

# LAMINAR CLEAN BENCHES







# Polypropylene Vertical Air Flow Laminar Clean Bench - PRO

TopAir provides high-quality, Vertical Laminar Clean Benches. Clean benches are designed to supply a clean controlled work environment meeting Class 100/ISO 5 Cleanliness level. The clean bench is tested according to USA Federal Standard 209E/ISO 14644-1/CE.

TopAir's clean benches draw air from the room or hall space, pass it through a HEPA filter using a fan, and then distribute the clean air across the working area. In vertical benches, the filtered air is directed downwards through a filter installed at the top of the bench.

#### Structure:

- 8 mm welded polypropylene with high chemical resistance
- stainless steel 304 worktop, (SS316 optional)
- 5 mm safety glass front window with counterweight system
- Side windows for better visibility
- Optional Integrated Particle Monitoring System (IPMS)

The IPMS measures particle concentration in real-time, monitoring the cleanliness level 24/7. Its display clearly indicates whether the cleanliness level complies with ISO-5, and alerts when the workspace has been contaminated or needs to be serviced.

- Microprocessor control system with 10.1" color touchscreen display
- Automatic speed control to maintain 0.33 m/s (66 fpm)
- Downflow alarms, critical "red light" chamber alarm, service alarm, filter alarm
- Real-time filter status gage display
- High efficiency quiet EC fan
- Germicidal waterproof UV light (254 nm) system and safety interlock mechanism
- LED light 800 lux
- 2 x universal sockets
- · Includes metal stand and casters
- Multi-language control with metric or Imperial units
- Compliance with US Federal Standard 209E / ISO 14644-1 / CE
- Optional Integrated particle monitoring system (IPMS)

### **Red Light Alert:**

Whenever there is an air velocity failure, a red light inside the unit switches on and the system automatically switches off. This enables convenient detection of failures from a distance, facilitating notice even for the hearing-impaired.



# Polypropylene Vertical Air Flow Laminar Clean Bench - PRO

Spec/ Model	HC-V090-PRO	HC-V120-PRO	HC-V150-PRO	HC-V180-PRO
Outer Dimensions WxDxH	35.4 x 33.4 x 51.9" 900 x 850 x 1320 mm	47.2 x 33.4 x 51.9" 1200 x 850 x 1320 mm	59 x 33.4 x 51.9" 1500 x 850 1320 mm	70.8 x 33.4 x 51.9" 1800 x 850 x 1320 mm
WE (	CAN CUSTOMIZE ANY	SIZE - EVEN A SINGLI	E UNIT! CONTACT US	FOR DETAILS
Workspace (W x D x H)	30.3 x 27.5 x 29.5" 770 x 700 x 750 mm	65.7 x 27.5 x 29.5" 1670 x 700 x 750 mm		
Test Standard	USA Federal Standard 209E / ISO-14644-1, CE			
Air Velocity m/s	0.33 m/s, 66 fpm			
Cleanliness in Workstation	Class-100 (FS 209E) ISO-5, ISO-14644-1			
Hood Material	Polypropylene			
Worktop Material		Stainless	s steel 304	
Noise Level (Tested 20 cm from worktop, 1.2 m / 48" above ground)	<52dB <54dB <56dB <56dB			
Power Supply	110 / 220 V, 50/60 Hz, Single phase			
Illumination	800 lux LED lighting			
Filters	HEPA Filter Eff	iciency of 99.9995% at (	0.3 microns H14 (Option	nal ULPA filter)





# Polypropylene Horizontal Air Flow Laminar Clean Bench - PRO

TopAir provides high-quality, safe Horizontal Laminar Clean Benches. Clean benches are designed to supply a clean controlled work environment meeting Class 100/ISO 5 Cleanliness level. The clean bench is tested according to USA Federal Standard 209E/ISO 14644-1/CE.

TopAir's clean benches draw air from the room or hall space, pass it through a HEPA filter using a fan, and then distribute the clean air across the bench area. In Horizontal benches, the filtered air is directed downwards through a filter installed at the back of the bench.

