

LF Horizontal Flow Clean Bench

A freestanding, multi-purpose, vibration-free, horizontal laminar flow work station.

The Enviroco LF Horizontal Flow Clean Bench has a unique design concept consisting of separate plenum and table modules that virtually isolates all vibration transmission from the filter/blower console to the work surface. It provides an ISO Class 5* (Class 100) environment within the work area that complies with the latest IEST Recommended Practices.

Horizontal Laminar Airflow

The positive pressure[†] laminar airflow provides product protection within the work area, which is defined by the removable clear acrylic side panels and plastic laminated work surface. Air from within the cabinet is returned to the room through the front access opening.

Standard Features

- An ISO Class 5* environment utilizing an aerosol challenged high efficiency particulate air (HEPA) filter
- Four, standard sizes with 24 in. (610 mm) deep work areas. Custom sizes available
- Two-piece construction allows easy passage through a standard doorway
- Duplex electrical outlet, 115 V, 15 Amp on the front leg for easy access
- A welded steel cabinet with exterior finished in corrosion resistant polyurethane enamel
- Perforated aluminum diffuser screen protects the HEPA filter and maintains uniform airflow velocity within the work area
- Quiet operation (65 dBA \pm 3 measured 30 in. (762 mm) from the filter face)
- Non-glare plastic laminated work surface for easy cleaning
- Recessed fluorescent lighting provides 150 foot candles (1615 lux) at the work surface
- Clear, removable acrylic side panels

* As defined by the latest ISO 14644 and IEST Recommended Practices, where particle count does not exceed 3520 particles, 0.5 μ m or larger, per cubic meter of air.

†Note: Positive pressure laminar flow clean benches provide product protection only. Does not protect personnel or the environment from aerosols generated within the work area.



SPECIFICATIONS

Filters

Aluminum framed High Efficiency Particulate Air (HEPA) filter, with a minimum efficiency of 99.99% at 0.3 micron, aerosol challenged (zero probed).

Prefilters

Washable type, polyurethane foam - 30% ASHRAE.

Airflow

90 feet per minute \pm 10 FPM (0.45 m/s) average velocity measured 6 in. (152 mm) from the diffuser screen. Uniformity \pm 20% of average or better.

Motor/Blower Assembly

Direct drive, continuous duty 1/2 Hp, .37 kW with sealed-for-life bearings and inherent overload protection. Motor/blower assembly is electronically balanced (dynamically) and mounted on vibration dampening rubber mounts.

Motor/blower assembly is designed to provide rated airflow through a 50% increase in initial static pressure.

Speed Controller

Solid state speed control with RFI suppression for adjusting airflow velocity.

Electrical

Standard 15-20 Amp, 115 V, single phase, 60 Hz, rubber covered cord with 3-prong grounded plug.

Duplex electrical outlet flush mounted on front right leg.

Recessed fluorescent lighting fixture provides 150 foot candles at the work surface.

Separate blower and light switches.

Construction

Welded steel cabinet with exterior finished in corrosion resistant polyurethane enamel.

Non-glare plastic laminated work surface.

Removable 1/4 in. (6.35 mm) clear acrylic side panels.

Adjustable leveling feet on work bench.

Warranty

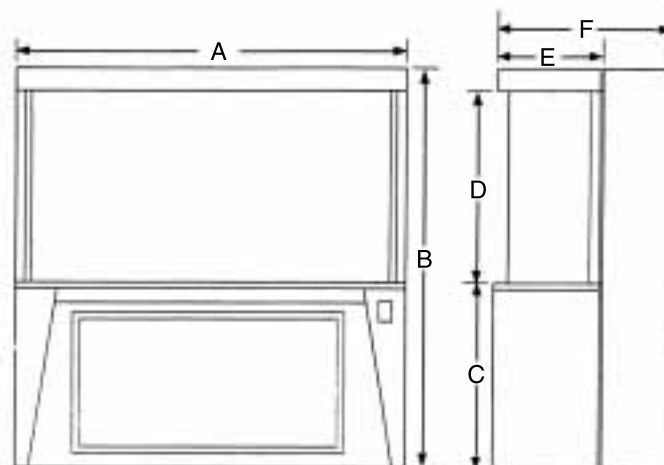
Limited one year.

Applications

- Analytical Balances
- Critical Sample Preparation
- Hyperalimentation
- I.V. Admixtures
- Media Preparation
- Microscopy Analysis
- Pharmaceutical Preparation
- Syringe Filling
- Tissue Culture
- Microelectronic Assembly
- Optical Assembly
- Quality Control Inspection Station
- Sterility Testing

Options

- Lab Service (work deck installed), Part No. 10231
- Magnehelic Pressure Differential Gauge, Part No. 10693
- Stainless Steel I.V. Rod, Part No. 10595 (4-ft, 1.22 m), 10596 (5-ft, 1.52 m), 10597 (6-ft, 1.83 m), 10598 (8-ft, 2.44 m)
- Stainless Steel Side Panels (2), Part No. 830657
- Stainless Steel Work Surface, Part No. 10585 (4-ft, 1.22 m), 10586 (5-ft, 1.52 m), 10587 (6-ft, 1.83 m), 10588 (8 ft, 2.44 m)
- Ultraviolet Light Fixture, Part No. 10599 (4-ft, 1.22 m), 10600 (5-ft, 1.52 m), 10601 (6-ft, 1.83 m), 10602 (8 ft, 2.44 m)
- 220 V, 50 Hz unit available with transformer



Model No.	LF430	LF530	LF630	LF830	
Part No.	10552	10553	10554	10554	
Dimensions - inches (millimeters)	A	51.00 (1296)	63.00 (1601)	75.00 (1905)	102.00 (2591)
	B	65.00 (1651)	65.00 (1651)	65.00 (1651)	65.00 (1651)
	C	30.00 (762)	30.00 (762)	30.00 (762)	30.00 (762)
	D	30.00 (762)	30.00 (762)	30.00 (762)	30.00 (762)
	E	24.00 (610)	24.00 (610)	24.00 (610)	24.00 (610)
	F	44.00 (1118)	44.00 (1118)	44.00 (1118)	44.00 (1118)
No. of Blowers	1	1	1	2	
BTU / Hour	3000	3000	3000	6000	
Ave. CFM @ 90 FPM (m ³ /hr @ 0.45 m/s)	900 (1530)	1125 (1913)	1350 (2295)	1800 (3060)	
Power Requirements Amps @ 115 V / 60 Hz	8.0	8.0	8.0	16.0	
Ship Weight, lbs. (kilograms)	590 (267.6)	600 (272.2)	760 (344.7)	1050 (476.3)	

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AND WITHOUT INCURRING LIABILITY FOR MODIFICATIONS TO EQUIPMENT PREVIOUSLY SOLD.