

06. CLEAN BENCH & HOOD

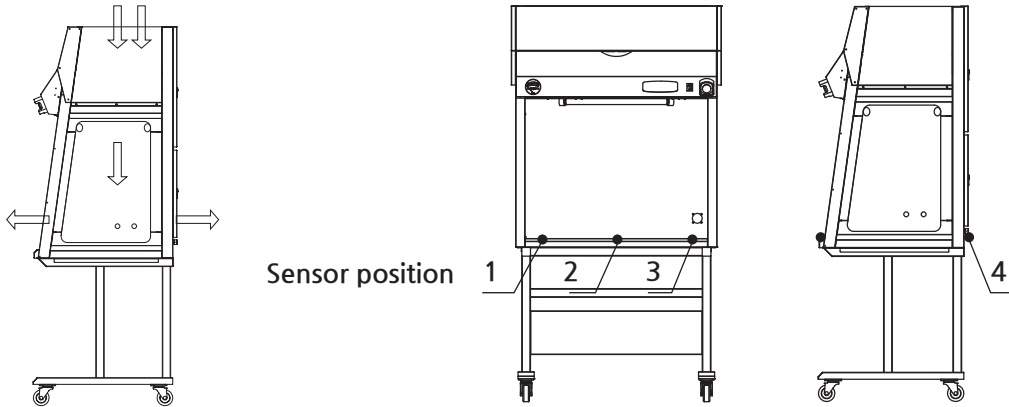


Laminar Clean Bench	85
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Clean Bench -Feature

Laminar flow sheet

84

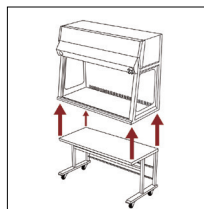


Step \ Position	1	2	3	4
0	0m/s	0m/s	0m/s	0m/s
1	0.2m/s	0.2m/s	0.2m/s	0.1m/s
2	0.6m/s	0.6m/s	0.6m/s	0.4m/s
3	0.9m/s	0.9m/s	0.9m/s	0.9m/s
4	1.9m/s	1.9m/s	1.9m/s	1.8m/s
5	2.2m/s	2.2m/s	2.2m/s	2.1m/s
6	2.4m/s	2.4m/s	2.4m/s	2.2m/s
7	2.3m/s	2.3m/s	2.3m/s	2.3m/s
8	2.3m/s	2.4m/s	2.4m/s	2.3m/s
9	2.3m/s	2.4m/s	2.4m/s	2.3m/s
10	2.3m/s	2.4m/s	2.3m/s	2.3m/s

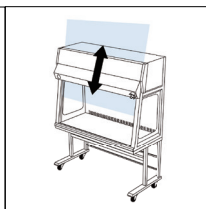
Feature



Informing filter replacement time



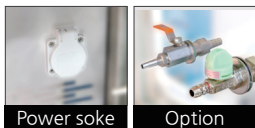
Detachable



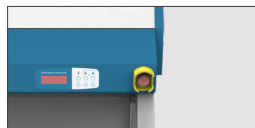
Maximize space efficiency



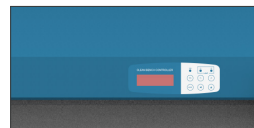
Easy to change consumables



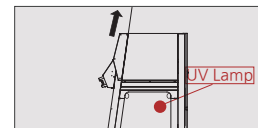
Operation supporting utilities



Safety devices



Digital microprocessor controller



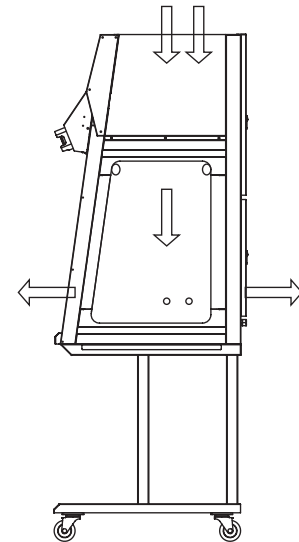
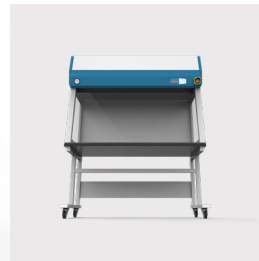
UV Lamp turns off as window opens

Laminar Clean Bench

The Laminar Clean Bench is suitable for use within a manufacturing area, laboratory or a cleanroom. This unit protects sensitive samples and processes from airborne particulate.

