

Pass Box:-

Static Pass Box

Micro Flow pass boxes are self-contained units installed at the entrance to clean rooms. They minimize the amount of particulate contamination entering the clean room by reducing operator "traffic". Equipment and materials are passed into the clean room via the pass box.



Dynamic Pass Box

Clean room sterile dynamic pass through box is self contained units with class 100 laminar air flow unit installed at the entrance to the cleanrooms. They minimize the amount of particulate contamination entering the cleanroom by reducing the operator traffic. The laminar flow in the pass box starts running, when the doors are opened for material transfer in order to maintain air cleanliness required for the product.



- This system provides class 100 as per US FED 209E (equal to class 5 as per ISO 14644-1) air cleanliness with in the chamber
- Available in Different sizes to suit customer requirement
- Material of Construction available in complete Wood Melamine, Stainless Steel or CRCA with Polyurethane PU coated construction

Dispensing & Sampling booth:-

Micro flow Power Dispensing Booth are designed as Open Front Containment Systems with built-in scavenging arrangement that draw powder aerosols away from the operator and the operating environment, protecting products and personnel. Technical specifications:

Micro Flow Dispensing and Sampling booth are ideal for weighting and dispensing of critical Pharmaceutical and other powders. These provide down flow of HEPA filtered clean air creating clean environment in the area where powder is being dispensed as well as protects the worker, who is working inside from inhaling the powder fumes as the air bound powder gets trapped in the suction filter at the bottom.



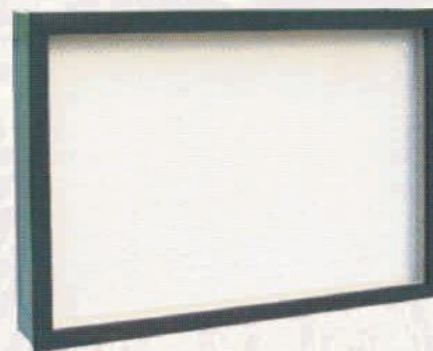
Technical Specifications

- Type - Recirculated type or Exhaust Type.
- Material of Construction available in complete Wood Melamine, Stainless Steel or CRCA with Polyurethane PU coated construction
- Air cleanliness - Class- ISO-5 (As per ISO-14644-1)

HEPA Filter

Hepa filters are designed to meet requirement of very fine filtration up to 0.3 micron at high efficiency of 99.99 %.

A HEPA filter (high efficiency particulate air) thus is a filter that is excellent at removing tiny particles from the air and trapping them. A true HEPA filter (there are filters called HEPA-like) is able to remove a minimum of 99.97 percent of airborne particles that are 0.3 micrometers in diameter.



Air Shower

Air Showers supply concentrated Class 100, clean air flows to lift off contamination while an individual stands in, or walks through, a specially constructed air chamber. Whenever an automatic floor switch inside the unit is activated, pressurized air streams from adjustable nozzles* at a velocity between 6,000 and 8,000 feet per minute, a force that ensures efficient scrubbing action necessary to remove particulate matter.

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.

Micro Flow is a leader in air showers for demanding applications in the micro-electronics, semiconductors, pharmaceutical, spraypainting, lab animal research and food markets.



Sterile OT

This system is unidirectional and delivers air flow over the operating table of 300 air changes per hour. A bacterial count of 10 cfu or less per cubic meter at the operating area is achieved

- Compact & Slick design
- Quiet operations
- SS Perforated grill to protect HEPA filters
- Class 100 work surface
- Puff insulated doors, wall & ceiling panels
- Available in MS/GI powder coated & SS 304



AC Integration

A/C integrated class 100 Pressurizing Module to pressurize and sustain the clean air with HEPA Filter of 0.3 micron, pre Filter, Motor Blower Assembly. It delivers cooled and filtered air into the room. In return air duct having one pre filter of 5 micron, 5% fresh air provision with dampers for control the fresh air quantity.

Technical Specifications

- Air changes / Hour - 40
- Class-10,000
- Temp - 24.c
- Noise level - 65 decibels +/-5
- Humidity - 45-60%
- Standard - FEDSTD 209E



Microflow Devices India Private Ltd.

