUSTOMIZED
FLOW	VERTICAL LAMINAR
VELOCITY AT GRILL	0.45+/-0.05 MPS
AIR CLEANLINESS	ISO CLASS – 5
MOTOR & BLOWER	STATICALLY & DYNAMICALLY BALANCED MOTOR BLOWER
HEPA FILTER	HEPA FILTERS WHICH CONFORMS TO H 13/H14 WITH EFFICIENCY OF 99.997% DOWN TO 0.3 MICRON
PRE FILTER	PRE FILTER WHICH CONFORMS TO G4 GRADE WITH EFFICIENCY OF 95 % DOWN TO 5 MICRON
DOOR	SS – 304 DOUBLE WALLED DOORS WITH DOUBLE GLAZED VIEW PANEL
INDICATORS	INDICATOR & BUZZER IS PROVIDED FOR DOOR INTERLOCKING SIGNAL
LIGHTS/SWITCHES	LED LIGHTS & ON/OFF SWITCHES FOR BLOWER& LIGHTS
MAGNEHELIC GAUGE	MAGNEHELIC DIFFERNTIAL PRESSURE GAUGE ACROSS SUPPLY HEPA FILTER AND ACROSS PRE FILTER
DOP PORT	DOP TEST PORT FOR UPSTREAM OF HEPA FILTER
POWER SUPPLY	220-230 V AC/ SINGLE PHASE / 50 Hz

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#### **CLEAN STOKER**

Clean Stoker for Clean Room is designed to maintain the cleanliness integrity of clean room garments during storage. It can effectively purge and remove particles such as lint and dust ingress on the clothing fabric.

Clean Room Stoker features a quiet, direct drive, variable- speed blower mounted above a HEPA filter rated 99.99%0.3m, and delivers a continuous downstream that block the inrush of contaminants into the storage area, as a result, helps garments virtually free of particulates. Door of the scientific equipment is made available to make movable and curtain type.



#### Types of Clean Room Stoker

- MODULAR TYPE
- TROLLEY TYPE CLEAN STOCKER
- UV PROTECTED PANEL SEALED CLEAN
  STOCKR
- SHOE STORAGE CLEAN STOKER

#### Application:

- Electronic Industry
- Pharmaceuticals
- Food Processing
- Chemical

## **FAN FILTER UNIT**

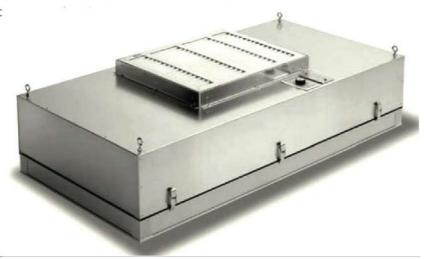
PS AIR TECH cleanroom fan filter units are self-contained devices that utilize HEPA or ULPA filters. We offer a full line of standard and custom fan filter units, with numerous options available to meet your specific cleanroom requirements. MAC 10 Original comes standard with the filter integral with the unit housing, requiring the unit to be removed from the ceiling grid to replace the filter. The RSR unit has the filter sealed to the unit using the knife edge/gel seal construction, allowing the filter to be replaced from the room side.

#### Standard Features

- Low sound, low watts, low profile, and low operating costs.
- Three speed switch features low, medium, and high settings; standard on all 2 ft. x 4 ft. units
- Solid state speed controller standard on 2 ft. x 2 ft., 2 ft. x 3 ft., and all RSR units.
- Forward-curved centrifugal fan.
- High Efficiency Particulate Air (HEPA) UL900 Filter: 99.99% efficient @ 0.3 Micron.
- Snap-in pre-filter allows for easy replac

### Application:

- Pharmaceutical
- Chemical
- Agri-chemical Companies
- Dispensing of Raw Materials



## **REVERSE LAMINAR AIR FLOW**

PS AIR TECH offer easy solutions to control your dust and vapor in the form of RLAF. Our equipment is designed to protect workers from breathing unsafe levels of particulates during material handling operations. Air flows from the booth ceiling, down across the operator's head, and into a grille below the operator's waist level, thereby drawing particulates away from the operator's breathing zone. We designs both standard and customized downflow booth for clean room application. The containment booths are economical and offer unmatched usages and specifications.

### **Optional Accessories:**

- Front Anti-static PVC Curtains
- Audio visual alarm indicating condition of HEPA filters
- Clean down timer with operation hold indicator
- VFD based control systems
- Sodium vaporlamps
- Flame proof fitting
- Safe change bag in / bag out arrangement for filters
- Double skin side panels with view windows
- Service access from front / back / side
- Horizontal internal coving at base

### **Application:**

- Pharmaceutical
- Chemical
- Agri-chemical Companies
- Dispensing of Raw Materials
- Chemical Industry

#### Standard Model Available:

Model No.	Work Area (mm)	Airflow Velocity (Down flow)	Air Cleanliness	Air Flow
PS/RLAF/48-36	1260 X 955 X 2170			
PS/RLAF/48-48	1275 X 1260 X 2170	0.45±0.05mps/	ISO Class 5 (ISO 14644-1:1999 (E)) /	Vertical -
PS/RLAF/72-48	1875 X 1275 X 2170	90(fpm)	Class 100 (U.S. FED STD 209 E)	Recirculatory