#### Structure:

- 8 mm welded polypropylene with high chemical resistance
- stainless steel 304 worktop, (SS316 optional)
- 5 mm safety front glass window with counterweight system
  - Side windows for better visibility
- Optional Integrated Particle Monitoring System (IPMS)

- Microprocessor control system with 10.1" color touchscreen display
- Automatic speed control to maintain 0.33 m/s (66 fpm)
- Downflow alarms, critical "red light" chamber alarm, service alarm, filter alarm
- Real-time filter status gauge display
- High efficiency quiet EC fan
- Germicidal waterproof UV light (254 nm) system and safety interlock mechanism
- LED light 800 lux
- 2 x universal sockets
- · Includes metal stand and casters
- Multi-language control with metric or Imperial units
- Compliance with US Federal Standard 209E / ISO 14644-1 / CE
- Optional Integrated particle monitoring system (IPMS)

The IPMS measures particle concentration in real-time, monitoring the cleanliness level 24/7. Its display clearly indicates whether or not the cleanliness level complies with ISO-5, and alerts when the workspace has been contaminated and needs to be serviced.

### **Red Light Alert:**

Whenever there is an air velocity failure, a red light inside the unit switches on, and the system automatically switches off. This enables convenient detection of failures from a distance, facilitating notice even for the hearing-impaired.



## Polypropylene Horizontal Air Flow Laminar Clean Bench - PRO

Spec/ Model	HC-H090-PRO	HC-H120-PRO	HC-H150-PRO	HC-H180-PRO
Outer Dimensions WxDxH	35.4*36.6*47.2" 900*930*1200 mm	47.2*36.6*47.2" 1200*930*1200 mm	59*36.6*47.2" 1500*930*1200 mm	70.8*36.6*47.2" 1800*930*1200 mm
WE (	CAN CUSTOMIZE ANY	SIZE - EVEN A SINGLE	UNIT! CONTACT US	FOR DETAILS
Workspace (W x D x H)	30.3*24.4*23.6" 770*620*600 mm	65.7*24.4*23.6" 1670*620*600 mm		
Test Standard		USA Federal Standard	209E / ISO-14644-1, CE	
Air Velocity m/s	0.33 m/s, 66 fpm			
Cleanliness in Workstation	Class-100 (FS 209E) ISO-5, ISO-14644-1			
Hood Material	Polypropylene			
worktop Material		Stainless	steel 304	
Noise Level (Tested 20 cm from worktop, 1.2m / 48" above ground)	<52dB <54dB <56dB <56dB			
Power Supply	110 / 220 V, 50/60 Hz, Single phase			
Illumination	800 lux LED lighting			
Filters	HEPA Filter Ef	ficiency of 99.9995% at	0.3 microns H14 (Option	nal ULPA filter)



# Value line Metal Vertical Air Flow Laminar Clean Bench

TopAir's Value Line provides high-quality metal structure Vertical Laminar Clean Benches. Clean benches are designed to supply a clean controlled work environment meeting Class 100/ISO 5 Cleanliness level. The clean bench is tested according to USA Federal Standard 209E/ISO 14644-1/CE and can be customized to meet customer requirements.

TopAir's clean benches draw air from the room or hall space, pass it through a HEPA filter using a fan, and then distribute the clean air across the working area. In vertical benches, the filtered air is directed through a filter installed at the top of the bench.

#### Structure:

- Metal epoxy-coated paint
- Work surface made of 304 stainless steel
- Side windows made of tempered glass
- Front sliding sash with counterweight

### **Red Light Alert:**

Whenever there is an air velocity failure, a red light inside the unit switches on, and the system automatically switches off. This enables convenient detection of failures from a distance, facilitating notice even for the hearing-impaired.

- Microprocessor control system with 7" color touchscreen display
- Fan control with 10 speeds
- Airflow display and alarm
- Filter replacement alarm
- High efficiency quiet EC fan
- Germicidal waterproof UV light (254 nm) system and safety interlock mechanism
- 800 lux LED lighting
- UV light
- 2 universal electrical outlets
- Metal stand with casters
- Multi-language control with metric or Imperial units
- Certifications: Compliance with US Federal Standard 209E / ISO 14644-1 / CE
- Optional Integrated particle monitoring system (IPMS)