Only extreme air passing down over the process is ensured through the HEPA filtered unidirectional down flow.

This method guarantees that air will be free of any particles and that any particles generated from the process will be pushed away, maintaining it contamination free area.



Model	SH-HD-900V	SH-HD-1500V	SH-HD-1900V
Type	Laminar Vertical Down Flow		
Dimension Internal (W×D×H)	860x613×690mm	1391x613×690mm	1891x613×690mm
	33.86x24.13x27.17"	54.76x24.13x27.36"	74.45x24.13x27.36"
Dimension External (W×D×H)	966x696×1820mm	1496x696×1820mm	1996x696×1820mm
	35.43x30.71x74.80"	59.06x30.71x74.80"	74.80x30.71x74.80"
Weight	130 Kg	190 Kg	230 Kg
Control System	Microprocessor LCD Digital Controller		
Main Filter	Hefa Filter 0.3µm 99.97% Efficient Filter		
Material External	Steel Plate with Powder Heating Coated		
Working Table	Stainless Steel		
Illumination LED Lamp	10W, Length 600mm	20W, Length 1200mm	
Illumination UV Lamp	15W x 1EA	32W x 1EA	
UV Time Range	00.00 to 99HR 59MIN (MIN SEC) Selectable LCD Counter		
Winding Velocity	0.2~2.3M/SEC, 10 Step Adjustable		
Purity	Below to Class 100		
Door Type	Tempered Glass by Weight Balance		
Electrical Requirements	120V,230V, 1Φ		
Cat. No. 120V, 50Hz	HD900V120-50	HD1500V120-50	HD1900V120-50
Cat. No. 120V, 60Hz	HD900V120-60	HD1500V120-60	HD1900V120-60
Cat. No. 230V, 50Hz	HD900V230-50	HD1500V230-50	HD1900V230-50
Cat. No. 230V, 60 Hz	HD900V230-60	HD1500V230-60	HD1900V230-60

• Option

-Air & Gas Port

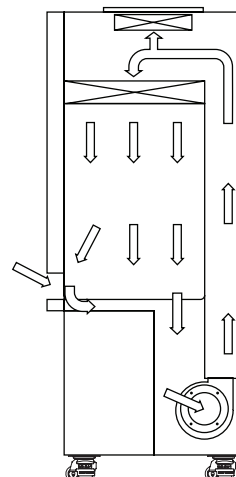
• Safety Device

- Fan motor over load Protection
- Automatic reset function incoming power cut
- Buzzer on and UV Lamp cut off when set time arrived
- UV Lamp turns off as window opens
- Emergency stop button

Biosafety Cabinet

The Biosafety Cabinet is an enclosed, ventilated laboratory workspace made for working with materials contaminated or possibly contaminated with pathogens, thus, requiring a specified biosafety level.

Our Biosafety Cabinet ensures both the safety of its users and samples as it prevents the air from the cabinet to the surrounding environment.



