



# BioSafety Cabinet- Class 100

MODEL NO. - ACM- 42103-L



# Bio Safety Cabinet Class 100

We are manufacturers of bio safety cabinets class 100 and class 10000 in India since 1990. Our bio safety cabinets 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 bio safety



cabinets specially designed to meet the challenging demands of various scientists for individual and specialized research applications. Over a short period of time weiber brand have been established as reliable exporters of bio safety cabinets in India. We are catering to the huge market in South East Asia, Middle East, Africa and Europe.

Apart from the exports, we are also renowned suppliers of bio safety cabinets in India. We are catering to the variety of customers ranging from defense installations, research laboratories, educational institutes and various R & D laboratories of leading national and multi national companies.

## PRODUCT OVERVIEW

Our Bio safety cabinet are conceptualized and designed to provide a work area that is completely bathed in high efficiency perfect air, which is free from any kind of particulate contamination. These bio safety cabinets are indispensable when the user is working with potentially infectious bio hazardous agents, bacteria and viruses.

Our bio safety cabinets ensure the triple protection to the personnel, environment and the product by trapping the potentially harmful micro organisms inside the filters.



## PROCESS EXPLANATION

Our bio safety cabinets incorporate all the standard features of a vertical laminar air flow combined with the unique capability to be used in conditions that require material, personnel and environment protection within the enclosure, from extra-neous contaminants that are airborne. This is accomplished in our bio safety units with the help of a uniquely designed and strategically located high efficiency perfect air filters made of non woven superior grade pleated media. The air inside the unit is circulated and re-circulated through these filters to ensure maximum protection by the inward air flow at a constant face velocity, thus creating a negative pressure of approximately 0.5" or more. The intake of the air is also derived through primary HEPA filters located at the pre filter unit of the unit.

## CLASSIFICATIONS

### Bio Safety Cabinet Class I

The class I bio safety cabinets have an open front design and works on the principle of negative pressure generation. The exhausted air is filtered through high efficiency perfect air filter before disbursing in the environment. This bio safety cabinet is ideal to be used where user protection and environmental protection is key.

### Bio Safety Cabinet Class II

Bio safety cabinet class II also have an open front design provided with negative pressure generation module. This equipment provides recirculation of mass flow of HEPA filtered air. This type of bio safety cabinets provides excellent protection to users, products and the environment.

### Bio safety Cabinet Class III

Bio safety cabinet class III is a totally closed compact and purely ventilated enclosure having an air tight construction. All the experiments/procedures are performed through rubber gloves, which are provided at the front of the unit.

The primary feature of class III bio safety cabinets is that they maintain negative pressure of 0.5" or more while in operation. The supplies of fresh air are taken inside the enclosure through specially designed high



efficiency perfect air filters. The exhausted air of the unit is passed through two modules of HEPA filters, which are strategically placed in series. The air passes through the two filters before being discharged in the environment. These type of bio safety cabinet have complete self sustained exhaust system.

## CONSTRUCTION

Our bio safety cabinet is designed to conform to the united state federal standard 209B/BS5295 and meets the class 100 conditions along with British



standard 5726-Appendix A. Our units are fabricated of industrial grade wooden boards covered with mica sheets. The inner portion of all our bio safety cabinets is painted with epoxy paint coating for extra long life. The working table is made of heavy gauge stainless steel sheet of grade ss-304. The side panels made out of heavy plexi glass sheets are mounted on anodized aluminum frames. The whole unit is supplied with differential manometer to gauge the pressure drop in the unit while operation, beside the gas cock, power socket etc.

### Filter Assembly

All our bio safety cabinets are fitted with fully washable synthetic pre-filter units and secondary high efficiency perfect air filters made of mini pleated non woven fabric. The efficiency of our filters have a rating better than 99.99% at DOP (cold) and 99.97% at DOP (Hot). Our units have the capacity to hold all suspended particles of size greater than 0.3 micron.

### Motor And Blower Assembly

All our bio safety cabinets are provided with perfectly balanced (Static as well as dynamic) motor and blower motors bearing ISI mark. The rating of the assembly is 1/5 HP. Our high efficiency pumps which have life long lubricated bearings ensure a trouble free operation for a long time.

## ILLUMINATION

All the units are provided with adequate illumination at the work table by means of fluorescent lights panel concealed at the upper portion of the unit. This light arrangement conforms to the guidelines laid down in US federal standard . The illumination at the work table is approx greater then 800 lux.

### Ultra Violet Light

Optimal wattage ultra violet light is incorporated in the illumination panel of our bio safety cabinets to take care of the sterilization of the existing air present in the enclosure, thus ensuring the high standard of cleanliness in our equipment before the commencement of actual working.



## NOISE LEVEL

Our bio safety are designed to ensure that the work enclosure have minimum possible vibration levels and noise level is also contained below 60 db.

## SALIENT FEATURES

- Ergonomic Design
- Versatile Usage
- Low Noise And Vibration Levels
- Conforms to US Federal Standard 209 B
- Calibration And Protocol Documentation

## APPLICATIONS

- Our bio safety have a variety of applications such as
- Quality control labs of pharmaceutical Industries





- Quality control labs of food processing industries
- Quality control labs of micro circuit and electronic assembly and manufacturing applications.
- Deoxy Ribonucleic Acid Thermo cycling
- General Laboratory applications in Biotechnology
- General Laboratory applications Microbiology
- General Laboratory applications Tissue Culture
- General Laboratory applications Genetic engineering

## TECHNICAL MATRIX

Constructions	Class 100
Cleanliness (Class)	90 ft/min + 20 feet
Face velocity	Industrial grade mica clad wooden board
Table	Stainless steel sheet table of ss-304 grade
Pre Filter	Washable pre-filter unit
HEPA Filters	Glass pleated non woven fabric filter having 99.99% efficiency 0.3 micron particle size.
Air Flow	Unidirectional.
Air Flow Control	Three Step air flow speed controller
Blower Assembly	Centrifugal lubricated bearing type ISI marked assembly
Illumination	Fluorescent light illumination greater than 800 lux on work table
Noise level	Noise level less than 54 db
<b>Add on features</b>	Gas/air/vacuum line cock
Power Requirements	500 watts – 750 watts (Model specific)
Internal Work Space	600mmx600mmx600mm/ 900mmx600mmx600mm/ 1200mmx600mmx600mm /1800mm..
Nominal voltage	220-230 Volts, 50 Hz Single Phase
Frequency	50





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## **ACMAS** TECHNOLOGIES PVT. LTD.

### **CORPORATE OFFICE/ SHOWROOM (INDIA)**

Plot No. 352-353, Sector – 57  
Phase- IV Kundli, Sonapat, Haryana - 131028  
Land Line No.: +91 - 11- 47619688,  
Fax: +91-11-47619788  
E-mail.: [info@acmasindia.com](mailto:info@acmasindia.com)

### **SALES OFFICE (HONG KONG)**

Unit D 28 11/F Wing Tat Comm,Bidg 97, Bonham Strand East,  
Sheung Wan, Hong Kong (PRC)  
Tel.: 0086-13929598046 | 0086- 18922303099  
E-mail.: [hk@acmasindia.com](mailto:hk@acmasindia.com)

### **SALES OFFICE (RUSSIA)**

Inmed Trade Street Ozerkovsky Embankment,  
Unit No 50, Straine- 1, Off- 502, Moscow, Russia  
E-mail.: [info@acmasindia.com](mailto:info@acmasindia.com)  
Tel.: 0049- 79592345 | Email: [russia@acmasindia.com](mailto:russia@acmasindia.com)