# Value line Metal Vertical Air Flow Laminar Clean Bench

Spec/ Model	HC-V090	HC-V120	HC-V150	HC-V180
Outer Dimensions W x D x H	35.4*33.4*51.9" 900*850*1220 mm	47.2*33.4*47.2" 1200*850*1220 mm	59*33.4*47.2" 1500*850*1220 mm	70.8*33.4*47.2" 1800*850*1220 mm
WE CAN	CUSTOMIZE ANY SIZ	E - EVEN A SINGLE UN	IIT! CONTACT US FOR	DETAILS
Workspace (W x D x H)	30.3*24.4*23.6" 42.1*24.4*23.6" 53.9*24.4*23.6" 65.7*24.4*23.6" 770*620*600 mm 1070*620*600 mm 1370*620*600 mm 1670*620*600 mm			
Test Standard	USA Federal Standard 209E / ISO-14644-1, CE			
Air Velocity m/s	0.33 m/s, 66 fpm			
Cleanliness in Workstation	Class-100 (FS 209E) ISO-5, ISO-14644-1			
<b>Hood Material</b>	Metal epoxy-coated paint			
Worktop Material	Stainless steel SUS 304			
Noise Level (Tested 20 cm from worktop, 1.2 m / 48" above ground)	<52dB <54dB <56dB <56dB			
Power Supply	110 / 220 V, 50/60 Hz, Single phase			
Illumination	800 lux LED lighting			
Filters	HEPA Filter Effi	ciency of 99.9995% at 0	.3 microns H14 (Option	al ULTRA filter)





# Value Line Metal Horizontal Air Flow Laminar Clean Bench

TopAir's Value line provides high-quality Horizontal Laminar Clean Benches built with a metal structure. Clean benches are designed to supply a clean controlled work environment meeting a Class 100/ISO 5 Cleanliness level. The clean bench is tested according to USA Federal Standard 209E/ISO 14644-1/CE.

TopAir's clean benches draw air from the room or hall space, pass it through a HEPA filter using a fan, and then distribute the clean air across the working area. In Horizontal benches, the filtered air is directed downwards through a filter installed at the back of the bench.

#### Structure:

- Metal epoxy-coated oven tempered paint
- Work surface made of 304 stainless steel
- Side windows made of tempered glass
- Front sliding sash with counterweight

### **Red Light Alert:**

Whenever there is an air velocity failure, a red light inside the unit switches on, and the system automatically switches off. This enables convenient detection of failures from a distance, facilitating notice even for the hearing-impaired.

- Microprocessor control system with 7" color touchscreen display
- Fan control with 10 speeds
- Airflow display and alarm
- Filter replacement alarm
- High efficiency quiet EC fan
- Germicidal waterproof UV light (254 nm) system and safety interlock mechanism
- 800 lux LED lighting
- UV light
- 2 universal electrical outlets
- Metal stand with casters
- Multi-language control with metric or Imperial units
- Certifications: Compliance with US Federal Standard 209E / ISO 14644-1 / CE
- Optional Integrated particle monitoring system (IPMS)





# Value Line Metal Horizontal Air Flow Laminar Clean Bench

Spec/ Model	HC-H090	HC-H120	HC-H150	HC-H180
Outer Dimensions WxDxH	35.4 x 36.6 x 47.2" 900 x 930 x 1220mm	47.2 x 36.6 x 47.2" 1200 x 930 x 1220mm	59 x 36.6 x 47.2" 1500 x 930 x 1220mm	70.8 x 36.6 x 47.2" 1800 x 930 x 1220mm
WE (	CAN CUSTOMIZE ANY	SIZE - EVEN A SINGL	E UNIT! CONTACT US	FOR DETAILS
Workspace (W x D x H)	30.3 x 24.4 x 23.6" 42.1 x 24.4 x 23.6" 53.9 x 24.4 x 23.6" 65.7 x 24.4 x 23.6" 770 x 620 x 600mm 1070 x 620 x 600mm 1370 x 620 x 600mm 1670 x 620 x 600mm			
Test Standard		USA Federal Standard 209E / ISO-14644-1, CE		
Air Velocity m/s	0.33 m/s, 66 fpm			
Cleanliness in Workstation	Class-100 (FS 209E) ISO-5, ISO-14644-1			
Hood Material	Metal epoxy-coated paint			
Worktop Material	Stainless steel 304			
Noise Level (Tested 20 cm from worktop, 1.2 m / 48" above ground)	<52dB <54dB <56dB <56dB			
Power Supply	110 / 220 V, 50/60 Hz, Single phase			
Illumination	800 LUX LED lighting			
Filters	HEPA Filter Effi	ciency of 99.9995% at 0	0.3 microns H14 (Option	al ULTRA filter)