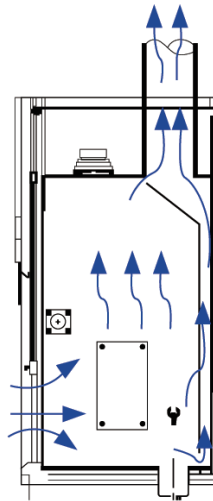
Model	SH-HD-900B	SH-HD-1500B	SH-HD-1900B
Type	Bio Hazard Type(Class II A2)		
Dimension Internal (W×D×H)	740x600x750mm	1340x600x750mm	1740x600x750mm
	29.13x23.62x29.53"	52.76x23.62x29.53"	68.50x23.62x29.53"
Dimension External (W×D×H)	900x825×1875mm	1500x825×1900mm	1900x825×1900mm
	35.43x32.48x73.81"	59.06x32.48x74.80"	74.80x32.48x74.80"
Weight	210 Kg	265 Kg	305 Kg
Control System	Microprocessor LCD Digital Controller		
Main Filter	Hefa Filter 0.3µm 99.97% Efficient Filter		
Material Internal	Stainless Steel		
Material External	Steel Plate with Powder Heating Coated		
Utility	Air & Gas Port		
Illumination LED Lamp	10W, Length 600mm	20W, Length 1200mm	
Illumination UV Lamp	15W x 1EA	32W x 1EA	
UV Time Range	00.00 to 99HR 59MIN (MIN SEC) Selectable LCD Counter		
Winding Velocity	0.2~1.9M/SEC, 10 Step Adjustable		
Purity	Below to Class 100		
Door Type	Tempered Glass by Weight Balance		
Electrical Requirements	120V,230V, 1Φ		
Cat. No. 120V, 50 Hz	HD900B120-50	HD1500B120-50	HD1900B120-50
Cat. No. 120V, 60 Hz	HD900B120-60	HD1500B120-60	HD1900B120-60
Cat. No. 230V, 50 Hz	HD900B230-50	HD1500B230-50	HD1900B230-50
Cat. No. 230V, 60 Hz	HD900B230-60	HD1500B230-60	HD1900B230-60

• Safety Device

- Fan motor over load Protection
- Automatic reset function incoming power cut
- Buzzer on and UV Lamp cut off when set time arrived
- Emergency stop button

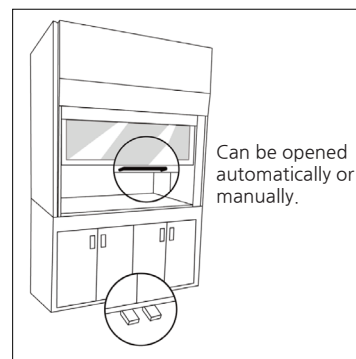
Fume Hood

A fume hood is a type of local ventilation device that is designed to limit exposure to hazardous or toxic fumes, vapors or dusts. A fume hood is typically a large piece of equipment enclosing five sides of a work area, the bottom of which is most commonly located at a standing work height.

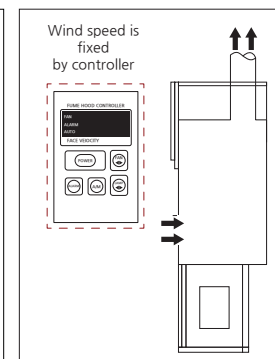


Option

Automatic Door Control



Digital Controller



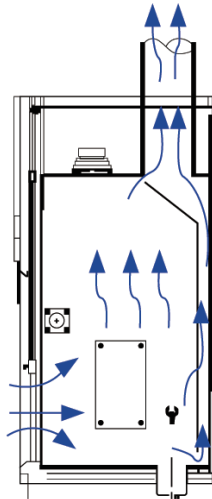
Model	SH-HDO-1200UP	SH-HDO-1500UP	SH-HDO-1800UP	SH-HDO-2100UP	SH-HDO-2400UP
Type	Fume Hood Type				
Dimension External (WxDxH)	1200x800x2350mm	1500x800x2350mm	1800x800x2350mm	2100x800x2350mm	2400x800x2350mm
	47.24x31.50x92.52"	59.06x31.50x92.52"	70.87x31.50x92.52"	82.68x31.50x92.52"	94.49x31.50x92.52"
Post	Aluminum				
Exterior Wall	Phenolic Laminate 4T Plate				
Interior Wall	Phenolic Laminate 4T Plate				
Cabinet	75x45 & 40x40 SS41 SQ Pipe W / Baked Powder				
Window	Tempered Safety Glass 5.0t				
Work Top	Chemtop 10t Plate				
Utility	Water Cock, Air Cock, Gas Cock, Cup sink				
Lamp	LED Lamp				
Exhaust Duct	200Φ P.V.C Pipe			250Φ P.V.C Pipe	
Face Velocity & VAV System	Option				
Cat. No. 120V	HD1200UP120	HD1500UP120	HD1800UP120	HD2100UP120	HD2400UP120
Cat. No. 230V	HD1200UP230	HD1500UP230	HD1800UP230	HD2100UP230	HD2400UP230

