

LAMINAR AIR FLOW



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ABOUT THE COMPANY

iGene Labserve Pvt. Ltd. is gaining recognition by offering resilient, innovative solutions in laboratory instrumentation across healthcare, genomics, drug discovery, biopharma, and food & beverage sectors. We strive to enhance lab efficacy and reduce challenges through advanced technologies and a diverse product portfolio tailored to our customers' needs.

DESCRIPTION

A laminar air flow workstation creates a sterile environment for sensitive processes using a HEPA filtration system. It provides unidirectional airflow at 0.4-0.6 m/s, minimizing turbulence and reducing particulate contamination. While it protects products from room contaminants, it does not offer personal protection for the user.

CONSTRUCTION

- Our ergonomically designed cabinets are built for exceptional durability and long service life. Crafted from premium, thick metal sheets and pipes, they offer the highest level of safety and performance. Choose from four material options:
- Full Stainless Steel 304 / 316
- Inner Stainless Steel, Outer Mild Steel
- Stainless Steel Bench with Mild Steel Structure
- Stainless Steel Bench with Wooden Body

TYPES

Vertical Laminar Air flow

The vertical airflow cabinet is the most popular laminar airflow model, drawing room air through a HEPA filter at the top. The filtered air flows downward over the workspace, effectively removing particles and bacteria. This configuration ensures a clean environment by expelling contaminants as the air exits the cabinet.

Horizontal Laminar Air Flow

A horizontal airflow cabinet ensures a sterile workspace by drawing room air through a HEPA filter at the back. The filtered air flows horizontally toward the user, creating a clean, contaminant-free environment. This unidirectional airflow prevents contamination by directing particles away from the work area, ensuring process integrity.

GERMICIDAL LAMP

The optional UV lamp provides effective sterilization of the work area before use, ensuring a clean environment.

Certifications

As ISO and CE-certified manufacturers and suppliers in India, we design both horizontal and vertical laminar flow benches that meet ISO Class 100 standards.

FEATURES

High-Quality Filtration System:

- The system includes both pre-filters and HEPA filters for optimal filtration.
- The box-type pleated pre-filters have an efficiency of 95%, filtering particles down to 5 microns. These pre-filters are made from high-density polyethylene (HDPE), non-woven fabric, and HDPE mesh, and are housed in an aluminium case for durability.
- The HEPA filters offer 99.99% efficiency, capturing particles as small as 0.3 microns. These filters are also housed in an anodized aluminium case for enhanced durability.
- The H14 HEPA filters are designed to ensure minimal pressure drop while maintaining high filtration performance.

Blower Assembly:

- The system is equipped with a ¼ HP motor that operates at 1400 RPM, ensuring reliable performance.
- The aluminium anodized impellers provide powerful, dependable airflow for effective system operation.

Thoughtfully Designed Working Area:

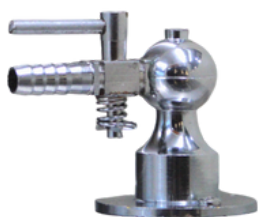
- The workbench is made from stainless steel with curved edges, offering durability and easy cleaning.
- Standard features include air/gas cocks and electrical outlets, providing added convenience for users.
- The working area is well-lit by fluorescent lighting, ensuring excellent visibility.
- A manual or motorized sliding sash, made of transparent acrylic, allows for clear visibility and smooth operation.
- The system maintains an air cleanliness level that meets Class 100 standards, ensuring a sterile working environment with minimal particulate contamination.

STANDARD SIZE/ DIMENSION

Dimensions (ft)	Dimensions (mm)	HEPA Filter Size	No. of Pre Filters
2 x 2 x 2	610 x 610 x 610	2ft x 2ft x 6inch (1 No.)	1
3 x 2 x 2	915 x 610 x 610	3ft x 2ft x 6inch (1 No.)	2
4 x 2 x 2	1220 x 610 x 610	4ft x 2ft x 6inch (1 No.)	2
6 x 2 x 2	1828 x 610 x 610	3ft x 2ft x 6inch (2 Nos.)	3
8 x 2 x 2	2438 x 610 x 610	4ft x 2ft x 6inch (2 Nos.)	4
H & V should be mentioned in cat no to denote type Horizontal or vertical i.e IG-LAF22-H			

TECHNICAL SPECIFICATIONS

Air flow direction	Vertical and Horizontal
Air cleanliness	Class 100
Construction	SS / Powder coated MS / GI sheet/ wooden with 18 gauge ss.
Sash (front door)	Manual/ Motorized sliding type (Acrylic transparent and tiffin glass)
Side panels	Acrylic /polycarbonate / SS
Air velocity	0.4 m/s to 0.6 m/s/ 0.45m/sec
Illumination	Fluorescent or LED light/ UV light (800lux, glare-free)
Noise level	65 ±5 dB
Power supply	220 volts / 50 Hz
Air filtration	<ul style="list-style-type: none"> · Pre-Filter - 5 microns (washable) · HEPA filter (0.3 Microns)
Standard fittings	<ul style="list-style-type: none"> · Air / gas cock, Mains on/off switch, Light on/off switch · UV Light on/off switch, Blower on/off switch
Optional	<ul style="list-style-type: none"> · Motorized sliding door · LCD display for velocity, time & lamp on/off · UV Germicidal lamp · UV Hour meter · Magnehelic gauge · Extra power outlet switch · Foot rest · Levelling legs for stand · DOP HEPA filter testing





iGENE LABSERVE®
Innovative • Interactive • Intuitive



CONNECT WITH US.

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