# **Eco Polypropylene Vertical Laminar Clean Bench**

TopAir provides cost effective Vertical Laminar Clean Benches. Clean benches are designed to supply a clean controlled work environment meeting a Class 100/ISO 5 Cleanliness level. The clean bench is tested according to USA Federal Standard 209E/ISO 14644-1/CE.

TopAir's clean benches draw air from the room or hall space, pass it through a HEPA filter using a fan, and then distribute the clean air across the bench area. In vertical benches, the filtered air is directed downwards through a filter installed at the top of the bench.

### Structure:

- 8 mm welded Polypropylene with high chemical resistance
- Polypropylene worktop

- Analog control panel
- High efficiency quiet EC fan with speed adjustment
- LED lighting 600 lux
- · Optional front sliding sash and UV light
- Optional metal stand and casters
- Compliance with Test Standard: US Federal Standard 209E / ISO 14644-1 / CE





# **Eco Polypropylene Vertical Laminar Clean Bench**

Spec/ Model	ECO-HC-V090-PP	ECO-HC-V120-PP	ECO-HC-V150-PP	ECO-HC-V180-PP
Outer Dimensions W x D x H	35.4 x 21.9 x 43.5" 900 x 558 x 1105 mm	47.2 x 21.9 x 43.5" 1200 x 558 x 1105 mm	59 x 21.9 x 43.5" 1500 x 558 x 1105 mm	70.8 x 21.9 x 43.5" 1800 x 558 x 1105 mm
WE (	CAN CUSTOMIZE ANY	SIZE - EVEN A SINGLI	E UNIT! CONTACT US I	FOR DETAILS
Workspace (W x D x H)	34.6 x 17.7 x24" 46.4 x 17.7 x 24" 58.26 x 17.7 x24" 70 x 17.7 x 24" 880 x 450 x 600 mm 1180 x 450 x 600 mm 1480 x 450 x 600 mm 1780 x 450 x 600 mm			
Test Standard		USA Federal Standard 2	209E / ISO-14644-1, CE	
Air Velocity m.s	0.33 m/s, 66 fpm			
Cleanliness in Workstation	Class-100 (FS 209E) ISO-5, IOS-14644-1			
Hood Material	Polypropylene			
Worktop Material	Polypropylene			
Noise Level (Tested 20 cm from worktop, 1.2 m/ 48" above ground)	<52dB <54dB <56dB <56dB			
Power Supply	110 / 220 V, 50/60 Hz, Single phase			
Illumination	600 lux LED lighting			
Filters	Н	EPA Filter Efficiency of	99.9995% at 0.3 micror	ns

## **Models**

Unit size	90 cm/ 36"	120 cm / 48"	150 cm / 59"	180 cm / 70"
Vertical Cabinet Stand	ECO-HC-V090-ST	ECO-HC-V120-ST	ECO-HC-V150-ST	ECO-HC-V180-ST





# **Eco Polypropylene Horizontal Laminar Clean Bench**

TopAir provides cost effective Horizontal Laminar Clean Benches. Clean benches are designed to supply a clean controlled work environment meeting a Class 100/ISO 5 Cleanliness level. The clean bench is tested according to USA Federal Standard 209E/ISO 14644-1/CE.

TopAir's clean benches draw air from the room or hall space, pass it through a HEPA filter using a fan, and then distribute the clean air across the working area.

