

TECHNOCRATICS (Pvt) Ltd

# Laminar air flow cabinet

**Technocratics** Horizontal Laminar Flow Clean Bench blends in latest laminar flow technology and innovation to provide proven protection for your samples and processes. The new generation Horizontal Laminar Flow Clean Benches offers a wide range of options for our customers; with glass side wall, sizes from 2 to 6 feet, behind the many options that the customer can select, the full range of the new **Technocratics** laminar flow clean benches is powered by the latest generation ultra-high efficiency motor. It now also offers ISO Class 3 (Class 100 air quality) work zone with a 10x efficiency of its HEPA filters. With more choices for the customers, **Technocratics** laminar flow clean benches still offer the same level of product protection for your samples and processes where operator protection is not required.

## **Key Benefits:**

Class 100 Air quality maintains. Energy Efficient Superior airflow uniformity Ergonomic design

## **Features:**

Microprocessor Controller displays all safety information on one screen with a touch pad. Stainless steel work surface ensures optimal clean less, chemical resistance and containment of accidental liquid spills. Ergonomic design encourages proper posture reducing fatigue. Washable, reusable pre filter which trap dust and large particle. 10x filtration efficiency of HEPA filter creates Class 100 air quality work zone instead of industry-standard ISO Class 5. The removable protective screen located in front of the HEPA filter and easily removed for service and cleaning. Each clean bench is individually factory tested for safety and performance in accordance with international standards. All components are cleanroom compatible. **Technocratics** Laminar Flow Clean Benches have been tested for cross-contamination and product protection using microbiological test method. Built in recessed illuminator provide diffused lighting without interfering with the laminar flow. Face velocity is adjustable from less than 90 FPM (0.45 m/s) to higher than 130 FPM (0.66 m/s) Pressure drop from 0.35 to 0.795 inches W.G at 90 FPM (0.45 m/s).

## **Introduction:**

The LF Horizontal Laminar Flow Clean Bench is a completely self-contained, multipurpose, vibrationfree clean bench That supplies a laminar flow pattern of HEPA filtered air. The clean bench provides a Class 100 (M 3.5) environment. The unique design concept of the LF Horizontal Laminar Flow Clean Bench consists of separate plenum and table Modules that virtually isolates all vibration transmission from the filter/blower console to the work surface. Air enters the LF Horizontal Laminar Flow Clean Bench through a pre filter which removes most of the large particles. The air is then evenly distributed across the High Efficiency Particulate Air (HEPA) filter by blower. The HEPA filter removes 99.99% of all particles 0.3 micros and larger in size and imparts a unidirectional or laminar flow pattern to the air. The air moves through the work area at a uniform velocity of 90 feet per minute (+/-20%), carrying away all airborne contamination generated by activities within the work area. All samples or equipment within the work area are continually bathed in the ultra-clean air.





## TYPE

- 1. Vertical Laminar Air flow
- 2. Horizontal Laminar Air flow



Vertical Laminar air flow

Horizontal laminar air flow





0333-0297007, 0335-4944616, 0321-2202241

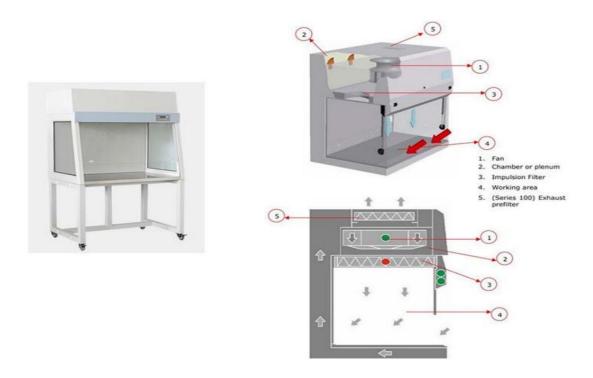
Plot # 42, Street # 2, Block-C, Asim Town, Harbanspura Underpass Near Ring Road, Lahore-Pakistan.



