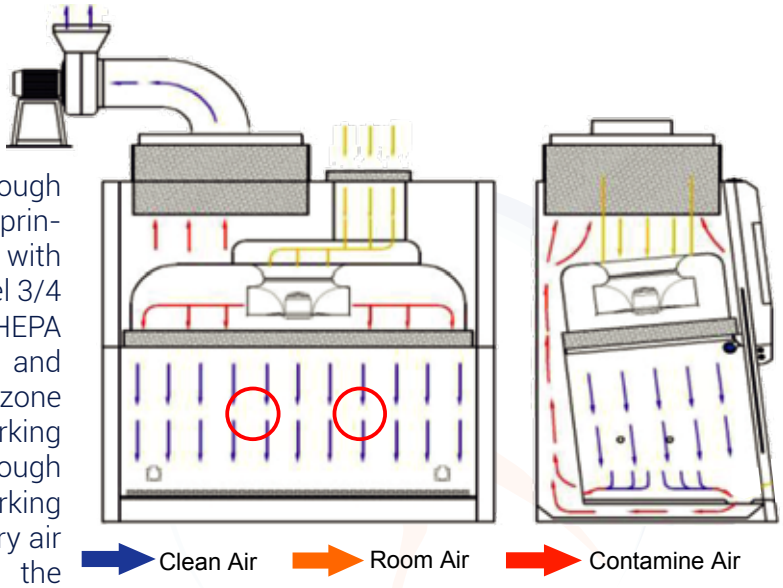
metisafe

Biological Safety Cabinet Class III

- Superior Biological Protection for Personnel, Product / Material and Environment
- Suitable for Working With Agents Assigned to Biological Risk Level 1,2,3,4
- Class 100< (FED209E) / ISO Class 5< (EN14644) cleanliness class work area
- Ergonomic Design
- Low Noise Level

EN12469 ISO 14644 CE

CLASS III BSC AIRFLOW DIAGRAM

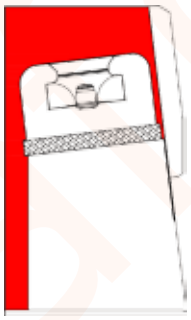


Metisafe Class III Biological Safety Cabinets works under principles with %100 HEPA filtered fresh air to working area without recirculation. Exhausting through HEPA filter also protects environment. Those Airflow principles of Class III Cabinets which can also be aplicable with carbon filter, provide safe work with biological risk level 3/4 agents and also with cytotoxic gas & materials. Pre/HEPA filtered air supplied through top of the cabinet and pass-tbox provides the work area protecting the work zone under ISO-5 class laminar airflow. Total air in the working cabinet fully exhausted without recirculation through exhaust blower fan to athmosphere by keeping working area under negative air pressure. In addition to primary air barrier accomplished by negative pressure within the working zone double wall negative plenum design of the Metisafe cabinet prevents particle escape to surroundings and zero leakage is ensured.

Monoblock and piston supported openable front panel for comfort sash window backside cleaning

Removable monoblock or sterilization available partited, high strength, non-vibrating stainless steel work plate

Isolated electrical components assembly from contaminated zones, easy to reach for servicing



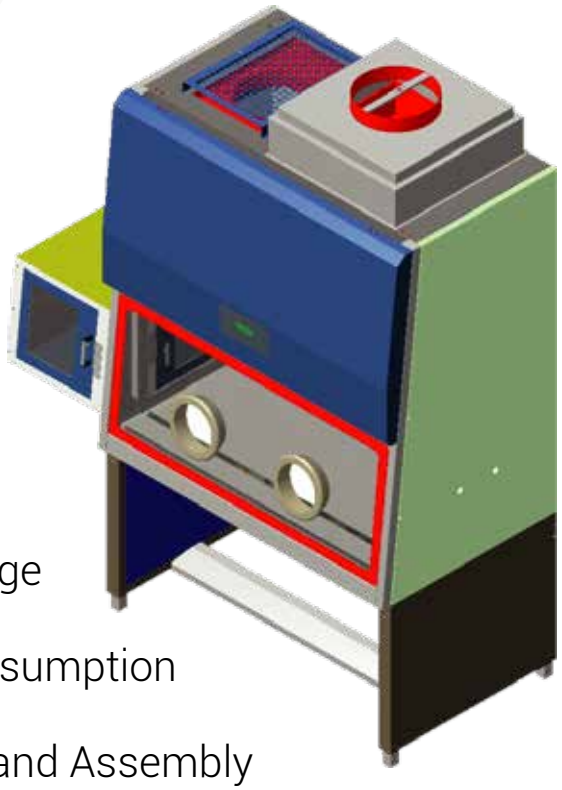
Plenum cast design creates negative pressure around contaminated work area and ensures zero leakage

