



Innovative solutions

Exceptional quality

Affordable prices

Excellent service support

## INTRODUCTION

*Airtech is well recognized global player in containment, Sterile environment, HVAC, Clean room & laboratory equipment technology. We are highly oriented towards the domestic & international markets. Airtech represents innovation, forward-thinking design, coupled with the tradition of quality and affordability since 1999.*

*Airtech contributes to facility improvements in medical - hospital, pharmaceutical, Electronics, biotechnology and general laboratory services by offering high-quality innovative solutions that guarantee improved quality of life and well-being for society as a whole.*

*Airtech products are designed to provide you a contamination controlled environment. The company is specialized in quality Design, manufacturing and service providing for Clean rooms & Clean room Equipments. All the products offered by us are reliable and comply with international standards.*

*Leveraging on our state-of-the-art facilities and profound expertise, we provide Design, Supply, install & validate all types of clean rooms and related equipments. All our services are in conformance with international standards and can be tailor made to befit different requirements of our clients. All our services are designed to provide utmost satisfaction to our clients. All our Design, Engineering, R&D, Manufacturing, Quality control and customer services are dedicated to each of the technologies in which Airtech has expertise.*

*Our clean room equipments and clean room testing and maintenance services have proved beneficial in a number of industries.*

## THE CORE SECTORS SERVED BY US ARE:

- Drugs & Pharmaceutical Industries
- Hospital Industries (IVF Labs, Operation Theatres)
- Micro Biology, Pathology & Tissue Culture Laboratories
- Biotechnology & Nanotechnology
- Plant tissue culture Laboratories
- Automobile Industry
- Semi conductors, Electronics & Space Applications
- Research Institutes
- Quality Control & Testing Laboratories
- Scientific & Industrial Research

*We leave no stone unturned to provide satisfaction to our customers. Our exclusive services are meant to be valuable and rewarding for both user and the supplier. All our validation and maintenance services will surely make your investments worthy and useful.*

*To provide utmost satisfaction to our clients, we conduct scrupulous tests on the equipments and clean room systems. To give our client a verified proof of our stringent quality control measures, we provide test reports as a hard copy. The report can be also availed thru CD-ROM or through e-mail, as per the preference of the clients.*

*Moreover the test report can also be created & customised to suit various compliance requirements like CGMP, NABH, NABL ISO Standards Compliant. This makes them appropriate to be used as attachments in qualification and validation reports.*





## LAMINAR AIR FLOW CLEAN AIR WORK STATIONS

**AIRTECH** Laminar Air Flow Clean air work station provides operation in sterile and particle free conditions due to continuous flushing of working area with unidirectional Horizontal or vertical ultra filtered airflow. It assures a full product protection when processing products requiring ultra clean zones for manipulation. Our range of equipments are designed with best of its quality & performance which are widely accepted by various Govt. & Private agencies in the industries across the Globe.

### MODELS:

Horizontal, Vertical, Tissue culture version, Mobile Portable Units, Ceiling Suspended for OTs & Pharma Filling applications

### MATERIAL OF CONSTRUCTIONS:

Water proof commercial Ply with Melamine finish  
Galvanized Iron with Poly Urethane Coat Finish  
CRCA With Powder Coated Finish  
SS 304, 316 Grade with satin finish

### SPECIAL FEATURES OF OUR UNITS:

High Efficiency HEPA or ULPA Filtration  
High Quality washable & cleanable Prefilter  
Magnehelic or Minihelic Gauge for Pressure  
Adjustable Speed Control, Quiet Operation  
SS Work Table, UV Lamp & Fluorescent Lamp  
Attractive Appearance, Highly Portable  
Standard Sizes 2x2x2, 3x2x2, 4x2x2, 6x2x2  
Custom design Sizes Available on request

### MOBILE LAMINAR AIR FLOW UNIT

The application of Mobile laminar air flow unit is for safely transferring the product from one sterile area to another sterile area and also from non sterile area. The unit is used in industrial manufacturing for protection of the product in areas like Pharmaceutical Industries, Filling section, Bio-tech industries, PCB Assembling processes, Tissue culture Labs and others. The unit is ideal to protect product from particular contamination with help of class 100 clean air flow & UV tube.

### FEATURES:

Cleanliness Class 100, ISO 5 as per ISO 14644-1  
Compact, mobile transportable design  
Quiet operation with less than 60db noise level  
Flourescent Light & Ultra violet Lamp  
Class 100 work station  
Available in vertical, horizontal & mobile unit with battery backup  
Counter balance weight glass shutter  
MOC SS304, SS316, MS Powder coated, GI PU Painted



## OPERATION THEATRE LAMINAR AIR FLOW

We at Airtech consequently contributing to the improvement of the hospital Operation theatre areas and of reducing the risk of infections by designing and installing vertical down flow Laminar air flow systems for the hazardous areas where patients are treated. The use of laminar air flow in combination with HEPA filters and special air distribution systems lays ground for ultra clean air and today's highest technically possible germ free environments. As clean air enters the patients area, pressurised laminar air flow ensures protection from external contamination and avoidance of internal contamination by surgical team and / or patient. Airtech offers a wide range of different operating theatre solutions, matching all particular needs.