TECHNOCRATICS (Pvt) Ltc

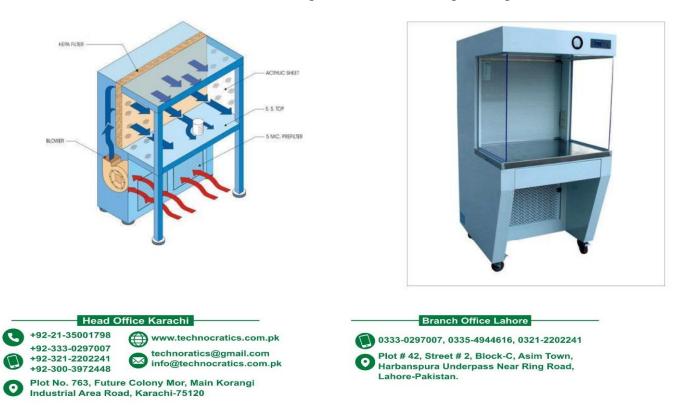
## 1. Vertical Laminar Air flow:

Vertical Laminar Flow Cabinets function equally well as horizontal Laminar Flow Cabinets with the laminar air directed vertically downwards onto the working area. The air can leave the working area via holes in the base. Vertical flow cabinets can provide greater operator protection.



#### 2. Horizontal Laminar Air flow

Horizontal Laminar Flow Cabinets receive their name due to the direction of air flow which comes from above but then changes direction and is processed across the work in a horizontal direction. The constant flow of filtered air provides material and product protection.





TECHNOCRATICS (Pvt) Ltd. ISO 9001:2015 Certified Company

## **Technical specifications**

Model	LFC-TS4	
External L x D x H Dimension (mm)	1950 x 770 x 1961	
Work Bench Dimension (mm)	1884 x 712 x 695	
Material of Construction	MS Powder Coated 1.2 mm Thickness	
Grill Mini plate HEPA	Capsule Type holes	
Wheels and Lugs	Caster wheels	
Stage of filters	Pre-filter = 10micron with an efficiency 90% washable	
	HDPE Media in FRP PU coated Frame for GI model for	
	S.S304 Model the frame will be in S.S 304 Mini plate HEPA	
	filter in cased in aluminium frame, filter have anti-fungal	
	joint. 0.3 micron with an efficiency of 99.997% (anti –	
	microbial treated media)	
	size 1220 X610 X75 Qty-1 nos	
HEPA Filter	Size (mm) 610 x 915 x 75 Qty (Nos)	
Motor Blower Assembly	make variable speed motor mounted on PU coated. FRP	
	Blower with aluminium power coated impeller.	
Motor Blower Assembly Mounting	Unique spring suspension with bellow system to take care of	
	Vibration & noise	
Velocity	100 FRM At 6'' from face of the filter (0.45)	
Noise Level	<65Db at 01 meter from face of the equipment	
Pressure Gauge	Magraphelic make Mangnahelic differential pressure gauge 0 to 500 Pscl	
Levelling Bolt	04 Nos.	
Power Supply Cable	1.5 Sq. mm x 3 Core x 03 metres, flexible with 3 pin top	
Side Glass	6mm Float Glass encased Stainless still channel	
Design and Classification	Top backside loading pre- filter, complete work area will be	
	of Ms powder coated including HEPA Grill. Light canopy	
	internal surface for GI model and S.S model Angled front	
	slop of 10 Degrees to reduces Operator fatigues while	
	working.	
Electrical Panel	FLUORESCENT LIGHTING: 4' X 40-Watt tube light on	
	Patti fitting	
	illumination Of Light MCB: 800 LUX ON WORKING	
	TABLE.	
	230V Power sockets 15A Qty: 1	
	Cock for Light Qty: 05	
	Ultra violet Light: 03 feet length 30 watts	



Branch Office Lahore

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## **Models**

Model no	Internal (work Bench)	External	
Horizontal Laminar cabinet			
LFC-HTS2	610*610*610	710*870*1440	
LFC-HTS3	915*610*610	1020*870*1440	
LFC-HTS4	1220*610*610	1315*870*1440	
LFC-HTS6	1830*610*610	1930*870*1440	
Vertical Laminar Cabinet			
LFC-VTS2	660 x 700 x 695	730 x 770 x 1961	
LFC-VTS3	965 x 712 x 695	1035 x 770 x 1961	
LFC-VTS4	1270 x 712 x 695	1340 x 770 x 1961	
LFC-VTS6	1884 x 712 x 695	1950 x 770 x 1961	

## APPLICATIONS

The high-performance, two-piece LF Clean Bench has successfully demonstrated its versatility in a wide variety of applications and industries.

- Pharmaceutical Preparation
- Microscopy Analysis
- Critical Sample Preparation
- Optical Assembly
- Microelectronic Fabrication and Assembly
- Electronics instrument Assembly
- Actuator Assembly
- PCB Manufacturing
- Tissue Culture
- Biotechnology



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