Scratch-proof stainless steel, monoblock interior cabinet surface with easy to clean continous radiused corners

Back sloped front panel design according to anthropometric rules provides increased viewing angle, operator comfort and ergonometric for long period of works

Automatic filter compensation, cruise control airflow rate

Energy efficient high performance EC fan technology



DOP Test Ports

Low Noise Level

Easy Filter Change

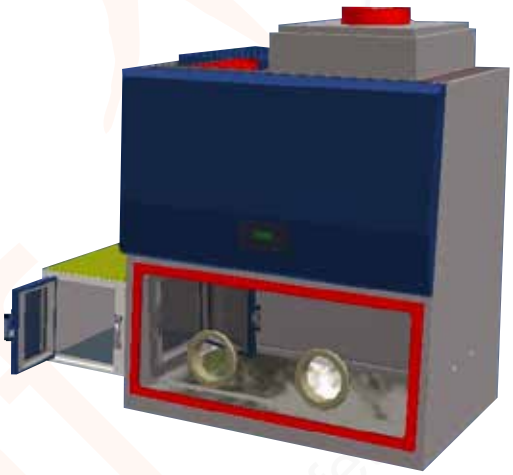
Low Energy Consumption

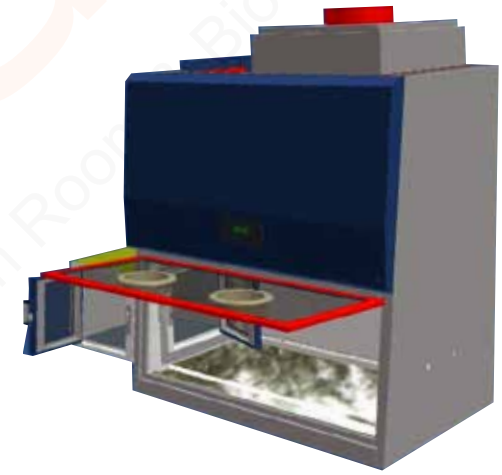
Easy Transport and Assembly

MICROPROCESSOR CONTROL UNIT

Easy adjusted working parameters by touch pad control panel Continous airflow velocity measuring sensors and cruise controlled automated airflow rate adjustment
Audio and visual alarm activation on airflow rate changes Manually cancellable alarm
Real time information available large LCD screen: Airflow velocity, Airflow rate, Total work time, UV and fluorescent lamp work time, Alarm activation memory data, Filter change periods, Filter integrity state, Alarm activation log data

- ✓ Homogenous and cruise control laminar airflow
- ✓ Advanced filter compensation system keeping steady air velocity under increased filter resistance
- ✓ Continous work suitable HEPA Fan/Filter Unit
- ✓ Contamination proof antimicrobial coated steel main body frame
- ✓ Easy opening monobloc sash window
- ✓ Leak proof glove entries
- ✓ Pass-box with glass lid and air-lock feature
- ✓ Timer controlled effective disinfection UV Lamp





OPTIONALS

Interior view of work cabinet

Electromagnetic interlock Lid system
Dynamic pass-boxes with HEPA filter

Pre-Filter

Formalin Vaporizer

- Carbon Filter ✓
- Solenoid / Backflow Valve ✓
- Leak proof recoil valve ✓
- Adjustable LED illumination ✓
- Heater & Microscope Assembly Base ✓
- Automatic decontamination/fumigation ✓