## BIOSAFETY CABINETS

AIRTECH Biosafety cabinets are used to provide primary containment in the laboratory when the investigator is using potentially infectious materials. Bio-safety cabinets are available in Stainless steel and GI with PU coated construction. Worktables are of removable type and suitable for easy cleaning. Inner surface are completely lined with stainless steel coverings. HEPA filters are of Minipleated type. Differential pressure is monitored through specially designed & imported gauges. Working chamber is provided with UV & Fluorescent tubes. Feather-touch control switches are provided for the operations of blower, Fluorescent Tube lights & UV. Bio-safety cabinets are available in various standard sizes and custom-built sizes to suit user's requirement



### TYPES OF BIOSAFETY CABINETS:

**Class I:** The Class I biological safety cabinet is an open-front negative Pressure cabinet. The exhaust air from the cabinet is filtered by a HEPA filter. The Class I biosafety cabinet will provide only personnel and environmental protection, but not product protection.

**Class II:** The Class II vertical laminar-flow biological safety cabinet is an open-front ventilated cabinet. This cabinet provides a HEPA-filtered, recirculated mass airflow within the work space. The exhaust air from the cabinet is also filtered by HEPA filters. Thus, the Class II biosafety cabinet will provide personnel, environment and product protection. While HEPA filters are effective for trapping particulates and infectious agents, these filters will not capture volatile chemicals & gases.

**Class III:** The Class III cabinet is a totally enclosed ventilated cabinet of gas-tight construction. Operations within the Class III cabinet are conducted through attached glove port arrangements. When in use, the Class III cabinet is maintained through negative air pressure of at least 0.5 inches water gauge. Supply air is drawn into the cabinet through HEPA filters. The cabinet exhaust air is filtered by two HEPA filters, installed in series, before discharging outside of the facility. The exhaust fan for the Class III cabinet is separate from the exhaust fans of the facility's ventilation system and should not be combined together.

### TYPES OF CLASS II CABINETS:

**Class II, type A:** This does not have to be vented, which makes it suitable for use in laboratory rooms which cannot be ducted. This cabinet is acceptable for use of low to moderate risk agents in the absence of volatile toxic chemicals and volatile radionuclides.

**Class II, type B1:** This cabinet must be vented, with 30% of the air exhausted from the cabinet while 70% is recirculated back into the room. This cabinet may be used with etiologic agents treated with minute quantities of toxic chemicals and trace amounts of radionuclides required as an adjunct to microbiological studies if work is done in the directly exhausted portion of the cabinet, or if the chemicals or radionuclides will not interfere with the work when recirculated in the downflow air.

**Class II, type B2:** This cabinet must be totally exhausted, with 100% of the air exhausted through a dedicated duct. This cabinet may be used with etiologic agents treated with toxic chemicals and radionuclides required as an adjunct to microbiological studies.

**Class II, type B3:** This must be vented. 70% of the air is exhausted from the cabinet while 30% is recirculated. This cabinet may be used with etiologic agents treated with minute quantities of toxic chemicals and trace amounts of radionuclides that will not interfere with work if recirculated in the downflow air.







### AIR SHOWER

**AIRTECH** Air Showers engage continuous airflows to remove contaminations such as lint, dirt, dust etc., while an individual moves in or walks through a specially designed & constructed Air shower. The high velocity air from jet nozzles ensures efficient scrubbing action necessitates to remove particulate matters. Contaminated air then flows through the return airpath on the sidewalls of the air shower and flows through pre filters and final HEPA filters.

**Airtech** Air showers are installed at the entrance of any clean rooms in order to keep the clean room sanitized by minimizing the amount of particulate contamination entering the clean room. Equipment and materials are sanitized by passing through air shower while particulate contamination is removed by continuous flow of air with high velocity HEPA-filtered air thru jet nozzles. Contaminated air is then taken in through the return air path of the unit filtered and re-circulated into the chamber..

