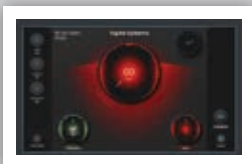


Vertical
Laminar
Flow
Clean
Bench



Vertical Laminar Flow Clean Bench for Pharmaceutical and Medical Applications



IPMS
Integrated Particle Monitoring Systems



Stainless steel Vertical Air Flow Laminar Clean Bench

TopAir provides high-quality vertical laminar clean benches designed to deliver a clean and controlled work environment that meets **ISO 5** cleanliness standards.

TopAir's clean benches operate by drawing air from the surrounding room or hallway, filtering it through a **HEPA filter** using a built-in fan, and distributing the purified air evenly across the work surface. In the vertical configuration, the filtered air flows downward through a top-mounted filter to ensure consistent laminar airflow.

These clean benches are ideal for use in **pharmaceutical, healthcare, and biocontainment** environments.

Structure:

The unit is constructed entirely from **316L stainless steel**, offering exceptional chemical resistance and long-term durability. The **worktop is also made of 316L stainless steel**, ensuring a robust and easy-to-clean surface suitable for demanding environments.

Control System:

TopAir's third-generation microprocessor control system features a 10.1" touchscreen interface that allows easy operation of the fan, lighting, and electrical sockets. The system includes a VAV (Variable Air Volume) function that automatically adjusts air velocity, with real-time airflow display and an integrated alarm. Additional alerts include a filter timer alarm and a service reminder. The screen displays time, date, temperature, and humidity, with options for both Metric and Imperial units. The interface supports multiple languages, including English, Spanish, German, and French.

Optional Feature -

Integrated Particle Monitoring System (IPMS):

The IPMS continuously measures particle concentration in real time, providing 24/7 monitoring of cleanliness levels. It clearly indicates ISO 5 compliance and alerts the user in case of contamination or required maintenance.

Red Light Alert System:

In the event of an air velocity failure, a red light inside the unit automatically turns on, and the LED lighting switches off. This visual indication allows for easy identification of a malfunction from a distance, making it especially helpful for hearing-impaired users.

- Microprocessor control system with 10.1" full-color touchscreen display
- VAV - Automatic airflow speed control to maintain 90 FPM (0.45 m/s)
- Downflow alarm, critical "red light" chamber alarm, service alarm, and filter alarm
- Real-time filter status gauge display
- High-efficiency, ultra-quiet ECM fan
- HEPA filter with 99.9995% efficiency at 0.3 microns (H14)
- Worktop includes side and rear vents to enhance airflow
- LED lighting: 800 lux
- Multi-language control interface with Metric and Imperial unit options
- Compliant with ISO 14644-1 and CE regulations
- Optional: Integrated Particle Monitoring System (IPMS)
- 316L stainless steel motorized stand with casters; height range: 26.5"-44"
- Optional: Programmable automatic height adjustment (up to 4 height presets)

Height display



Led Light



Stainless Steel Vertical Air Flow Laminar Clean Bench

Spec/ Model	HC-V090-SS	HC-V120-SS	HC-V150-SS	HC-V180-SS
Outer Dimensions WxDxH	35.4 x 30 x 53.15" 900 x 760 x 1350 mm	47.2 x 30 x 53.15" 1200 x 760 x 1350 mm	59 x 30 x 53.15" 1500 x 760 x 1350 mm	72.4 x 30 x 53.15" 1840 x 760 x 1350 mm
WE CAN CUSTOMIZE ANY SIZE - EVEN A SINGLE UNIT! CONTACT US FOR DETAILS				
Workspace (W x D x H)	30.3 x 28 x 30" 770 x 712 x 762 mm	42.1 x 28 x 30" 1070 x 712 x 762 mm	53.9 x 28 x 30" 1370 x 712 x 762 mm	68.5 x 28 x 30" 1670 x 712 x 762 mm
Test Standard	ISO-14644-1, CE			
Air Velocity m/s	0.45 m/s, 90 fpm			
Cleanliness in Workstation	ISO-5, ISO-14644-1			
Hood Material	Stainless steel 316L			
Worktop Material	Stainless steel 316L			
Noise Level (Tested 20 cm from worktop, 1.2 m / 48" above ground)	<52dB	<54dB	<56dB	<56dB
Power Supply	120 / 240 V, 50/60 Hz, Single phase			
Illumination	800 lux LED lighting; Single phase			
Filters	HEPA Filter Efficiency of 99.9995% at 0.3 microns H14 (Optional ULPA filter)			

Options

MOTORIZED STAND SS 316L	HC-V-090-ST-MZ	HC-V-120-ST-MZ	HC-V-150-ST-MZ	HC-V-180-ST-MZ
CABLE PATH-WHITE	HC-CP-W	HC-CP-W	HC-CP-W	HC-CP-W
IV BAR	HC-IV-90	HC-IV-120	HC-IV-150	HC-IV-180
SHELF	HC-BM-90	HC-BM-120	HC-BM-150	HC-BM-180
IPMS	HC-IPMS	HC-IPMS	HC-IPMS	HC-IPMS
HEPA FILTER	HC-090-HEPA	HC-120-HEPA	HC-150-HEPA	HC-180-HEPA

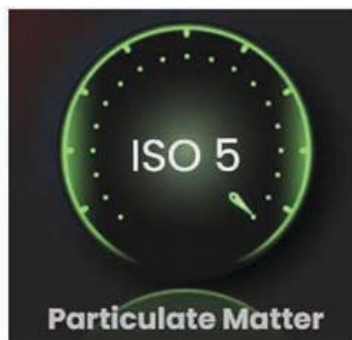


IPMS - Integrated Particle Monitoring System

The **Integrated Particle Monitoring System (IPMS)** continuously measures particle concentration in real time, providing 24/7 monitoring of cleanliness levels. Its display clearly indicates whether the environment complies with **ISO 5** standards and alerts the user when contamination is detected or maintenance is required.

Powered by a smart algorithm and an advanced built-in sensor, the IPMS delivers highly accurate and reliable data on workspace air quality. By providing critical, real-time insights, it helps prevent cross - contamination and ensures continuous compliance with cleanroom standards.

The IPMS represents a groundbreaking solution that has the potential to revolutionize biological processes across the industry.



GREEN LIGHT

The level of cleanliness within the workspace meets or exceeds ISO 5 requirements



RED LIGHT

The level of cleanliness within the workspace is below ISO 5 requirements



www.topairsystems.com

Tel : 1-855-6-TOPAIR / International: +1-855-686-7247

Headquarters: 300 First Avenue, Suite 102,
Needham, MA 02494 USA

Email: sales@topairsystems.com

