

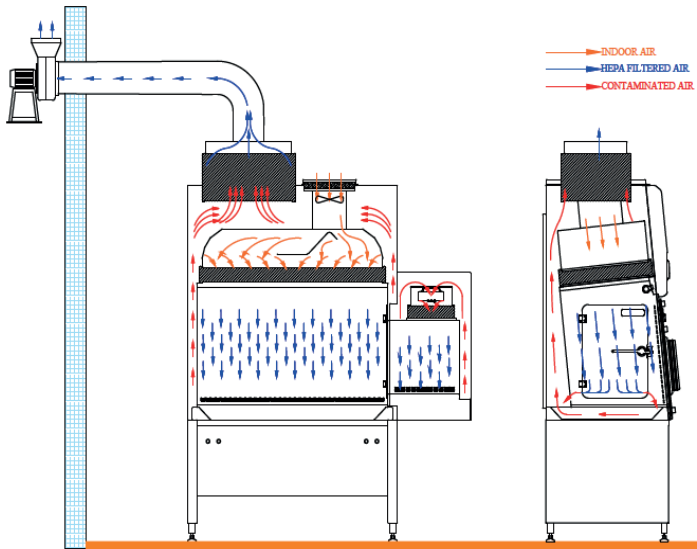
## METISAFE CLASS III BIOLOGICAL SAFETY CABINET

- 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 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

- Sealed main body covered with antibacterial electrostatic paint on steel,
- <7° tilted front panel for increased operating cabin visibility and ergonomic working comfort
- Electronic control panel protected by exclusion from the work chamber
- UV resistant glass
- 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
- Continous work suitable negative plenum Fan Filter Unit
- Active pass-box with rounded corner glass-lids and inter-lock feature
- Timer controlled effective disinfection by UV Lamp
- D.O.P test ports

### 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

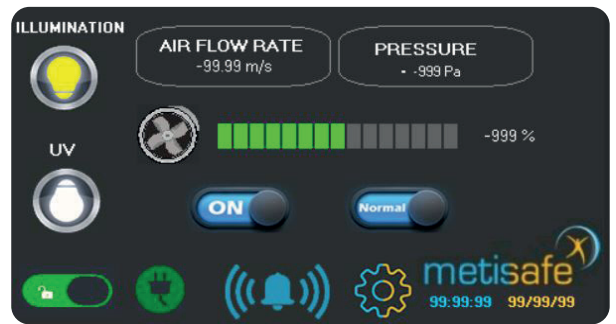


## MICROPROCESSOR CONTROL UNIT

**Color Screen Touch Control Panel:** Password protected user interface, Device on/off button, Standby/Normal modes button, UV and illumination lamp, On/Off buttons, UV lamp operating while in Standby mode, User interface password change, Password protected technical service maintenance/calibration, Date and time information

**Audio-Visual Warning System:** Audible visual alarm button and temporary mute, Exhaust fan error warning, Pressure warning, Improper air velocity warning, Filter, pre-filter and UV lamp replacement warning, Front window open warning, Technical service maintenance warning

**Large Information Display:** Downflow Air velocity rate, Fan working capacity, Fan working diagram, UV lamp timer setting, Cabinet, UV and pre-filter running times, Pressure value



