

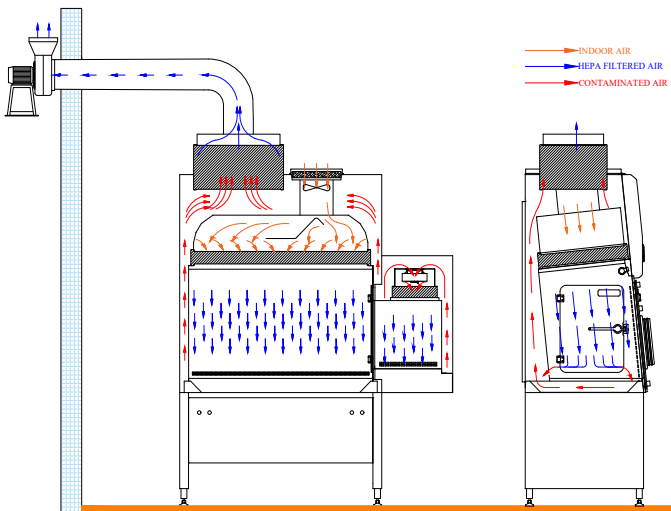
## METISAFE CLASS III BIOLOGICAL SAFETY CABINET

- Superior Biological Protection for Personnel, Product / Material and Environment
- Suitable for Working with Agents Assigned to Biological Risk Group 2-4
- Min. Class 100 (FED209E) / ISO Class 5 (EN14644) Cleanliness Class Work Area
- Ergonomic Design
- Low Noise Level



Class III Biological Safety Cabinet (BSC) is a fully isolated physical barrier which allows work material manipulations through air-tight glove ports assembled on the front window and material transfers through dynamic pass-boxes.

### CLASS III BSC AIRFLOW DIAGRAM



Metisafe Class III BSC works under principles with fresh air supply taken from the indoor environment to the work chamber and pass-box through pre/HEPA filtration. Exhausting of contaminated cabinet air to the outer atmosphere after HEPA filtration also protects the environment. That airflow pattern of BSC Class III provides safe work with biological risk group 3/4 agents and also with cytotoxic gas & materials if assembled with optional carbon filters. Total air in the work chamber is fully purged to the exhaust air ducts without recirculation. Exhausting to the outer atmosphere is accomplished by the help of an endpoint blower fan. Controlled air exhausting keeps work chamber and cabinet under negative pressure. In addition to the primary air-barrier accomplished by negative pressure within the work zones, double-wall negative plenum design of the Metisafe BSCs prevents particle escape to surroundings and zero leakage is ensured.



### Main Body and Design Features

- \* Antibacterial epoxy powder paint coated steel
- \* <7° Angle sloped front panel for work comfort and increased work chamber vision
- \* Easy reachable electronic control & electrical part protection inside at front panel, isolated from the work chamber
- \* UV safe tempered glass air-tight front window
- \* Air-tight glove ports air-tight glove ports

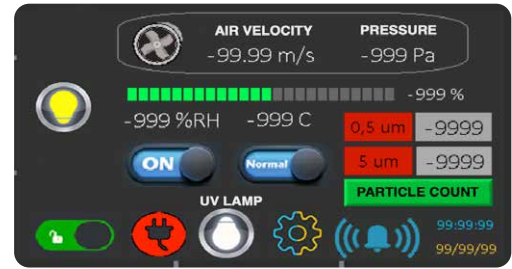
- Homogenous and cruise control airflow
- Advanced filter compensation system keeping steady air velocity under increased filter resistance
- Continuous work suitable negative plenum Fan/Filter Unit
- Contamination proof antimicrobial coated steel main body frame
- Monoblock air-tight tempered glass front window
- Leak-proof glove ports
- Dynamic pass-box with rounded corner glass-lids and inter-lock feature
- Timer controlled effective disinfection by UV Lamp
- DOP test ports

## MICROPROCESSOR CONTROL UNIT

**7" Color Screen Touch Control Panel:** One key touch on-off, Normal/Stand-by option button, UV and FL on-off button, Password protected technical service-maintenance interface, User password protection

**Audio-Visual Warning System:** HEPA filter life (%), Work chamber low-pressure warning, Fan failure warning, Service / Maintenance warning, Filter / UV lamp replacement warning, Alarm silence button

**Large LCD Information Display:** Downflow air velocity/Airflow rate, Work chamber pressure, Fan operation capacity diagram, UV and FL Lamps operation times, UV Lamp timer setting



Control panel main display screen



Material Transfer Sliding Tray System

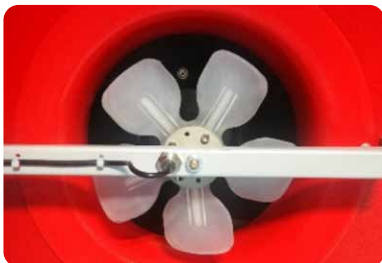


Removable or sterilization available partitted, stainless steel work plate (Optional)



### Dynamic Pass-Box

- Electromagnetic inter-lock system
- Stainless steel inner surface with wide angle radiused corners
- Increased safety with rounded corner tempered glass lids



Energy efficient high performance EC fan technology Automatic filter clogging compensation, cruise control airflow rate



Magnehelic work chamber negative pressure gauge

### Optionals

- ULPA Filter
- Carbon Filter
- Second Pass-Box
- Semi-Automatic Decontamination
- Full-Automatic Decontamination
- Work Chamber Temperature/Humidity Monitoring
- Work Chamber Shelves