Built-In Fan Motor



Model	SH-HDF-1200UP	SH-HDF-1500UP	SH-HDF-1800UP	SH-HDF-2100UP	SH-HDF-2400UP
Cat. No. 120V, 50 Hz	HDF1200UP120-50	HDF1500UP120-50	HDF1800UP120-50	HDF2100UP120-50	HDF2400UP120-50
Cat. No. 120V, 60 Hz	HDF1200UP120-60	HDF1500UP120-60	HDF1800UP120-60	HDF2100UP120-60	HDF2400UP120-60
Cat. No. 230V, 50 Hz	HDF1200UP230-50	HDF1500UP230-50	HDF1800UP230-50	HDF2100UP230-50	HDF2400UP230-50
Cat. No. 230V, 60 Hz	HDF1200UP230-60	HDF1500UP230F-60	HDF1800UP230-60	HDF2100UP230-60	HDF2400UP230-60

Fume Hood



Option



Cabinet (General type)



Cabinet (Fire safety type)



Storage Cabinet (Acid&Corrosive safety type)



Automatic spreading fire extinguisher



Support Frame (SUS rack)

Model	SH-HD-1200UP	SH-HD-1500UP	SH-HD-1800UP	SH-HD-2100UP	SH-HD-2400UP
Type	Fume Hood Type				
Dimension External (W×D×H)	1200x800x2350mm	1500x800x2350mm	1800x800x2350mm	2100x800x2350mm	2400x800x2350mm
	47.24x31.50x92.52"	59.06x31.50x92.52"	70.87x31.50x92.52"	82.68x31.50x92.52"	94.49x31.50x92.52"
Structure	AL. Profile				
Exterior	Phenolic laminat				
Interior/Baffle	Phenolic laminate				
Work Top	Chemical Resistant Phenolic laminate				
Light	16W LED				
Sash Windows	Safety Glass 5.0T				
Sash Frame	P.P Made (Air/N2/Water)				
Cock & Valve	P.P MADE (AIR/N2/WATER)				
Exhaust Duct	200φ P.V.C Pipe	250φ P.V.C Pipe		300φ P.V.C Pipe	
Receptacle	1 Purchase type / Safety cover attached				
Switch	Rocker Type				
The Lower part Frame / Back Panel	Steel				
Control Pedestal	Ø45 Zinc Die Casted Adjuster				
Cat. No. 120V	HD1200UP120	HD1500UP120	HD1800UP120	HD2100UP120	HD2400UP120
Cat. No. 230V	HD1200UP230	HD1500UP230	HD1800UP230	HD2100UP230	HD2400UP230

Built-In Fan Motor



Model	SH-HDF-1200UP	SH-HDF-1500UP	SH-HDF-1800UP	SH-HDF-2100UP	SH-HDF-2400UP
Cat. No. 120V, 50 Hz	HDF1200UP120-50	HDF1500UP120-50	HDF1800UP120-50	HDF2100UP120-50	HDF2400UP120-50
Cat. No. 120V, 60 Hz	HDF1200UP120-60	HDF1500UP120-60	HDF1800UP120-60	HDF2100UP120-60	HDF2400UP120-60
Cat. No. 230V, 50 Hz	HDF1200UP230-50	HDF1500UP230-50	HDF1800UP230-50	HDF2100UP230-50	HDF2400UP230-50
Cat. No. 230V, 60 Hz	HDF1200UP230-60	HD1500UP230F-60	HDF1800UP230-60	HDF2100UP230-60	HDF2400UP230-60