

BIO SAFETY CABINET CLASS II A2

Description :-

In order to minimize spread of airborne bacterial and viral organisms, the use of filter is crucial; therefore, we use 99.95% efficiency HEPA filters for particle size 0.3 microns in our biological class 2 type A2 safety cabinets. These airfilters are of ISO 5 / Class 100 quality. Inflow velocity remains approx. 105 fpm(0.5 m/sec) while down flow velocity remains approx. 55 fpm (0.3 m/sec). 70% air is re-circulated and 30% exhaust. This cabinet is designed for 70% recirculation 30% exhaust through a proper ducting facility. This cabinet has air re-circulation through HEPA FILTER and dedicated to hazardous chemical reactions & biological agents like fungus, bacteria, and viruses in the Microbiology lab. We design what you ask and we deliver with perfection at a reasonable price. Most Importantly HEPA/ULPA filters are used to trap the particulates & contaminated hazardous agents. These Filters are selected for the filtration of chemical powders which are manufactured according to the ASTM standards. Biological Safety Cabinets Class II is specially manufactured for Microbiology laboratories because of its advantage of protecting samples from airborne contaminants. This is the advantage given by HEPA filters and Prefilters with air circulation in the workspace.



BIO SAFETY CABINET CLASS II A2



Applications :-

- Clinical laboratory processes
- Biotechnology
- Pharmaceutical industry
- General health care sectors
- R&D and industrial sectors
- Bacteria & virus handling

Special Features :-

- Magnarelli Gauge – Optional
- Floor Standing and table top models available.
- Single Piece Wall
- Large radius for easy cleaning
- Side-mounted electrical outlets and staggered service fixtures, for easy reach
- Raised arm rest: Helps prevent grille blocking and provides comfortable working posture.
- Microprocessor based control / HMI+PLC- Optional
- Displays all safety information on one screen
- Centered and angled down for easy reach & viewing
- Selectable Quick start mode for fast operation



sales@helixbiosciences.com



www.helixbiosciences.com



+91-11-41613622
1800-890-4669

REGISTERED OFFICE :-

A-7, SOUTH WEST DELHI, NARAINA INDUSTRIAL AREA PHASE 1, NEW DELHI - 110028

MANUFACTURING :-

PLOT NO. 360, IMT INDUSTRIAL ESTATE, SECTOR 68, FARIDABAD, HARYANA - 121004

BIO SAFETY CABINET CLASS II A2



- Equipped with HEPA filter.
- ULPA filter (optional)
- UV Light
- UV interlock to prevent UV exposure (optional)
- UV hour meter to monitor bulb life (optional)
- UV timer (optional)

FEATURES :-

CE Certified

Energy Efficient

Proper Fluorescent Lamp

Microprocessor-Based Controller

Durable & Low Maintenance

Low Noise Operation

Class 100 Work Environment as Per ISO 14644-1

Highly Reliable

Proper Airflow Management System

DOP Test Port

User-Friendly

MS Powder Coated Construction

Wall Plenum Construction

audio/Visual sash alarm



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Operating Principle: :-

Ambient air is taken in through a pre filter at the top of the cabinet, and passes through the down flow HEPA filter, entering the work zone as Biosafety Cabinet. The uniform, non-turbulent air stream protects against cross contamination within and throughout the work area. Near the work surface, the down flow air stream splits with a portion moving toward the front air grille, and the remainder moving to the rear air grille. A small portion of the HEPA filtered down flow enters the intake perforations at the side capture zones (small blue arrows). The uniform, non-turbulent air stream protects against cross contamination within and throughout the work area. A combination of inflow and down flow air streams form an air barrier that prevents contaminated room air from entering the work zone, and prevents work surface emissions from escaping the work zone. The down flow combined with the inflow air enters the common air plenum. All air in the common plenum is HEPA filtered and exhausted via a dedicated ducting system to the external environment.

Construction Details: :-

The Biosafety Cabinet units are fabricated of PCRC, pre-coated corrosion resistant GI sheet or Stainless Steel-304.



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Motor and Blower Assembly:

Cabinets are provided with perfectly balanced (Static as well as dynamic) motor and blower motors bearing ISI mark. The rating of the assembly is 1/2 HP. high efficiency pumps which have life long lubricated bearings ensure a trouble-free operation for a long time.

Illumination:

Fluorescent light illumination greater than 800 lux on work table along with optimal wattage ultra violet UV light ensure high level of cleanliness in our equipment's.

Noise level:

Biosafety cabinet class II are designed to ensure minimum possible vibration and noise level.

HEPA filter:

Biosafety cabinet uses 99.97% efficient HEPA Filter (Also available in 99.99% ULPA) to remove particulate airborne contamination to meet cleanliness requirements.

Dimensions Matrix :-

Model	HBS-A222	HBS-A232	HBS-A242	HBS-A2522	HBS-A2622
Nominal Size	2 ft.	3 ft.	4 ft.	5 ft.	6 ft.
Working area (ft.)	2 x 2 x 2	3 x 2 x 2	4 x 2 x 2	5 x 2 x 2	6 x 2 x 2



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Technical specifications :-

Sizes Available	2ft, 3ft, 4ft, 5ft and 6 ft
Construction	SS 304 /316 / Powder coated MS or GI sheet
Work top	SS 304 /316
Controller	Microprocessor PID controller Display of SV & PV
Air filtration	HEPA filter 99.95% efficiency
Switches and indicators	Microprocessor controlled switches for UV, Blower Motor, LED/FL Lamp with inbuilt pressure, gauge and UV timer
Air recirculation	recirculate approximately 70% air and 30% exhaust
Work top	SS 304 /316
Average Airflow Velocity	105 feet per min
Fumigation	In-built fumigation port (Optional)
Noise level	Less than 60 decibels
Electrical protection	MCB & fitting with earthing protection
Standard Fittings	UV germicidal lamp to cover the entire work surface Mounted on a stand with levelling feet Inbuilt pressure gauge fluorescent lamp /LED Lamp
Average Airflow Velocity	105 feet per min
Fumigation	In-built fumigation port (Optional)