### Structure:

- 8 mm welded polypropylene with high chemical resistance
- polypropylene worktop

- Analog control panel
- High efficiency quiet EC fan with speed adjustment
- LED lighting 600 lux
- Optional front sliding sash and UV light
- Optional metal stand and casters
- Compliance with Test Standard: US
   Federal Standard 209E / ISO 14644-1 / CE





**Control System** 

· optional Metal stand

# Eco Polypropylene Horizontal Laminar Clean Bench

Spec/ Model	ЕСО-НС-Н090-Р	ECO-HC-H120-P	ECO-HC-H150-P	ECO-HC-H180-P
Outer Dimensions W x D x H	35.4 x 27 x 43.5" 900 x 688 x 1105 mm	47.2 x 27 x 43.5" 1200 x 688 x 1105 mm	59 x 27 x 43.5" 1500 x 688 x 1105 mm	70.86 x 27 x 43.5" 1800 x 688 x 1105 mm
Workspace (W x D x H)	34.6 x 17.7 x 24" 880 x 450 x 600 mm	46.4 x 17.7 x 24" 1180 x 450 x 600 mm	58.26 x 17.7 x 24" 1480 x 450 x 600 mm	70 x 17.7 x 24" 1780 x 450 x 600 mm
Test Standard		USA Federal Standard 2	209E / ISO-14644-1, CE	
Air Velocity m/s	0.33 m/s, 66 fpm			
Cleanliness in Workstation	Class-100 (FS 209E) ISO-5, IOS-14644-1			
Hood Material	Polypropylene			
Worktop Material		Polypro	ppylene	
Noise Level (Tested 20 cm from worktop, 1.2 m / 48" above ground)	<52dB <54dB <56dB <56dB			
Power Supply	110 / 220 V, 50/60 Hz, Single phase			
Illumination	800 lux LED lighting			
Filters	Н	EPA Filter Efficiency of	99.9995% at 0.3 micro	ns

## **Models**

Spec/ Model	ЕСО-НС-Н90-Р	ECO-HC-H120-P	ECO-HC-H150-P	ECO-HC-H180-P
Horizontal Cabinet Stand	ECO-HC-H90-ST	ECO-HC-H120-ST	ECO-HC-H150-ST	ECO-HC-H180-ST





## Polypropylene PCR-HEPA Cabinet

TopAir's Polypropylene PCR-HEPA cabinets offer a quality filtering system that provides complete protection from contamination.

Made of high-quality non-corrosive polypropylene, the cabinets feature a high level of chemical resistance. The cabinets are used in the genomics, proteomics, molecular biology and forensic science industries.

### Structure:

- 8 mm welded polypropylene with high chemical resistance
- 5 mm safety front glass window
- Side windows for better visibility

- Microprocessor control system with 7" color touchscreen display
- H14 HEPA filter, efficiency 99.9995% @ 0.3μm
- Fan control with 10 speeds
- Germicidal UV light (254 nm)with safety interlock mechanism
- programmable timer for UV light
- 800 lux LED lighting
- Air velocity: 0.33 m/s (66 fpm)
- High efficiency quiet EC fan
- · Optional stand
- ISO 6/ CLASS 1000 cleanliness level according to ISO 14644-1 and USA Federal Standard 209E, CE Certification





# Polypropylene PCR-HEPA Cabinet

Spec/ Model	PCR-060-HEPA	PCR-090-HEPA	PCR-120-HEPA	
External Dimensions W x D x H	600 x 640 x 950mm 23.6 x 25.2 x 37.4"	900 x 640 x 950 mm 35.4 x 25.2 x 37.4"	1200 x 640 x 950 mm 47.2 x 25.2 x 37.4"	
WE CAN CUSTOMIZE ANY SIZE - EVEN A SINGLE UNIT! CONTACT US FOR DETAILS				
Workspace (W x D x H)	585 x 450 x 590 mm 23 x 17.7 x 23.2"	885 x 450 x 590 mm 34.8 x 17.7 x 23.2"	1185 x 450 x 590 mm 46.6 x 17.7 x 23.2"	
Front Sash Max Opening	450 mm /17.7"	450 mm /17.7"	450 mm /17.7"	
Production / test Standard	USA Federal Standard 209E / ISO 14644-1, CE			
Air Velocity	0.33 m/s, 66 FPM	0.33 m/s, 66 FPM	0.33 m/s, 66 FPM	
Hood & worktop Material	Polypropylene			
Filter	H14 HEPA	A filter at Efficiency 99.9995% (	<u>@</u> 0.3 um	
Noise (Tested 20 cm from the worktop, 1.2m above ground)	< 52 dB			
UV light	17w ozone free 254nm.			
Power Supply	110 / 220V , 50/60 Hz, Single phase			
Illumination		800 LUX LED lighting		

## Accessories

Model	PCR-060-ST	PCR-090-ST	PCR-120-ST
PCR Cabinet	600 X 580 X 802 mm	900 X 580 X 802 mm	1200 X 580 X 802 mm
	24 x 22.8 x 31.57"	36 x 22.8 x 31.57"	48 x 22.8 x 31.57"



## **Polypropylene PCR-UV Cabinet**

TopAir's polypropylene PCR-UV cabinets (dead box) UV decontamination system is an excellent solution for laboratory equipment needs. Made of high-quality non-corrosive polypropylene, the cabinets feature a high level of chemical resistance.