**Airtech** air showers are mainly used for personal movement in pharma applications, Materials & Cargo Movement for Automobile industries for Paint shop booth applications and other clean rooms



### AIRCURTAIN

**AIRTECH** Air curtains are designed to provide an invisible barrier to your clean and Controlled sterile processing area from entry of unwanted dusts, fumes and other pollutions. The high-velocity air flow also prevents the entry of flies and insects inside. Also helps maintain the positive pressure and cool air inside your clean room or any controlled environment where the doors cannot always be closed. Air curtains are fabricated from pre treated mild steel sheet metal and by epoxy powder coated finish. Powerful, trouble free, continuous running motors are used to control Noise level with in 65 - 75 db on a scale.



### MATERIAL OF CONSTRUCTIONS:

Galvanized Iron with Poly Urethane Coat Finish  
CRCA With Powder Coated Finish  
SS 304, 316 Grade with satin finish

### SPECIAL FEATURES:

Attractive Appearance,  
Standard Sizes 3', 4', 5', 6'  
Custom design Sizes Available on request

### REVERSE LAF - DISPENSING AND SAMPLING BOOTH



Powder containment booths are used to control the hazardous emissions of powders dust or vapors during powder dispensing & product sampling, or bag dispensing, without risk to the operator or environment. The downwards airflow prevents airborne dusts caused by weighing and dispensing operations rising into the operator's breathing zone. 0.3 micron HEPA Filtered downward air stream deflects air-borne dust away from the

operator breathing zone which is caused in handling operation. The air forced downwards is extracted at low level into the booth's filtration system where dust particles are contained at each level of filtration prior to being re-circulated back into the booth's air stream. The Dust particles are being filtered at three levels of filtration prior to being re-circulated back to the booth's air stream. These units are suitable for filling, refilling, weighing & sampling of Raw material & Components. Our range of equipments are designed with utmost care to suit the specific customers requirement to best of its quality & performance which are widely accepted by various Leading Pharma and other chemical Manufacturers across the Globe.



### SPECIAL FEATURES OF OUR UNITS:

Variable Speed Control for Velocity adjustments  
High Efficiency HEPA or ULPA Filtration as per specific requirement  
High Quality washable & cleanable Prefilter and intermediate Filters  
Magnehelic Gauges for Pressure differential between the Filters  
Low Noise Operation, Attractive Design as per GMP Standard Sizes 4x3x6, 4x4x6, 6x4x6, Customized design are also Available



### MATERIAL OF CONSTRUCTIONS:

Galvanized Iron with Poly Urethane Coat Finish  
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SS 304, 316 Grade with satin finish

### STERILE GARMENTS STORAGE CABINET

**AIRTECH** Sterile Garment Storage Cabinet provides the premium solution to meet your Sterile garments maintenance. It ensures the cleanliness of your controlled cleanroom environment. Cleanroom garments can accumulate particulate contamination during storage and between laundry washes, which in turn may lead to lower product yields and increased product quality issues. These cabinets are equipped with Motor blower, HEPA filter, Prefilter, UV lamp & Infra red lamp for initial sterilization, totally equipped in a fully contained enclosure, which will not shed particles or contaminate the environment of your cleanroom. They provide a solution for storing your cleanroom garments in a visible and organized manner, while at the same time removing particulate contamination from your garments as they are stored and removed.



### MATERIAL OF CONSTRUCTIONS:

Galvanized Iron with Poly Urethane Coat Finish  
SS 304, 316 Grade with satin finish





### CLEAN ROOMS

*AIRTECH is a Leading builders of high - quality Modular , Portable, Softwall & Hardwall cleanrooms, offering an economical & effective solutions to all your cleanroom needs. If you need a small Portable Softwall in a very short duration or building an entirely new cleanroom, adding to or upgrading an existing*

*clean room,or simply looking for a single cleanroom component, we design supply and produce the most cost effective product on the market. Our complete line of clean room components will enable you to outfit your room from a single source. We also offer Fan Powered H E P A Filters, Clean room Light Fixtures, Ceiling Grids and Tiles. The Airtech softwall cleanroom is an economical and easy approach to modular portable cleanrooms. Room sizes of any ranges from 4' x 6' to 30' x 30' can be built.*



*AIRTECH modular cleanrooms are designed to suit any R & D work, Electronic assembling , medical equipments assembling or any specific process activity which requires cleanroom conditions. These custom built modular clean rooms can be designed for the various requirements like class 10, Class100, class 1000, class10000 Class 100000 cleanliness level as per ISO 16441-1, US FED STD209E*



*AIRTECH Modular Hard wall clean room offers you the convenience of easily designed installed,relocated upgraded as your needs changes. Modular Hardwall cleanrooms are considered a more permanent & fixed facility and offer a full line of options not normally available on Softwall and Semi cleanrooms,*



*Variable options like Temperature & Humidity controls, removable walls,clear ceiling spans, oversized single and double wide doors, roll-up and sliding doors, load bearing roof desks with PUF Panels. Hard wall clean rooms are ideal for any industries, such as production machinery, filling line, packing, sealing in pharma industry,micro-electronics, space application etc.*