### Accessories

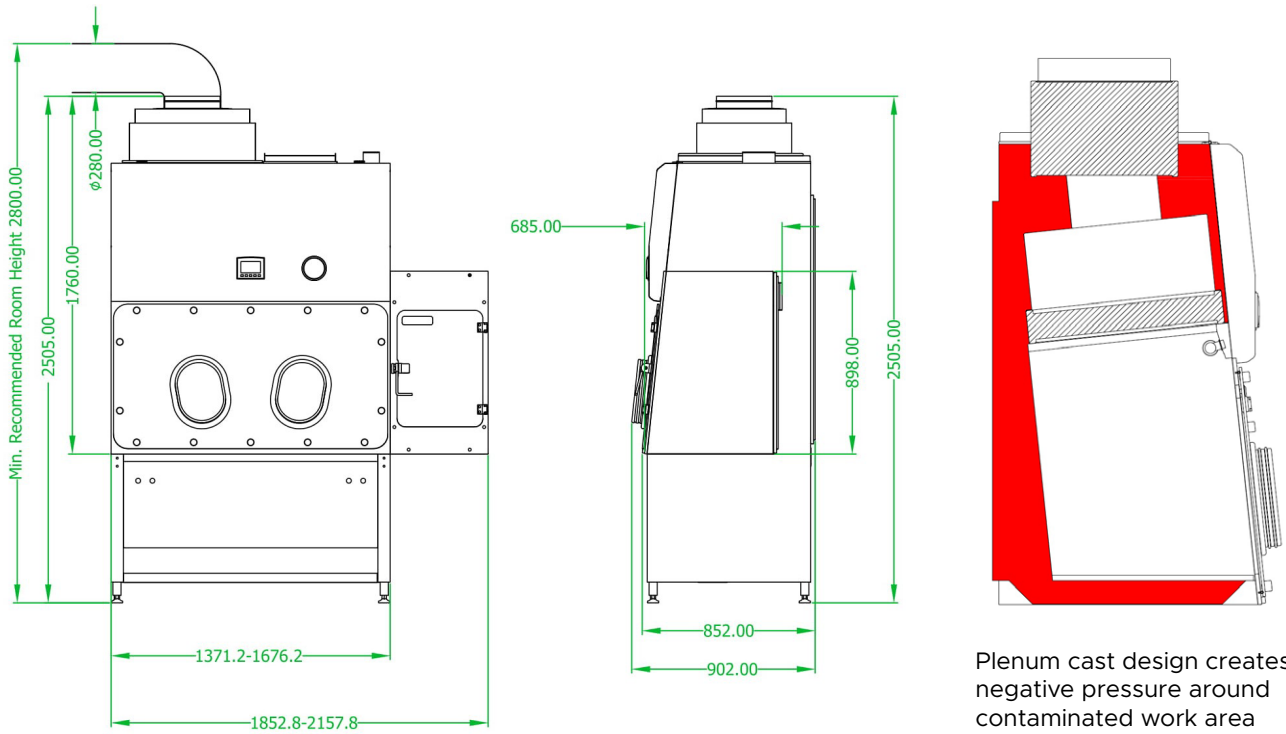
- Solenoid / Backflow Valve
- Leak Proof Gas/Vacuum Valve
- Portable Germicidal UV Lamp
- Microincinerator (Bacti-Cinerator)



### Glove

- Chemical or disinfection resistant
- High impermeability
- Good mechanical properties
- Resistant to ozone or UV rays
- Flexible handling and operation
- Long sleeve or Sleeve/Glove system options

## METISAFE CLASS III BIOLOGICAL SAFETY CABINET TECHNICAL DRAWING



Plenum cast design creates negative pressure around contaminated work area and ensures zero leakage

### METISAFE CLASS III BIOLOGICAL SAFETY CABINET TECHNICAL SPECIFICATIONS

MODEL		MSC-III-120	MSC-III-150
Internal Dimensions (WxDxH) mm		1250 x 620 x 695	1555 x 620 x 695
External Dimensions (WxDxH) mm		1371 x 902 x 1760	1676 x 902 x 1760
Pass-Box Dimensions (WxDxH) mm		482 x 685 x 898	482 x 685 x 898
Support Stand (WxDxH) mm		1371 x 805 x 745	1676 x 805 x 745
Working Table Top - Floor Height		840mm	840mm
Work Chamber Negative Pressure Level (Pa)		$\geq 125$	$\geq 125$
Exhaust Air Flow Rate (m <sup>3</sup> /h)		800<	1000<
Downflow Air Velocity (m/s)		0.30 m/s $\pm$ %5	0.30 m/s $\pm$ %5
Filters (EN 1822)	Main Filter	HEPA, H14 %99.995, 0,3 $\mu$ m	HEPA, H14 %99.995, 0,3 $\mu$ m
	Exhaust Filter	HEPA, H14 %99.995, 0,3 $\mu$ m	HEPA, H14 %99.995, 0,3 $\mu$ m
	Pre-Filter	EU4	EU4
Working Table	Standard	304 Stainless Steel	304 Stainless Steel
	Optional	316L Stainless Steel	316L Stainless Steel
Noise Level (1m distance)	Normal Mode	<55dB(A)	<58dB(A)
	Eco (Stand by) Mode	<50dB(A)	<50dB(A)
Front Window		8 mm Tempered Glass	8 mm Tempered Glass
Glove Port Number		2	4
Work Chamber Illumination Power (Lux)		850 – 1250 Lux	850 – 1250 Lux
Fan Power Consumption (kW)		0,35 kW	0,45 kW
Electrical Socket Voltage And Frequency		220-240VAC 50 HZ	220-240VAC 50 HZ
Pack/Palette Dimensions (WxLxH) mm		2000 x 1150 x 2000	2305 x 1150 x 2000
Net Weight (kg)		340	400
Packaged Weight (kg)		405	475