

BIOSAFETY CABINET

100 % air exhaust

Negative pressure air surrounding all biological contaminated parts

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.

There is no recirculation within the work area.

Room air enters through a blower/motor in the top of the cabinet and passes through a HEPA supply filter into the work area as the vertical unidirectional airflow.

Descending air is pulled through the base of the cabinet through the perforated front and rear grilles.

Simultaneously, air entering through the perforated front opening is pulled through the grille and exhausted immediately, 100% of the air is pulled into the facility exhaust system for appropriate treatment.

Type B2 cabinet are hard-connected to an exhaust system.

Negative pressure surrounds the work area with double wall plenums for protection.

Air drawn through pre-filter is made to pass through highly effective HEPA (High Efficiency Particular Air) filters MAIN/SUPPLY FILTER having efficiency rating as high as 99.99% with cold DOP and 99.97% with hot DOP, thus retaining all airborne particles of size 0.3 micron and larger. The highly efficient HEPA filter maintains the optimum cleanliness and purity. Being equipped with the prefilter, it can extend the life of HEPA filter.

Aerodynamic airflow grills maintain safety and prevents blockage.

U.V and fluorescent interlock available

Ergonomic and comfortable sloped front window for comfortable head and elbow rest position, thus reducing fatigue

Sash is counterbalanced for smooth and light weight operation with standard opening for easier access to work zone and enhanced user safety.

CLASS-II design ensures PERSONNEL, PRODUCT and ENVIRONMENT PROTECTION.



CLASS-II BIOSAFETY CABINET PROTECTION :

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 contaminants contained within the biosafety cabinet.

CLASS-II BIOSAFETY CABINET KEY FEATURES :

A front access opening with carefully maintained inward air flow.

HEPA-filtered, vertical, unidirectional airflow within the work area.

HEPA-filtered exhaust air to the room or exhaust to a facility exhaust system.

Office:- C-9/124, First Floor, Opp. Fire Station & Metro Pillor No.386, Sector-8, Rohini, Delhi-110085

First Unit- O-32, Bawana industrial area, Sector-3, delhi-110039, Second Unit-Swaroop Nagar

Email id : aps.inst2010@gmail.com Web: www.labequipments.net

CLASS-II BIOSAFETY CABINET APPLICATIONS :

Typically used for biosafety levels 1 through 3 for low to moderate risk biological agents.

The type B2 total exhaust cabinets are widely used in toxicology laboratories and similar applications where chemical effluent is present and clean air is essential.

All types of Class II cabinets may be used in biosafety level 4 laboratories when workers utilize positive pressure suits. However for level 4 Class III cabinets are recommended.

Class - II	Protection From Particulates	From Vapors and Gases
Type B2	Personnel, Work Area (Product) and Environment	Offer protection to personnel (offer protection to environment if exhausted to treated system.

EXHAUST SYSTEM WITH BLOWER

With an integral and essential exhaust system consisting of a heavy duty and powerful motor blower system, Class II Type B2 biological safety cabinet is able to exhaust 100% potentially contaminated air outside the cabinet & air.

DRAIN TROUGH WITH VALVE

The trough at base is easy to clean and for offloading liquid spillage if any.

UPPER & FRONT COVER

Removable upper and front cover simplifies filter, blower and front control panel replacements and maintenance easier.

DECONTAMINATION BY UV LAMP

UV Lamp to produce UV rays of 253.7 nanometers and fluorescent lamp are interlocked and motor blower are turned off/on as and when front sash is closed/opened. UV lamps functions through a timer (Option) to control the decontamination cycle and maximize UV lamp life. The UV lamp shuts off once the desired set time of decontamination is over and switches the fluorescent lamp to ON position.

FRONT WINDOW/SASH

Front Sash consists of a thick plexi-glass or toughened transparent glass (Option) for a clear inside view. In addition it serves optimum resistance and protection from harmful UV rays, protection user from exposure to harmful Ultraviolet radiation.

SPLASH PROOF ELECTRIC SUPPLY SOCKET

Splash proof sockets is provided for optimum convenience of using small electrical devices inside the cabinet.

MATERIAL OF CONSTRUCTION

Internal Working Chamber is made up of Stainless Steel (SS-304).

External Cabinet is fabricated of Cold Rolled Steel Duly powder Coated.

FRONT AIRFLOW INTAKE GRID

Aerodynamically designed front airflow intake grid eliminates potential turbulence and contamination.

FLOOR STAND AND CASTOR WHEELS

Floor Stand is made up of heavy duty tubular pipe duly powder coated and fitted with durable castor wheels for rotation and total brake system on front wheels.

TECHNICAL SPECIFICATIONS & ORDERING INFORMATIONS

Class II Type B2 BIOLOGICAL SAFETY CABINET

Model	APS-BSC 2(B2)	APS- BSC 3(B2)	APS- BSC 4(B2)	APS- BSC 5(B2)	APS- BSC 6(B2)
Internal Dimensions (WxDxH)mm	600x600x600	900x600x600	1200x600x600	1500x600x600	1780x600x600
MOC	Internal Working Chamber : Stainless steel (SS-304) Exterior Cabinet : Cold Rolled Steel Duly Powder Coated or Stainless Steel (SS-304)				
Pre - Filter	Mounted on aluminum frame, of rating 20 microns				
Supply / Main Filter	HEPA (Efficiency 99.97% @0.3 microns to meet air quality ISO Class 4 equivalent to US FED STD 209 E, Class 10				
Exhaust Filter	HEPA (Efficiency 99.97% @0.3 microns to meet air quality ISO Class 4 equivalent to US FED STD 209 E, Class 10				
Electrical Socket	Electrical Socket is provided for using small electrical devices				
Power Supply	220/230 Volts AC supply				
Heavy Duty Exhaust System	Standard fitted to the system for 100% exhaust				
Exhaust Tunnel/Duct (Option)	Available on per running feet basis				
Sash Lift	Can be lifted and adjusted manually				

OPTIONS

Sr. No.	OPTION
a)	ULPA Filter in lieu of HEPA filter
b)	Front door made of Toughened Glass (Tempered) in lieu of plexi glass
c)	Magnehelic Pressure Differential Gauge (To track filter pressure in lieu of static pressure manometer)
d)	Electronic filter choke alarm (Differential Pressure Monitor)
e)	Microprocessor Controller with door position alarm 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 the user that the bench is ready for use.
f)	Gas Burner
g)	Glove ports with gloves
h)	Exhaust ducting per running feet
i)	Digital down flow velocity indicator

