Laboratory Equipment

Biological Safety Cabinet

Biological safety cabinet is designed to protect operator, laboratory environment and samples from being exposed to the infective aerosol produced when the sample is bacteria strains, diagnostic material, and other infective subjects. It provides the operators with a more comfortable and safer working condition. It is widely used in medical health, disease prevention, food safety, biological pharmacy and environment monitoring. And it has been the important basis of sample safety and environment security.

cen
EN 1 2 4 6 9

Ultra Low Penetration Air Filter System

Camfil ULPA filter

Intelligent constant air velocity patent technology

The professional hot-bulb air velocity transducer performs real-time monitoring on the air velocity of the working area, compares it with the standard air velocity, and keeps the safety cabinet under constant air velocity through adjustment of the fan speed by microcomputer system

304 stainless steel operation platform and internal wall
• Stainless steel operation platform without screws, no accumulation of contaminant
• Dismountable air in-flow plate, easy to clean and disinfect
• Concaved operation platform, waste liquid easily collected

Digital microprocessor control system

BIOLOGICAL SAFETY CABINET

• LCD display
• Real-time display of key parameters: downflow velocity, inflow velocity, airflow volume, static pressure, negative pressure, accumulative running time of fan and UV lamp, left lifetime of filter
• Sound & light alarming function
• UV sterilization reservation setting function

HR1200-IIA2

Professional air flow distributiondesign
Through professional air flow distribution design, the air flow of the worktable is more uniform, with the noise ﹤62dBA

V-shaped air inlet design

Swivel caster, Internal thread support leg

Biological Safety Cabinet

Features

Patent Intelligent Constant Air Velocity

The professional hot-bulb air velocity transducer performs real-time monitoring on the air velocity of the working area, compares it with the standard air velocity, and keeps the safety cabinet under constant air velocity through adjustment of the fan speed by microcomputer system

Low Noise Safety Energy-saving Mode

When the human body detecting module detects under the intelligent mode that the person is outside the operating area for over 15 minutes, the microcomputer program will automatically switch the safety cabinet to Low Noise Safety energy conservation mode, so as to realize noise reduction and energy conservation and to improve the service life of the filter

Professional Air-flow Distribution Module

Through professional air flow distribution design, the air flow of the worktable is more uniform, with the noise <62dBA

Ultra Low Penetration Air Filter System

Sweden Camfil (ULPA) filter is tested to a typical efficiency of > 99.999% for 0.12 micron particles. ULPA filter provides vertical laminar flow to the worktable, so as to protect samples from pollution

Patent Technology of Air Flow Disruption

Adopt the patent technology of air flow disruption on the upper edge and both sides of the front window (Patent No. ZL200520125549.X) to eliminate the safety protection blindness. Adopt the patent technology of side air flow disruption design to eliminate the exposure of microorganism

Unique Drop-down Front Glass Window

Remove the hand-placing frame by hand, and pull down the front glass window to clean the upper part of the glass and to avoid dead corners

Dismountable Platform-type Hand-placing Frame

Platform-type hand-placing frame is comfortable to use and helps to relieve fatigue

	Biosafety Cabinets	Air Quality	Filtration	Electrical Safety
Standards Compliance	EN 12469, Europe CFDA YY-0569, China	ISO 14644.1, Class 3, Worldwide US Fed Std 209E, Class 1 USA	EN-1822 (H14), Europe IEST-RP-CC001.3, USA IEST-RP-CC007, USA IEST-RP-CC034.1, USA	EN61010

Biological Safety Cabinet

American AAF ULPA filter is tested to a typical efficiency of >99.999% for 0.12 micron particles

Reverse centrifugal fan allows double side air inflow, decreasing noise and saving energy

Reverse centrifugal fan allows double side air inflow, decreasing noise and saving energy

Digital microprocessor control system for easy operation

Intelligent alarming system

Multiple interlocking functions eliminate potential safety problems caused by misoperation.