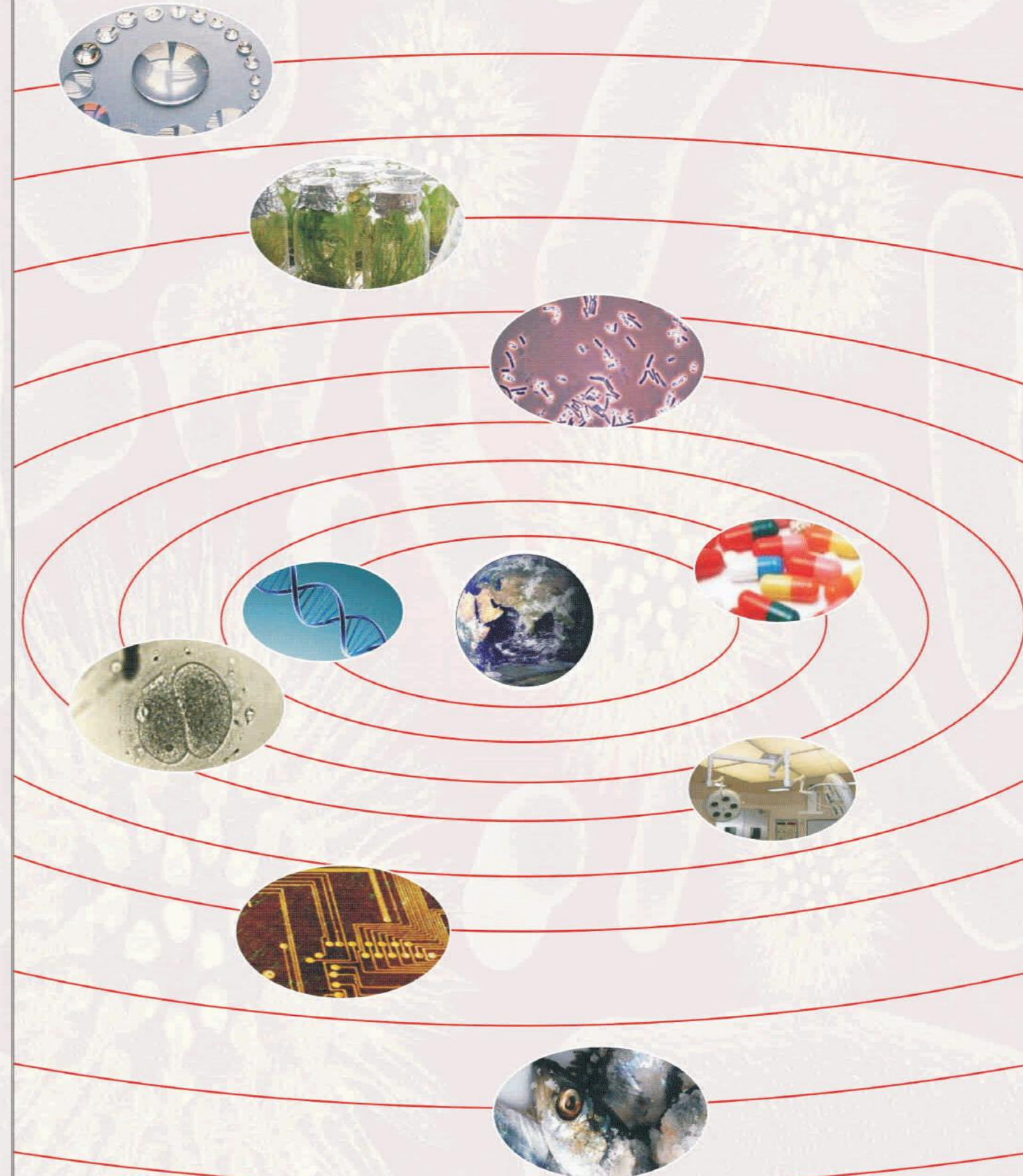
Regd. Office : # 51G, 1st Cross Street, Sabari Nagar, Porur, Chennai - 600 116. India.
Works : Plot No. 4&5, WIP SIDCO Industrial Estate, Thirumudivakkam, Chennai - 600 044
Phone : +91 44 4284 0181, 2478 1010 Fax : +91 44 4284 0251 Mobile : 95000 96250
email : info@microflow.in / microflowdevices@gmail.com www.microflow.in



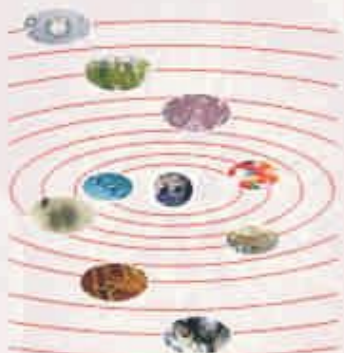
www.microflow.in

Microflow Devices India Private Ltd.

for Technology and Reliability



Profile



MICROFLOW

Micro Flow Devices India Pvt Ltd, was founded by a young and dynamic engineers.

Our endeavour is to ensure the greatest possible reliability and innovative excellence in our products to reflect the highest quality in design and workmanship to be the unsurpassed standard of comparison, and to be recognized as a Company of dedication dependability and integrity.