### FUME EXHAUST HOODS

*AIRTECH Laboratory fume exhaust hoods are enclosed workspace which removes smokes / fumes / odours from any processes conducted in the hood. Work surface of these Fume Hoods is equipped with acid proof ceramic lining, polished granite or TRESPA Panels. These hoods are comprised of the hood itself and a sash, which is the front panel of the fume hood that can be opened and closed to maximize access and minimize airflow.*

*The Fume hood is closed on three sides and front side provided with 5 mm thick polycarbonate or optional Toughened Glass Vertical sliding door . The fume hood is provided with a centrifugal motor blower mounted on top of the Hood or can be installed outside the Lab area, coupled directly with a suitable motor for sucking the fumes from the hood and forcing it to go out to the atmosphere through the duct. Suitable lighting is provided inside the work chamber.They are available with or without storage cup board under the work bench Also available in ductless type also, with activated carbon filter to remove heavy odours.Inlet nozzles for gas/air/vacuum etc Electrical points to work with any small electrical equipments, Water sink with inlet and outlet connections. Custom built units are available in various sizes to suit the lab.*



### LAB FURNITURES

*AIRTECH manufactures high quality laboratory furnitures with complete line of metal casework for the rigorous demands of the professional laboratory The rugged construction of eachcabinet precision-formed panels,welded corners, double-wall doors and drawers,durable*

*epoxy powder coated construction assures decades of service in an attractive modern environment.Our lab design-engineer can help you design your lab with smallest possible detailing about lab furniture. we can freeze lab layout with complete specs. AIRTECH Design comprehensive options of modular storage cabinets & Lab furnitures with acid & chemical storage cabins, Acid resistant work tops and sinks, Taps,pegboards,antivibration tables, electrical utility points with built in service channels.The constructional Materials and hardware fittings are all of premium quality & grade and has a long durability & life Hence it is tough, yet aesthetically beautiful!*





## FAN FILTER UNITS

AIRTECH fan filter unit is designed to provide Ultra filtered laminar air flow over a specific area. The unit integrates a high efficiency Motor blower with a HEPA / ULPA Filter. The FFU sucks in contaminated air from the Prefilter side and exhausts filtered clean air vertically or horizontally in a unidirectional (Laminar) air stream. FFU's are most commonly used in the construction of Class 1 to Class 1,00,000 clean rooms as per ISO 14644-1.

## POSITIVE PRESSURE MODULES

AIRTECH Positive Pressure Modules are designed to provide a clean zone with in a small enclosure or area. These pressure modules adopt the same Laminar Air Flow principle. Pre filters are fixed at the rear end of the unit and the motor blower assembly are used in the system to suck the air & passes thru the HEPA filter chamber. In the HEPA filter chamber the air is filtered to the maximum level. The pressure modules will provide Class 5 air cleanliness as per ISO 14644-1, Class 100 air cleanliness as per US Fed. Standard 209E. These units are suitable for Microbiology & Tissue culture labs



## CLEAN ROOM PASS BOX

AIRTECH Pass Boxes are designed to minimize traffic and contamination entry in to the clean room which enables parts, tools and other work materials to be passed to and from the room. Unit acts as an air lock device preventing ambient air from entering, or clean air from exiting the clean room. These are available in Both Static Version & dynamic Version.



## STANDARD FEATURES

- Electro Mechanical interlocking for the doors
- Swing type doors with view panels
- Door open indicator
- Optional UV lamp
- Fluorescent tube light etc.

## AVAILABILITY

- Available in Static & Dynamic versions
- Available in Different sizes to suit customer requirement
- Available in SS 304, 316 grade or MS with PU coated



## ACCESSORIES

- Deep Pleat & Minipleat HEPA Filters
- Pre Filters of 1 Micron to 20 Microns
- Magnehelic / Minihelic Pressure Gauges (Digital & Analog versions)
- Replacement Spares for all clean room equipments
- Ultra Violet Lamp, Infra Red Lamp,
- Acrylic / Uv stabilized Poly carbonate Front doors
- Clean room sticky mats
- Antistatic PVC Curtains

We undertake complete validation of all kinds of clean rooms & Clean room equipments  
Laminar air flow & Biosafety cabinet certification  
Clean rooms Laser Particle Counting to confirm cleanliness class levels  
DOP Test to prove the Integrity of HEPA, ULPA Filters  
Clean rooms Airflow pattern, Air change calculations  
Clean rooms Air Pressure Balancing, Temperature & humidity checks  
All our validations will comply with NABH, NASL, NSF, ISO 16441, FED STD 209E Standard

## AIRTECH SERVICES

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