Removable stainless steel work surface makes cleaning easier

Ergonomic angled design to improve comfort

Adjustable foot

HR40-IIA2
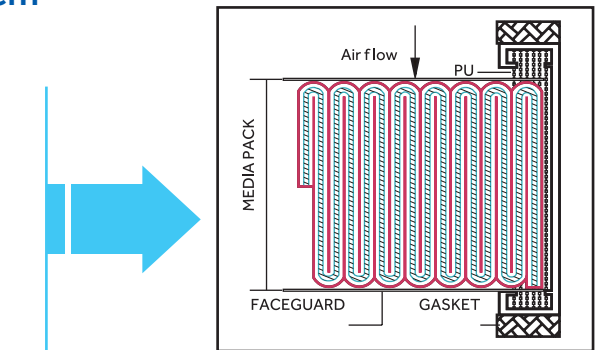
Biological Safety Cabinet

304 Stainless Steel Operation Platform and Internal Wall

- Stainless steel operation platform without screws, no accumulation of contaminant
- Dismountable air in-flow plate, easy to clean and disinfect
- Internal wall is constructed by a single plate, and the12mm arc angle conner leaves no cleaning blind area
- The volume of liquid tank is over 4L, equipped with outlet valve for convenient cleaning and maintaining
- Concaved operation platform, waste liquid easily collected
- Adjustable supporter (0-75mm) without exposed screw thread, preventing the germs from multiplying
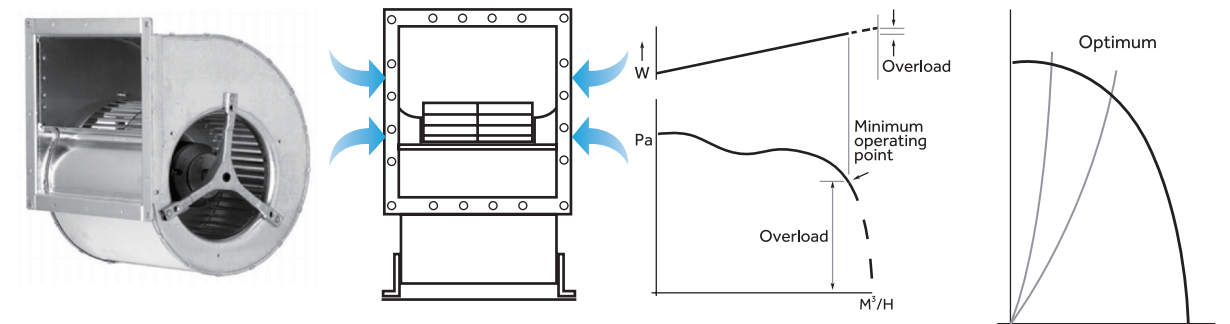
Ultra Low Penetration Air Filtration System

- American AAF ULPA filter
- Tested to a typical efficiency of 99.9995% for 0.12 micron particles
- Provides FED STD 209E class 1 (or ISO14644.1 class 3) clean air to work surface in a stable vertical laminar flow to protect samples
- The exhaust ULPA filter traps biohazard particles acquired from the work surface before air is exhausted to the room, offering personnel and environmental protection

Air flow
PU
MEDIA PACK
FACEGUARD   GASKET

High Efficiency Blower System

- The blower system is designed for high performance operation, maximum energy efficiency and minimal maintenance
- Self cooling system reduces energy consumption while enhancing reliability

W
Pa
Overload
Minimum operating point
Overload
M^3/H
Optimum

Reverse centrifugal fan	Double-side air inflow design decreases running noise	Air velocity auto-compensation function guarantees stable wind speed	Provide uniform airflow by adjusting working voltage of fan

