



SafeFAST Classic

Class II
Microbiological Safety Cabinets



LABORATORY AND
INDUSTRIAL EQUIPMENT

OUR COMMITMENTS

New technologies for a low environmental impact

Fully aware that our choices of today will determine and shape our fates tomorrow, our company - FASTER - is convinced that technology must protect the environment to ensure a continuing sustainable progress.

Respect for the environment motivates FASTER to manufacture laminar-flow and microbiological safety cabinets possessing ultra-low environmental impact, by utilizing:

- Certified 'low pressure-drop' H14 HEPA/ULPA filters providing up to 30% saving on power consumption
- Electronically controlled motor-blower with automatic pressure-drop compensation
- 99% recyclable components
- Innovative technologies such as the new **ECS®** microprocessor
- Air clean in class ISO 3 according to ISO14644-1



ECS® ECO CONTROLLING SYSTEM

The new ECS® microprocessor

employs the latest innovative methods of integrated management of all the principal functions of ventilation and filtration - self-regulating all the main filtration and ventilation system - components - compensating for declining pressure drops and restoring power balance. Combining the use of AC motor-blowers and certified low pressure-drop filters, the new ECS® controlling system optimize power consumption, reducing CO₂ emissions into the environment.

ENVIRONMENT AWARENESS

	Standard Class II cabinet	ECS® controlled cabinet
CO₂ Emissions [Kg]	764*	226*

* Operational hours per year (5 days per 8 hours per 52 weeks)

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BEYOND MINIMUM SAFETY REQUIREMENTS

SafeFAST Classic Microbiological Safety Cabinets belong to the latest generation of laminar air flow systems manufactured by Faster.

SafeFAST Classic cabinets, currently surpass most known “value for money” Microbiological Safety Cabinets on the market.

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

APPLICATIONS

SafeFAST Classic 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 disciplines in applications such as:

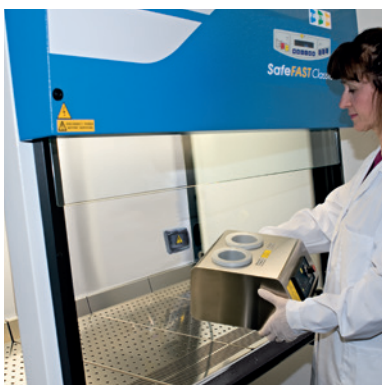
Microbiology, Virology, Haematology, Cell culture, Genetics, Handling of hazardous agents to human beings or animals.





REMOVABLE UV STERILIZING LAMP

Removable UV sterilizing lamp (optional) that can be easily placed in each area of the back wall. Complete with two switch-off countdown timers, variable on a 0÷3 hours scale (1 minute steps), one with immediate start, one programmable for day, start-up hour and duration.



ELECTRICALLY OPERATED SASH WINDOW

The standard height of the work position sash is set to 200 mm. Alternative sash-height setting is available upon request. 490 mm maximum opening.



REMOVABLE WORK SURFACE

Work surface in stainless steel 304/316L 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 is available on request.

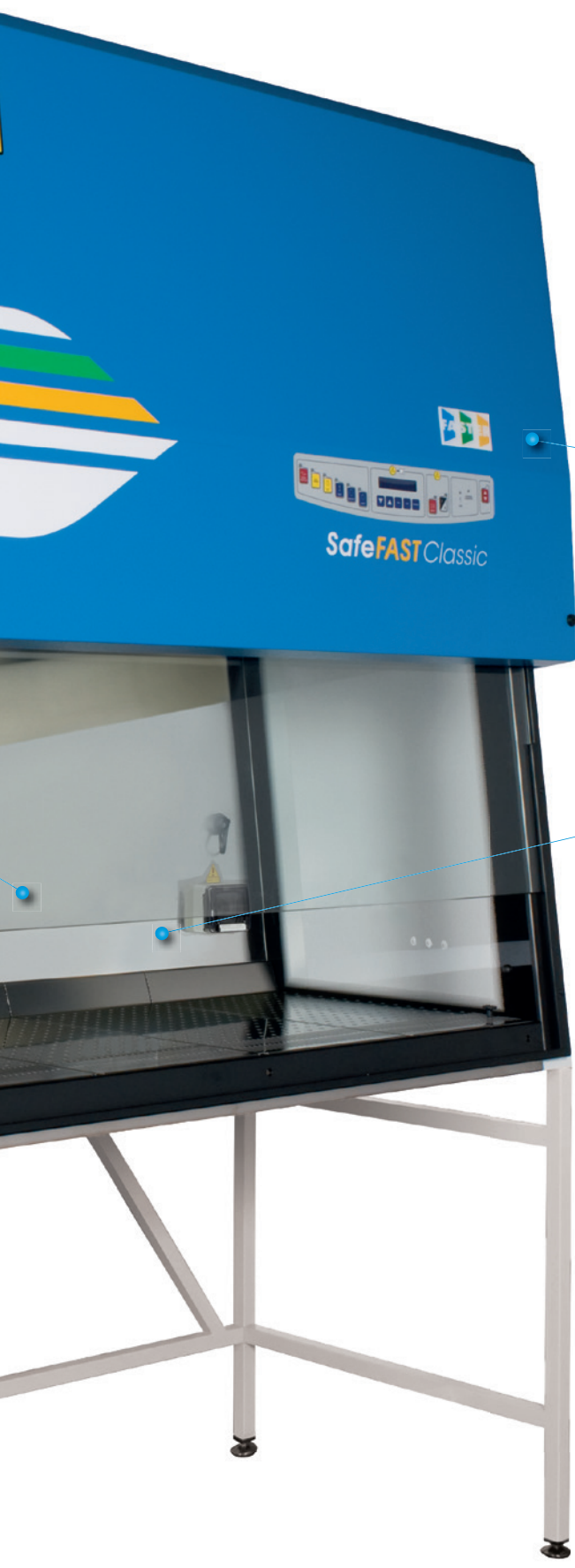
SINGLE PIECE WORK CHAMBER WITH ROUNDED CORNERS