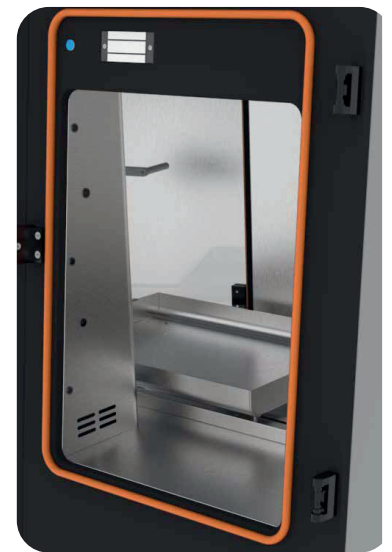
Control panel main display screen



Material Transfer Sliding Tray System



Removable or sterilization available partitted, stainless steel work plate



### Active 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



### OPTIONS

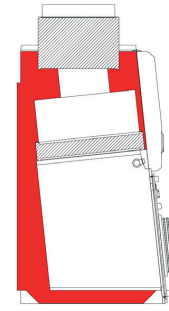
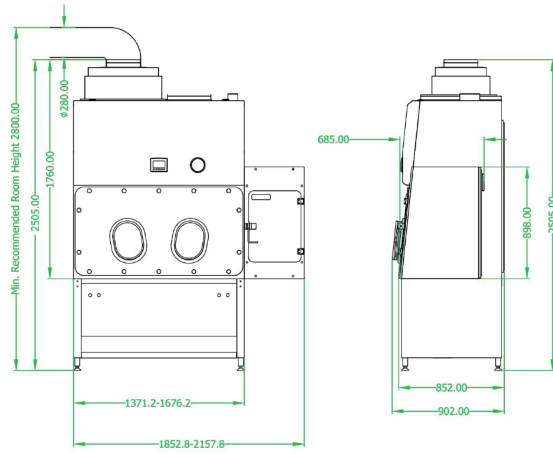
MOP.ADI	Adjustable Illumination
MOP.PPR	Process Parameter Recording System
MOP.HTS	Humidity/Temperature Sensor
MOP.RES	Remote Access
MOP.CFL	Carbon Filter
MOP.CFLEU4	Active Carbon Impregnated Pre-filter
MOP.FLT.ULP	ULPA Filter
MOP.PMS	Particle Measure System
MOP.BWT	Precision Balance with Vibration Damping Weighing Table
MOP.WCS	Working Cabinet Suspension Apparatus (IV Bar)
MOP.MDS	Manuel Decontamination System
MOP.SDS	Semi-Automatic Decontamination System
MOP.FDS	Fully-Automatic Decontamination System



### ACCESSORIES

MAC.UVC	Portable Germicidal UV Lamp
MAC.MIS	Microbiological Air Sampling Apparatus
MAC.UPS	Uninterruptible Power Supply (UPS)
MAC.ADH	Acrobat Document Holder
MAC.AMH	Acrobat Monitor Holder
MAC.INC	Incinerator
MAC.DID	Disinfectant Dispenser
MAC.ECM	Document/Equipment Cleaning Module
MAC.VLF	Service Valves
MAC.FOS	Foot Stand

## 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 TYPE BSC TECHNICAL SPECIFICATIONS

Model	MSC-III-120	MSC-III-150	
<b>DIMENSIONS AND WEIGHT</b>			
Internal Dimensions (WxDxH) mm	1250 x 620 x 695	1555 x 620 x 695	
Outer Dimensions (WxDxH) mm	1371 x 902 x 1760	1676 x 902 x 1760	
Support Stand Dimensions (WxDxH) mm	1371 x 810 x 745	1601 x 702 x 745	
Pass-Box Dimensions	482x685x898	482x685x898	
Working Table Height (mm)	840 mm		
Work Chamber Pressure - Negative	-125 Pa		
Cabinet Weight (kg)	340	400	
Support Stand Weight (kg)	34	38	
Packaged Total Weight (With Support Stand) (kg)	384	438	
Pack/Palette Dimensions (With Support Stand) (WxLxH) mm	2000 x 1150 x 2000	2305 x 1150 x 2000	
<b>HEPA FILTER and AIRFLOW DYNAMICS</b>			
Exhaust Air Flow Rate (m <sup>3</sup> /h)	700 <	900 <	
Downflow Air Velocity (m/s)	0.30m/s ± %20		
Filters (EN 1822)	Pre-Filter	EU4	
	Main Filter	H14 HEPA, 0,3 µm paticle %99.995 < filtration efficiency	
	Exhaust Filter	H14 HEPA, 0,3 µm paticle %99.995 < filtration efficiency	
<b>ENERGY</b>			
Enerji Tüketimi 230 VAC- 50Hz	Fan Filter Unit	160 W	220 W
	Illumination	50 W	50 W
	UV Lamp	30 W	36 W
	Electrical Socket Power / Current	2 X 5A = 10 A 2 X 1150W = 2300W	
Total Power / Current	2540 W / 11 A	2606 W / 11,3 A	
Power Consumption Under Normal Operating Conditions (Illumination and Fan Motor)	210 W	270 W	
<b>ERGONOMICS and COMFORT</b>			
Noise Level	< 65 dB		
Illumination	≥750 Lux		
<b>WORKING AREA</b>			
Working Area Cleaning Class	EN ISO 14644-3	< ISO 5	
	US FED 209E	< Class 100	
Working Table	Standard	304 Stainless Steel	
	Optional	316 Stainless Steel	
Front Window Thickness	≥ 8 mm		
Front Glass Glove Port Quantity	2	4	
<b>QUALITY AND CERTIFICATES</b>			
CE, ISO9001-2015 Quality Management Certificate, ISO14644 Cleanroom Class Compatibility, EN61010 Electric and Electronic Safety Compatibility, Accredited Testing Institution Validation Guarantee in case the installation is opared by Metisafe® Certified Technical Personnel			