ITEM	DESCRIPTION
TYPE	Reverse Laminar Air Show
МОС	SS-304/SS-316 / CUSTOMIZED
VELOCITY AT GRILL	0.45+/- 0.05 MPS
AIR CLEANLINESS	ISO CLASS – 5
MOTOR/BLOWER	STATICALLY & DYNAMICALLY BALANCED INBUILT MOTOR BLOWER
HEPA FILTER	HEPA FILTERS WHICH CONFORMS TO H 13/H14 WITH EFFICIENCY OF 99.997% DOWN TO 0.3 MICRON
HEPA FILTER (EXHAUST)	HEPA FILTERS WHICH CONFORMS TO H 13/H14 WITH EFFICIENCY OF 99.978% DOWN TO 0.3 MICRON
FINE FILTER	ENERTIA MAKE FINE FILTER WHICH CONFORMS TO F6 GRADE WITH EFFICIENCY OF 99 % DOWN TO 5 MICRON

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#### **CLEAN ROOM**

Cleanrooms are used in practically every industry where small particles can adversely affect the manufacturing process. They vary in size and complexity, and are used extensively in industries such as semiconductor manufacturing, pharmaceuticals, biotech, medical device and life sciences, as well as critical process manufacturing common in aerospace, optics, military and Department of Energy. A cleanroom is any given contained space where provisions are made to reduce particulate contamination and control other environmental parameters such as temperature, humidity and pressure. The key component is the High Efficiency Particulate Air (HEPA) filter that is used to trap particles that are 0.3 micron and larger in size

#### Salient Feathers

- HEPA or ULPA fan filter units
- Powder coated or stainless (stainless) steel frame building
- Free-standing
- Can be easily and quickly relocated
- Large open spans up to 34 ft.
- Interior clear height 8 to 16 ft.
- Room Class 100,000 to Class 10
- Aesthetic design, visually appealing
- High quality performance
- Easy to assemble
- Expandable and upgradeable
- Adjustable pressure upto 0.06 W.C.

### **Application**

- Nano-Technologies & Photonics
- Semiconductor / Electronics
- Manufacturing
- Food Contact, Packing & Bottling Lines
- Research/Academia
- Injection Moulding
- Printing
- Healthcare
- Life Science
- Medical Device Manufacturing
- Pharmaceutical
- Computing (server room)
- Optical Lenses Manufacturing
- Nuclear & Atomic Energy
- Defence& Aerospace
- Oil & Deep Sea Exploration



### **CLEAN ROOM TENT**

Cleanroom tents provide outstanding performance as well as aesthetic appeal. Cleanroom tents are composed of walls of heavy plastic sheeting supported by a strong metal frame. This superior construction provides the flexibility to easily assemble, reconfigure and move cleanroom tents. Cleanroom tents are available in both vertical and horizontal air flow configurations. All cleanroom tents from Clean Air Products are equipped with HEPA OR ULPA filtration systems to provide either positive or negative air pressure. Soft wall cleanroom tents are available from Class 100,000 to Class 10.

### **MODULAR CLEAN ROOM**

Modular, prefabricated cleanroom system that is designed to provide superior Cleanroom performance and aesthetic appeal. Its modular, prefabricated design combines functionality with flexibility to create systems that will meet your cleanroom needs of today and into the future. These rooms are available from Class 100,000 to Class 10. The rooms are available with open free spans from 6 to 34 feet and interior room heights of 8 to 16 feet. Multiple rooms can be combined to form larger Modular Clean Room systems.



#### Clean Room Panels

Designed for applications from Class 100,000 to Class 10 environments, the Panels are design to meet all the requirements of a new or existing project while providing an effective alternative to conventional construction. We provides complete flexibility with demountable walls allowing panels to be modified or removed without disturbing adjacent wall panels or the ceiling

#### Clean Room Doors

PS AIR TECH can design, supply and install doors of different types. They can be supplied with different widths and heights to suit the need of the applications. The door can be a swing type or a sliding type. They can be of different materials, like electro zinc steel with various surface coatings, Stainless Steel, Glass, FRP and HPL. The door system can be incorporated with various automatic door and closing system as well as with various types of access control systems.

#### Air Locks & Interlocks

To maintain cleanroom pressure differentials, passage should be through airlocks (and ideally controlled by inter-locks). Airlocks are mostly used for the coming and going of personnel in gowning and degowning areas and material transfer airlocks. Our wall panel and door system can easily be configured with an interlock system, with two subsequent sets of doors, each opening separately with airspace between them.

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### **CLEAN ROOM FURNITURE AND LAB FURNITURE**



SS Stairs



Clean Room Table



Canteen Table



SS Cabinet Case





SS Material Trolley



SS Instrument Trolley



Step Ladder



Guarded Trolley



Waste Dustbin



SS Sitting Table



Gowning Bench



Operation Theater Trolley



Lab Wall Cabinet

#### PRODUCT & SERVICES BY PS AIR TECH:

- CLEAN ROOM MAINTAINANCE
- **CLEAN ROOM LIGHT**
- **CLEAN ROOM RISERS**
- CLEAN ROOM GRILLS
- **CLEAN ROOM ACCESSORIES**
- FLAME PROOF ACCESSORIES
- CG SCREEN FOR LAF
- MAGNEHELIC GAUGES
- CONTROL PANELS FOR CLEAN ROOM MACHINES
- HEPA FILTER
- PRE FILTER
- POLYCARBONATE PARTITION
- **PVC CURTAIN**
- **DAMPERS**
- FILTER HOUSING BOX
- **OUTDOOR UNITS**
- COVINGS

#### **DOCUMENTATION AND CERTIFICATION:**

- **DESIGN QUALIFICATION**
- FUNCTIONAL DESIGN QUALIFICATION
- INSTALATION QUALIFICATION
- OPERATION AND MAINTAINANCE MANUAL
- OPERATIONAL QUALIFICATION
- PRODUCT QUALIFIACTION











