

SafeFASTop

Class II
Microbiological Safety Cabinets



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SAFETY CABINETS
WITH AUTOMATIC
REGULATION AND
MICROPROCESSOR
BASED
MONITORING
SYSTEMS

SafeFAST Top 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 Top 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 H14 HEPA filter within the cabinet, whilst the remaining 30% is discharged through an exhaust H14 HEPA filter.

Safety Cabinets with automatic regulation and microprocessor based monitoring systems; these cabinets are suitable for handling microorganisms 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.

THESE CABINETS
ARE SUITABLE FOR
HANDLING MICRO-
ORGANISMS AND
PATHOGENS



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THE USER-FRIENDLY
PRACTICAL KEYBOARD



APPLICATIONS

SafeFAST Top Class II Microbiological Safety Cabinets have been adopted worldwide 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 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.

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 respect:

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



STRATIFIED SAFETY-GLASS
Stratified safety-glass front sash window.



REMOVABLE WORK SURFACE
Work Surface in stainless steel AISI-316L, consisting of sections which are easily removable for carrying out routine cleaning and/or require autoclaving sterilization procedures; perforated to ensure an optimum degree of laminarity of the airflow, together with a high resistance factor to the most effective chemical agents used for disinfection. **Single piece work chamber** Work chamber in stainless steel AISI 304L, designed to fulfill the requirements and pass the "cleanability tests" according to EN12469:2000.

COMPLETE OPERATOR, PRODUCT AND ENVIRONMENTAL PROTECTION

Re-circulating and extractor fans: Safe FAST Top Microbiological Safety Cabinets 'S' Series are supplied with single centrifugal fan, whilst version '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. **SafeFAST Top 'D' Series, offers full protection to the operator, laboratory and environment in case of failure of one of the two blowers.**

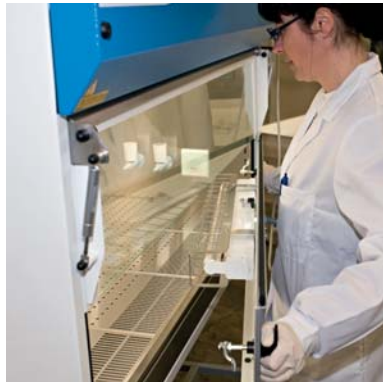


DIRECT DUCTING

As standard supplied with 200mm diameter collar on the top of the cabinet for optional direct ducting to facility exhaust system.

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UV STERILIZING LAMP

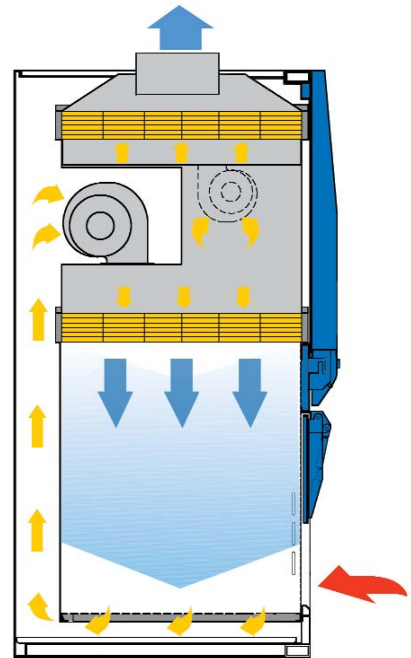
UV sterilizing lamp (optional) installed on the front closure-panel of the SafeFAST Top complete with two switch-off countdown timers, one variable on a 0÷3 hours scale (1 minute steps), the other set to 3 fixed hours.



CABINET ELEMENTS

1 automatic safety service connection for gas, 1 for vacuum and 1 electrical socket fitted as standard in each size module.

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 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) in a ISO 3 laminar flow pattern downwards into the work chamber and the remaining 30% is exhausted to atmosphere through another H14 HEPA filter)

QUALITY ASSURANCE DEPARTMENT



AIR FLOW SPEED TEST



FILTER LEAKAGE TEST



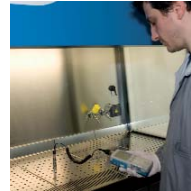
NOISE LEVEL TEST



KI DISCUS TEST



LIGHTING TEST



VIBRATION TEST



ELECTRICAL TEST

Each Faster cabinet is tested conforming to EN 12469:2000, EN 61010:2001 and released with FAT certificate of the tests performed.

TECHNICAL SPECIFICATIONS

Each size available with single motorblower (S series) or Double motorblower (D series)

Description	Unit	SafeFAST Top			
		209 S/D	212 S/D	215 S/D	218 S/D
Overall Dimensions WxHxD (1)	mm	1015 1470x785	1320 1470x785	1625 1470x785	1930 1470x785
Usefull Dimensions WxHxD	mm	885 660x580	1190 660x580	1495 660x580	1800 660x580
Working aperture	mm	200			
Maximum front aperture	mm	460			
Weight	kg	185	215	260	300
Exhaust flow rate	m ³ /h	290	390	485	585
Noise level (1)	dB(A)	<57	<58	<59	<60
Lighting level	lux	>1000	>1100	>1200	>1200
Electrical Data		1/Ph+E 230V 50Hz	1/Ph+E 230V 50Hz	1/Ph+E 230V 50Hz	1/Ph+E 230V 50Hz
Current consumption S series (1)(2)	A	1,9	2,1	3,4	3,6
Current consumption D serie (1)(2)	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) At operation condition according to EN12469: 2000.

(2) Clean filters, lighting activated, internal outlet load excluded.

OPTIONS AND ACCESSORIES

- Solid Work Surface • Single Piece Work Surface • UV light • Additional Tap (Fuel Gas / Gas / Vacuum) • Additional Electrical Outlet • Stainless Steel Hanging Bar • Movable Stainless Steel Armrest • Anti Blow Back Damper • Thimble Duct Exhaust Transition • Additional Exhaust HEPA 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



Striving everyday to improve our environmental performance, Faster developed environmental policies and procedures are founded on three guiding principles:

Protect the Environment for present and future generations manufacturing low energy consumption equipments

Reduce risks and improve efficiencies

Introduce improved technology and processes



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