

Biosafety Cabinet

IG-CIIA2 Series



IGENE LABSERVE

Innovative • Interactive • Intuitive



FEATURES & SPECIFICATIONS

DESCRIPTION

Biosafety Cabinets are specialized workstations widely used in clinical, pharmaceutical, life science and industrial laboratories where experiments need highly contaminant free environment. Also known as biological safety cabinets and biohazard safety cabinets, these are made in three different class types such as Class 1, Class 2 and Class 3; in which Class 2 is widely used in microbiology laboratories because it provides protection to both product as well as personal. It is biosafety level factor which decides which BSC should be used in laboratory. These cabinets are considered safer than other clean benches because such BSCs effectively eliminate risks to operator / staff, samples and the environment from pathogenic biological agents (PBA) and microorganisms responsible for spreading airborne infection

TYPES

There are three types of class 2 biosafety cabinets are made. It is the type of work which decides which class 2 BSC should be used in laboratory. Below is short description about all types:

- ❖ Type A2: recirculate approximately 70% air and 30% exhaust
- ❖ Type B1: recirculate approximately 30% air and 70% exhaust
- ❖ Type B2: Does not recirculate but exhaust 100% air

Construction

These cabinets are ergonomically designed to provide long service life. Only thick metal sheets and pipes are used in construction so that you may get the finest and safest Biosafety Cabinet in the market today. There are three different MOC used.

- ❖ Complete Stainless Steel 304 / 316
- ❖ Inner Stainless Steel, Outer Mild Steel
- ❖ Stainless Steel bench, rest mild Steel



AIR FILTRATION

In order to minimize spread of airborne bacterial and viral organisms, the use of filter is crucial; therefore, we use Dual, long life HEPA 99.9995% efficiency at 0.3 μm for supply and exhaust airflow in our biological class 2 type A2 safety cabinets. These air filters are of reputed brands in the market, economical in price and easy replaceable. ISO 5 / Class 100 quality, supply and exhaust through HEPA filters are done. 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.

STANDARD ACCESSORIES

Our Biosafety cabinets are fitted with fluorescent lights outside working zone. UV lamps are fitted inside working zone in such a way that the operator cannot see them directly. An hour meter is connected to UV lamp. Electrical sockets are fitted to run any instrument under the working area; in addition, service fixtures for air, gas, vacuum and water are fitted on demand.

We also manufacture biosafety cabinets class 2 type B1 and B2

SPECIFICATIONS

Sizes Available	2ft, 3ft, 4ft, 5ft and 6 ft
Construction	Stainless steel body, UV protected SS side panel
Work top	Easily removable stainless-steel single piece work surface with large radius corners
Sash	Sliding front panel / Frameless, shatter proof sash with automatic UV shut-off on sash opening
Blower	EBM papast German blower, which automatically adjusts the airflow speed
Controller	ON/Off switches for Cabinet, Light & Blower
Air filtration	Dual, long life HEPA 99.9995% efficiency at 0.3 μm for supply and exhaust airflow
Display	Microprocessor based controlled panel with display various parameter like airflow/air velocities in real time, UV line on/off, HEPA filter life remaining status

Air recirculation	70% recirculation and 30% exhaust
Average Airflow Velocity	Air flow velocity 450 Cubic foot per min
Fumigation	In-built fumigation port
Noise level	Less than 60 decibel
Standard Fittings	Magnehelic pressure gauge Germicidal UV lamp, 2 fluorescent lamps, 1 service fixer for gas inlet, 2 electrical sockets stand with caster wheel
Optional	Alarm for variation in air flow and blocked blower Sash height alarm UV hour meter Virus burnout Differential pressure sensor Arm / elbow rest Drain pan on work bench Foot rest Calibration certificates HMI Controller

Standard Size/ Dimension

IG-CIIA2222	2 x 2 x 2	610 x 610 x 610
IG-CIIA2322	3 x 2 x 2	914 x 610 x 610
IG-CIIA2422	4 x 2 x 2	1219 x 610 x 610
IG-CIIA2522	5 x 2 x 2	1524 x 610 x 610
IG-CIIA2622	6 x 2 x 2	1829 x 610 x 610