Upon request, the cabinet can be provided with single piece work chamber with rounded corners in stainless steel AISI 304/316L, designed to fulfill the requirements and pass the "cleanability tests" according to EN-12469:2000

EASY INSTALLATION

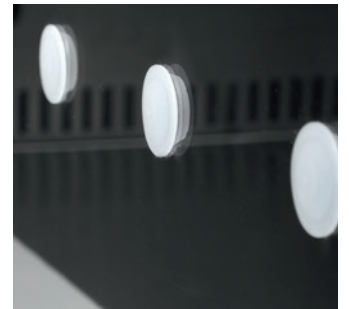
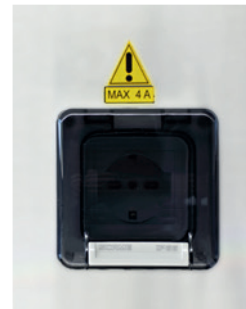
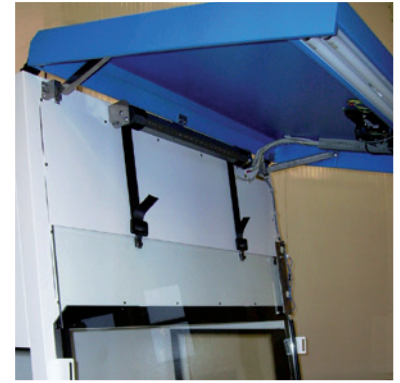
The safety cabinet can pass through 800 mm wide door openings. In fact, the overall depth of the cabinet can be reduced to approx. 790 mm by removal of the rear panel.





EASY CLEANING / MAINTENANCE

Electrically operated safety-glass sash window, which is also hinged and can be opened up during cleaning and routine maintenance.



CABINET ELEMENTS

2 IP 66 electrical sockets are fitted as standard in each size model.
Servicing holes are positioned on the side glasses for taps installation (as option).

SILENT OPERATION

The bag plenum, the structures of the electric motor of the fan, fitted on its antivibration mounts, and the software itself 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.

ERGONOMIC DESIGN

The 7° degrees angled safety-glass, 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.

Each size available with single motorblower or double motorblower and with the choice between Alternating Current "AC" (standard) or Direct Current "DC" (upon request) Version.

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THE USER-FRIENDLY
PRACTICAL
KEYBOARD



SafeFAST Classic

ECS® 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 EN-12469:2000 requirements.

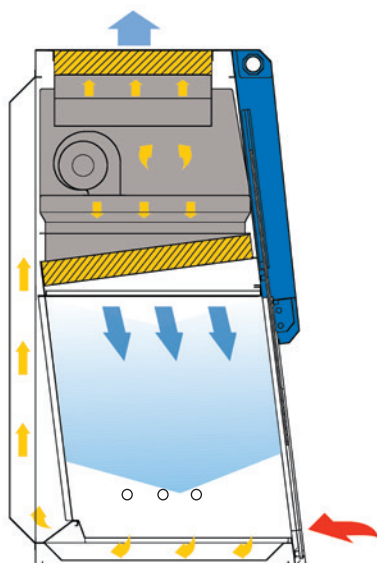
High power lithium battery keeps safety data saved to microprocessor system.

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 residual lifetime of H14 HEPA/ULPA filters, UV Lamp (if fitted)
- display of total number of hours of operation
- display of saturation level of H14 HEPA/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 H14 HEPA/ULPA filters
- end of life-cycle of UV lamp (if fitted)
- blockage in the exhaust duct
- fan-motor malfunction
- power failure



■ ENVIRONMENTAL AIR ■ CONTAMINATED AIR ■ STERILE AIR

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.