METİSAFE CLASS III BIOLOGICAL SAFETY CABINET TECHNICAL SPECIFICATIONS

MODEL		MSC-III-120	MSC-III-150
Internal Dimensions (WxLxH) mm		1250x610x675	1554x610x675
External Dimensions (WxLxH) mm		1370x843x1678	1674x843x1678
Pass-Box Dimensions (WxLxH) mm		327x500x327	327x500x327
Support Stand (WxLxH) mm		1370x804x744	1674x804x744
Working table-floor height		840 mm	
Work Cabinet Negative Pressure Level (Pa)		250<	
Exhaust Air velocity (m3/s)		1050 <	1300 <
Downflow Airflow (m/s)		0.38 m/s ± % 5	
Filtreler (EN 1822)	Main Filter	High Capacity H14 HEPA, 0,3 μm particle %99.995 filtration efficiency	
	Exhaust Filter	High Capacity H14 HEPA, 0,3 μm particle %99.995 filtration efficiency	
	Pre Filter	EU5 / G5	
Clean Area Class	EN14644	Class 5 and higher	
	FED209E	Class 100 and higher	
Working Table	Standard	304 Stainless Steel	
	Optional	316L Stainless Steel	
Noise Level	Normal Mode	< 55 dB(A)	< 58 dB(A)
	Eco (Stand by) Mode	< 50 dB(A)	
Sash Window		< 6 mm Tempered	
Glove entrance		2	4
Working Area Illumination (Lux)		850 – 1250 Lux	
Fan filter power consumption (kW)		0,35 kW	0,45 kW
Electrical socket voltage and frequency		220-240VAC 50 HZ	
Pack/Palette Dimensions (WxLxH) mm		1874x1043x1800	1874x1043x1800
Weight (kg), without support stand		320	360
Main Body & Design Parameters		Antibacterial epoxy powder paint coated stainless steel, < 7^0 angle sloped front panel for work comfort and increased working chamber vision, easy reachable electronic control & electrical part protection inside at front panel isolated from working chamber, UV resistant tempered glass, Leak proof gloves which 0,6 mm thickness	
Pass-Box options		Negative pressure air lock system, Stainless steel inner surface together with wide angle rounded corner, Tampered <6 mm sash window	
Microprocessor Control Unit & Display Parameters		Downflow Air Velocity/Airflow Rate, HEPA Filter Life (percent), Automated airflow rate and velocity compensation system, UV and FL Lamp working times, UV lamp timer setting, Audible and visual warning system, System Ready/Not-Ready message/warning, Working cabinet / Outdoor temperature control (Optional), Remote control (Optional)	
Audio-Visual Alarm Parameters		One key touch on-off, Key/Lock Mechanism (Optional), Normal/Stand-by option button, UV and FL Lamp working times, Automated airflow rate and velocity compensation system, Air Velocity/Airflow Rate, Audible and Visual Alarms for Air Flow/Rate System ready/not-ready information, Password protected technical service key, System Ready/Not-Ready message/warning, Service need warning, Alarm cancel button, Filter/Lamps replacement warning	
Quality and Certificates		CE, Management certificate of ISO9001, Biological Safety Cabinets EN 12469, ISO 14644 Clean Room class compatibility, EN61010 Electrical and Electronic safety compatibility, Accredited test company validation guarantee (When installation made by Metis or by its certified technical personnel)	

ACCESSORIES

Microincinerator

Gas / Vacum Valves

IP 54 Electrical Socket

- Cleanroom Chair ✓
- Voltage Regulator ✓
- Acrobat Document Holder ✓
- IR Sensored Bunsen Burner ✓
- Portable Germicidal UV lamp ✓
- Height adjustable support stand ✓
- Mechanical Airflow Velocity Sensor ✓
- UPS (Uninterruptible Power Supply) ✓
- BSC Microbiological Test Equipments ✓

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Also available from METISAFE

High Performance Fume Hoods, Laminar Air Flow Cabinets (LAF), Biological Safety Cabinets (BSC), Ceiling type HEPA Filtration Units, Mobile Air Extraction Units, Hygenic air cleaners with climatization, Modular Clean Room and Biological Safety Units, Mobile Biosafety Labs, Pharmacy Containment Room, Air-Shower, Air-Lock & Pass-Boxes...

metis Biyoteknoloji / Biotechnology

Batı Bulvarı ATB İş Merkezi No:1/285
Macun Mah., 06105 ANKARA TÜRKİYE
Phone : +90(312) 397 64 99
Fax : +90(312) 397 55 42
metisbio.com info@metisbio.com