



SafeFAST Elite

Class II
Microbiological Safety Cabinets



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BEYOND MINIMUM SAFETY REQUIREMENTS

SafeFAST Elite Microbiological Safety Cabinets belong to the latest generation of laminar airflow systems manufactured by Faster S.r.l., in which the choice of materials of construction of the highest quality guarantees conformity to the strictest safety standards.

SafeFAST Elite vertical laminar flow cabinets are Class II Microbiological Safety Cabinets - designed and built to performance requirements of the EN-12469:2000 European Standard, with 70% of the air re-circulated via the main Class H14 HEPA 14/ULPA filter within the cabinet, whilst the remaining 30% is discharged through an exhaust Class H14 HEPA 14/ULPA filter.

Safety Cabinets with automatic regulation and microprocessor based monitoring systems. These cabinets are suitable for handling micro-organisms and pathogens as defined by the appropriate European and other International Standards, current health and safety guidelines and legislation aimed at safeguarding health and safety of operators at work.

SafeFAST Elite Microbiological Safety Cabinets 'S' series are supplied with single centrifugal fan, whilst models of the 'D' series with double centrifugal fan to provide complete operator, product and environmental protection.

Moreover the 'D' series fitted with double motor-fan are designed and are also suitable to discharge the filtered air outside the laboratory through a ducting system, if required.

SAFETY CABINETS WITH AUTOMATIC REGULATION AND MICROPROCESSOR BASED MONITORING SYSTEMS





EASY CLEANING / MAINTENANCE

Electrically operated vertically sliding safety-glass sash window, the framework of which is also hinged and can be opened up for easy access during cleaning and routine maintenance.



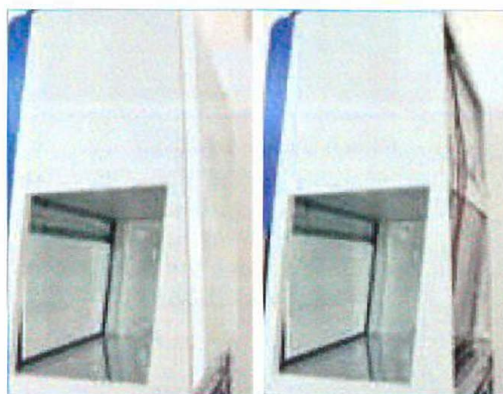
REMOVABLE WORK SURFACE

Work Surface in stainless steel AISI 316L consisting of sections which are easily removable for carrying out routine cleaning and/or autoclaving sterilization procedures. As standard supplied with perforated work surface, solid work surface available on request



SASH-HEIGHT OPENING

The standard height of the work position sash is set to 200 mm. Alternative sash-height settings (250 -160 mm) by the factory are available upon request.



BACK SIDE

EASY HANDLING AND MAINTENANCE

The safety cabinet can pass through 800 mm wide door openings. In fact, the overall depth of the cabinet can be reduced to approx. 790 mm by removal of the rear panel. All service operations are available from the front of the cabinet.

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MOBILE UV STERILIZING LAMP

Mobile UV sterilizing lamp (optional) that can be easily placed in each area of the back panel. Complete with two switch-off countdown timers, one variable on a 0-3 hours scale (1 minute steps), the other set to 3 fixed hours.



CABINET ELEMENTS

1 Automatic safety service connection for gas, 1 for vacuum and 1 (for size 209 and 212) or 2 (for size 215 and 218) electrical socket (s) fitted as standard in each size model.



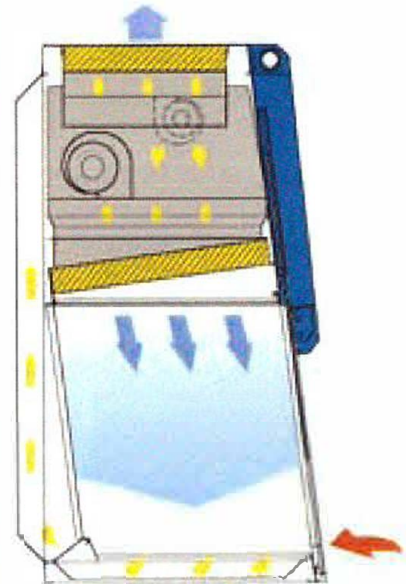
INFLATABLE GASKET

Inflatable gasket is also available as an option to provide effective sealing of the internal workspace of the chamber for purposes of fumigation/sterilization.

ERGONOMIC DESIGN

The angled sloping front safety-glass sash, provides optimum visibility of all objects placed in the interior work-space together with higher lightning level. The sash is electrically operated, pressing the appropriate touch-sensitive keys will completely open or completely close down the sash.

OPERATIONAL PRINCIPLES



The ambient air is drawn in from the slots at the stainless-steel base of the front opening and it then passes under the work surface, from where it is drawn up and blown into the plenum of the re-circulating and exhaust fan(s).

The "bio-dynamic sealing system" of the negative pressure plenum ensures that all contaminated particles are kept inside the system and are automatically drawn to the plenum or pressure chamber to be captured by the main re-circulating and exhaust HEPA 14/ULPA filters.

The fan system assures that no part of the cabinet comes ever under positive contaminated pressure to the laboratory, thus protecting and preserving the environment and operating personnel from exposure to agents of bio-contamination.