Absolute safety for the operator. Always

Manufacturing truly "safe" cabinets depends entirely on the quality of their design and components. Aware of the fact that our guarantees for safety do not tolerate any compromises, our company has created its internal FASTER QUALITY AND SAFETY PROGRAM - consisting of a new set of standard operational procedures and manufacturing methods - applied to each and every step of the production processes aimed at fulfilling all requirements of these high standards.



HARDWARE

- **ANTI BACTERIAL COATING**
Each FASTER cabinet is coated with exclusive **Dupont™ ALESTA®** anti-bacterial "Ag+cations-based solution", capable to prevent microbial contamination of surfaces thereby inhibiting long term surface growth.
- **LOW NOISE LEVEL**
The unique design and materials of the special plenum and filter-housing ensure a reduction in sound-pressure levels providing quiet operation.
- **STAINLESS STEEL AISI 304/316L**
Each FASTER Microbiological Safety Cabinet is fitted with standard AISI 304L (316 available upon request) Stainless Steel work-surface.
- **REAL LAMINAR FLOW**
The internal aerodynamic design of the structure of the chamber provides ideal laminar air-flow patterns – providing conditions to satisfy performance requirements expressed by EN-12469:2000 European Standard.

SOFTWARE

- Instant management and monitoring of operational parameters and automatic compensation system control by the new **ECS®** microprocessor.
- Software features easily programmable replacement-regime of spare parts and filters
- Countdown-Timer integrated within the control board.
- Permanent record of all alarms and anomalies memorized by the control-board for the entire life-cycle of the cabinet.
- One Push Restore menu, to reset the original factory calibration data.
- Alarm clock integrated in the control board.

CUSTOMER CARE

- Prompt technical assistance by phone and mail - within 24 hours from the call.
- Hot-line for immediate technical assistance and feasibility study.

TAILOR-MADE SPECIAL CABINETS

- Custom made special cabinets made on request.

CERTIFICATIONS

- Double ISO 9001 Certification
- Double TUV and LNE* Certifications.

** for microbiological safety cabinets SafeFAST Elite and TOP models*

QUALITY ASSURANCE DEPARTMENT

Each Faster cabinet is tested conforming to EN - 12469:2000, 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 motorblower (S series) or double motorblower (D series)

Description	Unit	SafeFAST Classic			
		209 S/D	212 S/D	215 S/D	218 S/D
Overall Dimensions WxHxD (1)	mm	1045 1545x810	1350 1545x810	1655 1545x810	1960 1545x810
Useful Dimensions WxHxD	mm	887 740x580	1192 740x580	1497 740x580	1802 740x580
Working aperture	mm	200*			
Maximum front aperture	mm	490			
Weight	kg	170	195	255	260
Exhaust flow rate	m ³ /h	290	390	485	585
Filtration		Main and exhaust certified low pressure drop H14 HEPA/ULPA filters with typical efficiency of 99,995% MPPS CEN EN 1822-ULPA filter with typical efficiency of 99,999% at 0.1 to 0.3 µm as per IEST-RP-CC00 1.3 USA			
Noise level (2)	dB(A)	<53	<54	<55	<56
Lighting level	lux	>1100	>1200	>1300	>1300
Electrical Data		1Ph+E - 230V 50Hz			
Current consumption (2)(3)	A	1,9	2,1	3,4	3,6
Electrical class / IP		1 / 20			
Internal electrical outlet		The electrical outlets have a total load capacity of 4A			
Heat emission	W	175	240	295	360
Downflow	m/S	0,40	0,40	0,40	0,40
Inflow	m/S	0,45	0,45	0,45	0,45

(1) The total depth of the cabinet can be easily reduced to 780 mm removing the back panel.

(2) At operation condition according to EN-12469: 2000.

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

* Alternative sash-height settings (250-160 mm) by the factory are available upon request

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 • Direct Duct Exhaust Transition • Thimble Duct Exhaust Transition • Pre-Filter Grid • Floor Stand 900 mm Working Height With Footrest (other heights on request) • Electric Adjustable Floor Stand 780 to 1080 mm working height • Floor Stand With Castors • Magnetic footrest bar



FASTER S.r.l.

Via R. Merendi, 22 I-20007 Cornaredo (MI) Italy
Ph. +39 02 93 991 92 Fax +39 02 93 991 608
www.faster-air.com info@faster.dgroup.it

Production Site

Via Melvin Jones, 3 I-44124 Ferrara (FE) Italy
Ph. +39 0532 730 785 Fax +39 0532 730 799



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 efficiencies
- Introduce improved technology and processes