Today Micro Flow Devices due to its dedicated efforts and sustained investments in technology is recognized as world's pioneer contamination control of enclosed spaces. The momentum has made us major players in diverse industrial sectors like Pharmaceuticals, Hospitals, Laboratories, Aerospace, Electronics, Tissue Culture, Microbiology, Biotechnology, Oncology, Ray-diagnosis, Ray-therapy, Veterinary Science, Virology.

Micro Flow Devices working in the field of aseptic technology with an objective of providing engineering services towards minimizing and controlling contamination from vectors like ambient environment, personal process contamination, bioclean room shell, material decontamination and cleaning, material handling within the facility.

Micro Flow Devices also helps clients to establish protocols for bioclean room operation, maintenance and executes assignments for complete facilities including design, HVAC layouts, air filtration systems and clean room finishes.

Out of consideration for several possible applications, each of a highly specialized nature, we have available numerous optional features that can be added or built into our system at the time of manufacture or retrofitted at a later date, so that you may evolve or upgrade the configuration to meet your needs.

Micro Flow Range of Products

- Laminar Air Flow Work Stations
- Biological Safety Cabinets
- Dispensing and Sampling Booth
- Static and Dynamic Pass Boxes
- Air Showers
- Fume Exhaust Systems
- AC Integrations / Positive / Recirculatory Pressure Modules
- Sterile Operation Theatre (OT)
- Garment Cubicles
- HEPA / ULPA Pre Filters
- Clean Rooms
- Validation
- Inoculation Chambers
- Stomackers (Laboratory blenders)
- Incinerators

Laminar Air Flows Work Stations

- Horizontal/Vertical
- Micro Flow laminar flow bench provides a HEPA filtered airflow across the work area, and a particulate-free work surface.
- Specifications Material of Construction : Wood Melamine / CRCRA
- Power Coated / PU painted / Stain Steel
- Cleanliness Level : Class 100
- Standard ISO 14644-1
- Advantages of Vertical Laminar Flow:
 - Air-Stream is not directed at the operator causing less stress over Sterile Air wipes all the areas, there is no dead space.



Fume Exhaust Systems

We offers a wide range of Fume Exhaust Hood to suit every specific application of the user. These are designed to exhaust toxic, or otherwise harmful vapours etc, for protecting laboratory personnel and equipments. Fume exhaust hoods provided by us are made of water proof ply & block boards. Its external body is fabricated from laminated sheets, stainless steel and interiors coated with epoxy paint. A face velocity of 100 feet per minute (fpm) provides efficient vapour capture while reducing hood turbulence.



Garment Cubicle

Micro Flow Sterile Garment Storage Cabinet is a specifically designed cabinet which provides a wash of sterile filtered / UV radiation clean air through HEPA filters.

The special cabinet protects dust and other impurities on clean room garments and other materials.

Biological Safety cabinet:-

The Biological Safety Cabinet (BSC) is the principal primary containment device used to minimize exposure of laboratory personnel to aerosols or droplets when working with biological materials or pharmaceutical products. Secondary containment measures include facility design features such as negative pressure airflow and BSC location within the laboratory. Biological Safety Cabinets are divided into three classifications (Class I, II, III). The classifications are based on what type of biological agents that may be used in the laboratory and the degree of risk they pose to personnel working directly with the biological agents or visitors who may only be in the laboratory for a short time.

Class I Micro Flow Biological Safety Cabinets

The Class I Biological Safety Cabinet provides personal and environmental protection, but does not protect the material within the cabinet (product) from contamination. Unfiltered room air is drawn through the front opening and across the work surface. The exhaust air is passed through a HEPA filter before being vented to the outside. The Class I Micro Flow Biological Safety Cabinet is designed for general microbiological research with low and moderate risk agents. However, since product protection is not provided it is mainly used to enclose equipment. It may also be used for radioisotopes and some volatile toxic chemicals if the exhaust is ducted to the outside.

Class II Biological Safety Cabinets

The Class II cabinets are designed for personal, environmental and product protection. They are divided into two types (A and B) based on construction type, airflow velocities, patterns and exhaust systems. Type A Biological Safety Cabinets are classified as A1 (formerly type A) and A2 (formerly B3). Type B Biological Safety Cabinets are classified as B1 and B2.

Class III Biological Safety Cabinets

Class III Biological Safety Cabinets - are totally enclosed, gas tight, ventilated work space. Exhaust air must pass through HEPA filters or a HEPA filter and an air incinerator before being discharged to the outside. The airflow is maintained by a dedicated independent exhaust system that maintains a negative pressure within the cabinet of at least 0.5 inches of water. The Class III Biological Safety Cabinet was designed for work with Biological Safety Cabinet-4 agents and provides the highest degree of protection for the worker, the environment and the product. Arm-length gloves that allow for manipulation of materials inside are attached to ports in the cabinet.