70% of the filtered air is re-circulated (after passing through a H14 HEPA 14/ULPA) in a air cleanless in Class ISO 3, according to ISO 14644-1 laminar flow pattern downwards into the work chamber and the remaining 30% is exhausted to atmosphere through another H14 HEPA 14/ULPA filter.

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THE USER-FRIENDLY PRACTICAL KEYBOARD



APPLICATIONS

SafeFAST Elite Class II Microbiological Safety Cabinets have been adopted worldwide in use for product, personnel and environmental protection while handling harmful agents pathogenic to human beings and/or animals as defined in the appropriate International Standards, in a wide range of disciplines in applications such as:

Microbiology, Virology, Haematology, Cell culture, Genetics, Handling of hazardous agents to human beings or animals.

Microprocessor based monitoring system: full status report provided via 2-line digital display by the new generation microprocessors - which automatically control all functions and all safety alarm systems ensuring that performance characteristics are maintained to EN12469:2000 requirements.

High power lithium battery keeps safety data saved to microprocessor system.

The user-friendly practical keyboard and the rear-lit LCD will continuously display all required data keeping the user constantly informed of the cabinet conditions in operation - and in particular:

- display of laminar airflow velocity and frontal air barrier velocity
- display of inside and outside temperature
- display of residual lifetime of HEPA 14/ULPA filters, UV Lamp and activated carbon filter (if fitted)
- display of total number of hours of operation
- display of saturation level of HEPA 14/ULPA filters

Audio-visual alarms provided for:

- out of range or incorrect laminar airflow velocity and frontal air barrier velocity
- uncorrect position of front sash-window
- saturation of HEPA 14/ULPA filters
- end of life-cycle of UV lamp and saturation of activated carbon filter (if fitted)
- blockage in the exhaust duct
- fan-motor malfunction
- power failure

Silent Operation. The textile plenum, the structures of the electric motor(s) of the fan(s) fitted on their antivibration mounts and the software itself designed to provide optimum air handling characteristics guarantee quiet operation of this silent safety cabinet, with sound-pressure levels recorded way below the parameters specified in the current EN 12469:2000 European Standard for Microbiological Safety Cabinets.

High Level Lighting. The safety glass side-windows with the ideal positioning and sizing of the light-system provide the highest level of luminosity to the work area.

QUALITY
ASSURANCE
DEPARTMENT

Each Faster cabinet is tested conforming to EN12469:2000, EN 61010:2001 and released with FAT certificate of the tests performed.



AIR FLOW SPEED TEST



FILTER LEAKAGE TEST



NOISE LEVEL TEST



KI DISCUSS TEST



LIGHTING TEST



VIBRATION TEST



ELECTRICAL TEST

TECHNICAL SPECIFICATIONS

Each size available with single motor blower (S series) or double motor blower (D series)

Description	Unit	SafeFAST Elite			
		209 S/D	212 S/D	215 S/D	218 S/D
Overall Dimensions	mm	1045	1350	1655	1960
WxHxD (1)		1545x855	1545x855	1545x855	1545x855
Usefull Dimensions	mm	887	1192	1497	1802
WxHxD		740x580	740x580	740x580	740x580
Working aperture	mm	200			
Maximum front aperture	mm	440			
Weight	kg	170	195	225	260
Exhaust flow rate	m³/h	290	390	485	585
Noise level (2)	dB(A)	<53	<54	<55	<56
Lighting level	lux	>1100	>1200	>1300	>1300
Electrical Data	1Ph+E - 230V 50Hz				
Current consumption S series (2)(3)	A	1,9	2,1	3,4	3,6
Current consumption D series (2)(3)	A	2.2	2.4	3,9	4,2
Electrical class / IP	1 / 20				
Internal electrical outlet	The electrical outlets have a total load capacity of 6A and are protected with one T6A fuse				
Heat emission	W	175	240	295	360

(1) The total depth of the cabinet can be easily reduced to 780 mm removing the back panel.
(2) At operation condition according to EN12469: 2000.
(3) Clean filters, lighting activated, internal outlet load excluded.

OPTIONS AND ACCESSORIES

- Solid Work Surface • Single Section Work Surface • UV Light with Magnetic Support • Additional Tap (Fuel Gas / Non-Fuel Gas / Vacuum) • Additional Electrical Outlet • Stainless Steel Hanging Bar • Movable Stainless Steel Armrest • Anti Blow Back Damper • Direct Duct Exhaust Transition • Thimble Duct Exhaust Transition • Additional Exhaust HEPA 14/ULPA Filter (only D version) • Additional Exhaust: Carbon Activated Filter (only D version) • Pre-Filter Grid • Floor Stand 900 mm Working Height With Footrest (other heights on request) • Electric Adjustable Floor Stand 800 to 1100 mm working height – Floor Stand With Castors



EN ISO 9001:2000 quality assured firm
Certificate n°112



Faster S.r.l.



Striving everyday to improve our environmental performance, Faster developed environmental procedures are founded on three guiding principles:
Protect the Environment for present and future generations: manufacturing low energy consumption equipments.
Reduce risks and improve efficiency:
Introduce improved technology and processes