Polypropylene also increases the product's tensile strength and improves its thermal characteristics.

The cabinets are used in the genomics, proteomics, molecular biology and forensic science industries.

### Structure:

- 8 mm welded Polypropylene with high chemical resistance
- 5 mm safety front glass window
- · Side windows for better visibility

- Microprocessor control system with 7" color touch screen display
- Germicidal UV light (254 nm) with safety interlock mechanism
- Programmable timer for UV light
- 800 lux LED lighting
- · Optional stand





# Polypropylene PCR-UV Cabinet

Spec/ Model	PCR-060-UV	PCR-090-UV	PCR-120-UV
External Dimensions W x D x H	600 x 640 x 750 mm 23.6 x 25.2 x 29.5"	900 x 640 x 750 mm 35.4 x 25.2 x 29.5"	1200 x 640 x 750 mm 47.2 x 25.2 x 29.5"
WE CA	AN CUSTOMIZE ANY SIZE - I	EVEN A SINGLE UNIT! CONTAC	T US FOR DETAILS
Workspace (W x D x H)	580 x 450 x 550 mm 22.8 x 17.7 x 21.6"	880 x 450 x 550 mm 34.6 x 17.7 x 21.6"	1180 x 450 x 550 mm 46.4 x 17.7 x 21.6"
Front Sash Max Opening	500 mm / 19.6"	500 mm / 19.6"	500 mm / 19.6"
Filter	None		
<b>Cabinet Material</b>	Polypropylene		
Worktop Material	Polypropylene		
UV light	17w ozone-free 254 nm		
Power Supply	110 / 220 V , 50/60 Hz, Single phase		
Illumination		800 lux LED lighting	

## Accessories

Model	PCR-060-ST	PCR-090-ST	PCR-120-ST
PCR Cabinet	600 X 640 X 802 mm	900 X 640 X 802 mm	1200 X 640 X 802 mm
	24 x 25.2 x 31.57"	36 x 25.2 x 31.57"	48 x 25.2 x 31.57"





## **IVF system for Clean Bench**

TopAir's Polypropylene IVF systems is an add-on system for a clean benches. It is designed for IVF procedures with an integrated heating plate to achieve an accurate temperature of  $37 \,^{\circ}\text{C}$  /  $98.6 \,^{\circ}\text{F}$  .

The heating element controlled by accurate PID system with a precise temperature sensor. This ensures fast heating of the surface without significant overshoot over the set temperature. The heating surface is set to 37  $^{\circ}$ C / 98.6  $^{\circ}$ F , and can be changed by the user.

IVF system for clean bench	Size
HC-IVF-1010	100*100 mm /4"*4"
HC-IVF-2020	200*200 mm / 8"*8"





## IPMS - Integrated Particle Monitoring System

The IPMS measures particle concentration in real-time, monitoring the cleanliness level 24/7. Its display clearly indicates whether or not the cleanliness level complies with ISO-5 and alerts the user when the workspace has been contaminated or needs to be serviced.

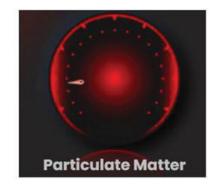
The IPMS smart algorithm processes data provided by an advanced built-in sensor and displays a reliable outcome. IPMS provides critical real-time information on the air quality within the workspace, prevents cross-contamination, and ensures constant, full standard compliance.

The IPMS is an unprecedented solution that can transform the future of biological processes in the industry.









### **GREEN LIGHT**

Level of cleanliness is equal or better than the IOS-5 requirement within the workspace

### **RED LIGHT**

Level of cleanliness is lower than the IOS-5 requirement within the workspace





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