

Inspiring Generations...

### BIOLOGICAL SAFTEY CABINET

We design, manufacture and supply Class 2 Biosafety Cabinets Type A2 & Class 2 Biosafety Cabinets Type B2 for laboratory and research applications.

These **Type B2 Class II Biological Safety Cabinets** have an open front design provided with negative pressure generation module. Class II, Type B2 cabinets are total exhaust cabinets, widely used in toxicology laboratories and similar applications where chemical effluent is present and clean air is essential. Cabinet protect from contamination of the works, experiment or process from outside contaminants.

The ergonomic internal design, the airflow aerodynamics, microprocessor based controls, the built-in safety devices and the advanced level of construction, ensure the highest performances at the most stringent safety levels, as specified by International standards. These systems combine a multitude of design, construction and technological considerations to provide optimum operator, product and environmental protection. Stainless steel construction and simple design make it easy to clean after use. The powder coating finish prevents



microbial / bacterial growth on the exterior and delivers a sleek and graceful appearance

#### SALIENT FEATURES:

- A front access opening with careful maintained inward air flow. An internal blower draws sufficient room air through the front gill to maintain a mimimum calculated or measured average lfpm at the face opening of the cabinet.
- There is no recirculation withing the work area. The contaminated air is drawn by the blower through the plenum of the cabinet , where 100% of the air is exhausted from a common plenum at top through a HEPA FILTER.
- Room air enters through a blower/motor passes through a HEPA supply filter into the work area as the vertical unidirectional airflow
- Air is pulled through the base of the cabinet through the perforated front and rear grilles. Simultaneously, air entering through the front opening is pulled through the grill and exhausted immediately.
- HEPA filters having efficiency rating as high as 99.99% with cold DOP & 99.97% with hot DOP thus retaining all air-borne particles of size 0.3 micron and larger
- Negative pressure surrounds the work area and maintains inward air flow in chamber.
- Aerodynamics air flow grills maintains safety and prevents blockage.
- High effieciency pre filter use increases life of HEPA filter
- Unit has UV germicidal light for sterilization and floruscent lamp for illumination.
- Personnel protection from harmful agents used inside the biosafety cabinet.
- Product protection to avoid contamination of the works, experiment or process from outside contaminants.
- Environmental protection from contamination of the works, experiment or process from outside contaminants.
- Machine is fitted with lockable castor wheels for ease of movement.

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#### **SPECIFICATIONS:**

Model	SAII-BSC-B2-2	SAII-BSC-B2-3	SAII-BSC-B24	SAII-BSC-B2-6
Main Filter	HEPA Filter (99.97% efficient at 0.3 micron particulates to meet air quality ISO			
	Class 4 equivalent to US FED STD 209 E, class 10)			
Pre-filter	High-efficiency washable pre filter of rating 20 micron			
Illumination	Fluorescent Lamp 40W (greater than 800 LUX as per guidelines laid in US federal standard)			
Sterilizing	UV Germicidal Tube of 254 nm wavelength			
Front Door	Sliding type safety Door made of plexi glass (Polycarbonate Door Optional)			
Utility	Gas/Air cock and Multipoint 15/5 Amp. electric socket			
Manometer	Static pressure analogue type			
Input supply	AC 230V, 50/60Hz			
MOC (Cabinet)	Cold Rolled Steel Powder Coated (Optional Stainless Steel SS-304)			
Work Table	Stainless Steel 304 grade			
Internal Work zone	600 x 600 x 600	900 x 600 x 600	1200 x 600 x 600	1800 x 600 x 600
Dimension (LxDxH mm)				
Size of HEPA Filter	600 x 600 x 150	900 x 600 x 150	1200 x 600 x 150	900 x 600 x 150
(LxDxH mm)				
No. of HEPA Filter	1	1	1	2

#### **OPTIONAL:**

- a. Front door made of transparent Polycarbonate Sheet in lieu of plexi glass to cost extra.
- b. Magnehelic pressure differential gauge (to track filter pressure in lieu of static pressure manometer).
- c. Electronic filter choke alarm (Differential pressure monitor).
- d. Interlocking of U.V. germicidal tube & fluorescent light with auto switch off/on mode for motor blower when the door is closed /open.
- e. Microprocessor LCD controller with auto switch off mode for motor blower when door is closed. Digital buzzer timer sounds an audio alarm on completion of sterilizing time of the chamber and the switches off U.V. germicidal tune and automatically switches ON the fluorescent light, alerting user that the bench is ready for use.
- f. Hour meter totalizer for U.V. light.
- g. Gas burner.
- h. Exhaust ducting per running feet.
- i. Virus burn out.
- j. Heavy duty exhaust system.
- k. Digital manometer

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