Biological Safety Cabinet

Biological Safety Cabinet

Specification

Model	HR900-IIA2	HR1200-IIA2	HR1500-IIA2	HR30-IIA2	HR40-IIA2	HR50-IIA2	HR40-IIB2
Working Voltage& Frequency	220V/50Hz	220V/50Hz	220V/50Hz	220V/50Hz	220V/50Hz	220V/50Hz	220V/50Hz
Power(VA)	1400	1500	1300	1300	1300	1300	1500
Power of Blower(W)	335	475	650	350	350	650	505
Airflow Circulation	70% downflow,30% exhaust	70% downflow,30% exhaust	70% downflow,30% exhaust	70% downflow, 30% exhaust	70% downflow, 30% exhaust	70% downflow, 30% exhaust	100% exhaust
Main Filter Typical Effiency	ULPA,99.9995%@0.12um	ULPA,99.9995%@0.12um	ULPA,99.9995%@0.12um	ULPA,99.9995%@0.12μm	ULPA,99.9995%@0.12μm	ULPA,99.9995%@0.12μm	ULPA,99.9995%@0.12μm
Exhaust Filter Typical Effiency	ULPA,99.9995%@0.12um	ULPA,99.9995%@0.12um	ULPA,99.9995%@0.12um	ULPA,99.9995%@0.12μm	HEPA,99.995%@0.3μm	ULPA,99.9995%@0.12μm	HEPA,99.99%@0.3μm
Filter's Brand	Camfil	Camfil	AAF	AAF	AAF	AAF	AAF
Downflow Velocity(m/s)	0.33	0.34	0.31	0.31	0.28	0.28	0.28
Inflow Velocity(m/s)	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Fluorescent Lamp Intensity(Lux)	900	900	900	≥1100	≥1100	≥1100	≥1100
Net/Gross Weight	290/315(kg) 639.3/694.5(lbs)	320/347(kg) 705.5/765(lbs)	350/375(kg) 771.6/826.7(lbs)	220/248(kg) 485.0/546.7(lbs)	258/293(kg) 568.8/646.0(lbs)	285/320(kg) 628.3/705.5(lbs)	280/308(kg) 617.3/679.0(lbs)
Internal Dimensions(W*D*H)	920*620*650(mm) 36.2*24.4*25.6(in)	1220*620*650(mm) 48.0*24.4*25.6(in)	1520*620*650(mm) 59.9*24.4*25.6(in)	900*610*680(mm) 35.4*24.0*26.8(in)	1167*610*680(mm) 45.9*24.0*26.8(in)	1585*610*680(mm) 62.4*24.0*26.8(in)	1167*610*680(mm) 45.9*24.0*26.8(in)
External Dimensions(W*D*H)	1080*845*2160(mm) 42.5*33.3*85.0(in)	1380*845*2160(mm) 54.3*33.3*85.0(in)	1680*845*2160(mm) 66.1*33.3*85.0(in)	1100*790*2200(mm) 43.3*31.1*86.6(in)	1360*790*2200(mm) 53.5*31.1*86.6(in)	1780*790*2200(mm) 70.1*31.1*86.6(in)	1360*790*2400(mm) 53.5*31.1*94.5(in)
Packing Dimensions(W*D*H)	1145*920*1690(mm) 45.1*36.2*66.5(in)	1470*920*1690(mm) 57.9*36.2*66.5(in)	1755*920*1690(mm) 69.1*36.2*66.5(in)	1160*920*1690(mm) 45.7*36.2*66.5(in)	1420*920*1690(mm) 55.9*36.2*66.5(in)	1840*920*1690(mm) 72.4*36.2*66.5(in)	1420*920*1850(mm) 55.9*36.2*72.8(in)
Supporter	75mm adjustbale height	75mm adjustbale height	75mm adjustbale height	75mm adjustable height	75mm adjustable height	75mm adjustable height	75mm adjustable height
Container load (20'/40'/40'H)	12/24/24	8/16/16	6/12/12	10/20/20	8/16/16	6/12/12	8/16/16
Alarm	Sound and Flash	Sound and Flash	Sound and Flash	Sound and Flash	Sound and Flash	Sound and Flash	Sound and Flash
Certificate	CE,EN12469,CFDA	CE,EN12469,CFDA	CE,EN12469,CFDA	CFDA	EN12469,CFDA,CE	CFDA	CFDA

Product appearance and specifications are subject to change without notice

Clean Bench

- Featuring many patented technologies and authoritative testing certification for reliability
- Microcomputer intelligent control panel with durable touch buttons
- Multiple safety protection functions including UV delay start
- Interlocking function to put an end to incorrect operation
- Various personalized design to ensure comfortable operation
- Perfect memory function to avoid repeat setting
- Combined under-frame structure with universal truckle design

Haier Vertical Laminar Flow Clean Bench

High-efficiency Filter ULPA

Shell: Cold rolled electrostatic painting, anti-corrosion ability

UV Lamp One-key Preset

UV germicidal delayed start to prevent from away UV damage

Pre-cleaning Function: patented technology (ZL201220087011.4)

304 Stainless Operation Table

UV lamps , fans, lighting linkage system to enhance user

Universal Caster to move more conveniently

Clean Bench

High-Efficiency Filter ULPA

The world-famous AAF damp and fire resistant fiberglass high-efficiency air filter (HEAP) 99.99%@0.3μm, enjoys the cleaning class up to Class V, ISO14644.1 which is superior to the cleaning requirement of class 100, safer and cleaner

304 Stainless Operation Table

The excellent 304 stainless operation table without fixing screws can avoid the accumulation of dirt

Ergonomic Design

• Adopting recess lighting to eliminate the radiation of the fluorescent lamps on the eyes and thus preventing the eyes from being tired
• Equalizer bar design: In the working area, the stainless equalizer bar with hooks is provided for facilitating the movement of articles

Patented Technology

• UV sterilization startup delay (keep away the injury by UV light) patent technology (ZL201220087011.4). After the UV lamp switch is pressed   down, the audible and visual alarm will be activated to remind the operator to leave in time. After 10s, the UV light is on. Therefore, the operator can be protected from the injury by UV light
• Preset function: It can preset the UV sterilization startup delay to provide users with more rest and to improve working efficiency, possessing the patent technology (ZL201220087011.4)

Interlocking Function

With the interlocking between illuminating lamp and UV lamp, the UV lamp can become on only when the illuminating lamp is off; When the UV lamp is on, it can be off if pressing the daylight lamp. The risk of incorrect operation can be avoided

Memory Function

The UV lamp startup delay time, sterilization duration, preset start time, fan position can be set and saved by user on request for the convenience of startup

One-key Operation

• After the UV lamp switch is pressed, the time function can be activated automatically. The default sterilization time is 30min, which can be adjusted by user within 0~99min on request
• Sterilization preset, when pressing the UV lamp, the preset lamp will become on to remind user that the sterilization preset function has been activated and that the sterilization preset can be conducted

Pre-cleaning Function

The only pre-cleaning function can further improve the protection on sample

Model	HCB-900V	HCB-1300V	HCB-1300H	HCB-1600H
Flow Type	Vertical	Vertical	Horizontal	Horizontal
Voltage/Frequency	220V/50Hz	220V/50Hz	220V/50Hz	220V/50Hz
Power	1200W	1200W	350W	350W
Vibration Amplitude	≤2um	≤2um	≤2um	≤3um
Exhaust Filter Typical Efficiency	HEPA,99.99%@0.3um	HEPA,99.99%@0.3um	HEPA,99.99%@0.3um	HEPA,99.99%@0.3um
Average Velocity	0.2~0.5m/s	0.2~0.5m/s	0.3~0.5m/s	0.3~0.5m/s
Fluorescent Lamp Intensity	≥300 Lux	≥300 Lux	≥900Lus	≥1000Lus
Net/Gross Weight	115/140(kg) 254/309(lbs)	145/175(kg) 320/386(lbs)	135/165(kg) 297.6/363.7(lbs)	165/205(kg) 363.7/415.9(lbs)
Noise(dB(A))	≤60dB	≤30dB	≤60dB	≤60dB
Internal Dimension(W*D*H)	900*550*520(mm) 35.4*21.7*20.5(in)	1300*550*520 (mm) 51.2*21.7*20.5(in)	1310*550*750 51.5*21.7*29.5	1710*550*750 67.3*21.7*29.5
External Dimension(W*D*H)	970*630*1730(mm) 38.2*24.8*68.1(in)	1370*630*1730(mm) 53.9*24.8*68.1(in)	1380*792*1960 54.3*31.1*77.2	1780*792*1960 70.1*31.1*77.2
Packing Dimension(W*D*H)	1105*745*1280(mm) 43.5*29.3*50.4(in)	1505*745*1280(mm) 59.3*29.3*50.4(in)	1465*940*1370 57.7*37.0*53.9	1865*940*1370 73.4*37.0*53.9
Supporter	750mm high chassis	750mm high chassis	750mm high chassis	750mm high chassis
Cleanliness Classification	ISO14644.1 Class 5	ISO14644.1 Class 5	ISO14644.1 Class 5	ISO14644.1 Class 5
Container Load(20'/40'/40'H)	15/33/33	10/25/25	8/16/16	6/12/12
Certificate	CFDA	CFDA	CFDA	CFDA

Clean Bench