FASTER UltraSafe
APPLICATIONS

Faster UltraSafe 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.

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

ORGANISMO DI
CERTIFICAZIONE

Distributed by:

Faster UltraSafe
Class II Microbiological Safety Cabinets

Protection, safety, reliability. And more.

FASTER-ULTRASAFE/2007/01

FASTER
a D GROUP company

FASTER UltraSafe
BEYOND MINIMUM SAFETY REQUIREMENTS

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

Faster UltraSafe 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 filter within the cabinet, whilst the remaining 30% is discharged through an exhaust Class H14 HEPA 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.

Faster UltraSafe cabinet features an ergonomically angled sloping-front, fitted with 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 maintenance.

FASTER UltraSafe
ULTRA FEATURES

Ergonomic Design. The angled sloping front safety-glass sash provides optimum visibility of all objects placed in the interior workspace. The sash is electrically operated. Pressing the appropriate touch-sensitive keys will completely open or completely close down the sash.
The standard sash-height opening during work is set to 250 mm.
Alternative sash-height settings by the factory are possible upon request.
The whole front of the safety cabinet – which includes the sash mechanism – can also be opened upwards as it is hinged on the top – in order to allow easy access for complete and effective cleaning and decontamination.
*Inflatable gasketing* is also available as an option to provide effective sealing of the internal workspace of the chamber for purposes of fumigation/sterilization.

Silent Operation. The textile plenum, the structures of the electric motors of the fans fitted on their antivibration mounts and the software itself designed to provide optimum airhandling characteristics guarantee quiet operation of this silent safety cabinet, with sound-pressure levels recorded way below the parameters specified in the current EN:12469 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.

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
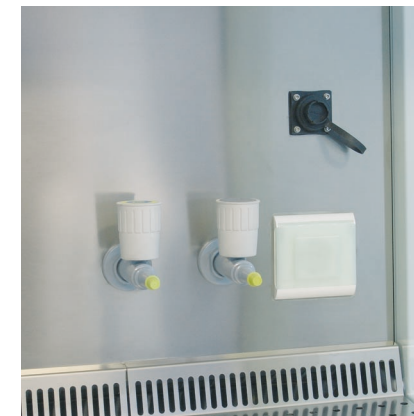
FASTER UltraSafe
SUPERIOR FEATURES

Rear wall in stainless steel
AISI 304L, designed to conform to requirements and pass the "cleanability test" according to EN12469:2000.
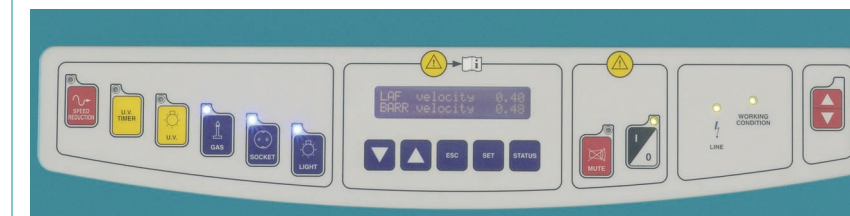
AISI 316 work surface consisting of sections which are easily removable for carrying out routine cleaning and/or autoclaving sterilization procedures; closed or perforated on request.

Re-circulating and extractor fans:
FASTER UltraSafe 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' models 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.

Microprocessor based monitoring system: full status report provided via 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.

UV sterilizing lamp (optional) 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.

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 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

FASTER UltraSafe
TECHNICAL SPECIFICATIONS

The cabinet is fitted, as standard, with one manual tap, one gas tap with solenoid valve, one electrical socket (for models 209 and 212) or two electrical sockets (for models 215 and 218)

	Dimensions [w x h x d]		Power	Supply	Weight	Exhaust dimensions
	Usefull [mm]	Overall [mm]	[kW]	[V/Hz]	[Kg]	[mm]
Faster UltraSafe 209 S	899	1045		0,7	170	427x427
Faster UltraSafe 212 S	1194	1350		1	195	427x580
Faster UltraSafe 215 S	1499	1655		1,2	225	427x732
Faster UltraSafe 218 S	1804	1960		1,4	260	427x885
Faster UltraSafe 209 D	899	1045		0,85	175	427x427
Faster UltraSafe 212 D	1194	1350		1,1	200	427x580
Faster UltraSafe 215 D	1499	1655		1,3	230	427x732
Faster UltraSafe 218 D	1804	1960		1,5	265	427x885

(S series: 700/600 useful height; overall 1500*/660**; 230/50. D series: 700/600; 1500*/660**; 230/50)

* 2300 with stand support   ** 795 without back panel   *** 200 on request

Working height [mm]	Front aperture [mm]	Maximum Aperture [mm]	Noise [dB(A)]	Lighting [Lux]	Temperature Rise [°C]
900	250***	420	< 57	> 1000	< 3

ACCESSORIES

UV Lamp with full programable timer
Customized work surfaces
Epoxy powder painted modular stand
Stainless Steel modular stand
Electrical adjustable stand (700-1000 mm height)
Additional electrical power socket
Additional service connection for gas/vacuum (manual tap)
Additional socket for data (RS232, RS485 or RJ45)
Additional exhaust Carbon filter for UltraSafe (only D model)
Additional exhaust HEPA filter for UltraSafe (only D model)
Anti-blowback valve
Exhaust hard duct connection
Exhaust thimble connection
3-Drawers unit on pivotting wheels
Volt free contact
Arm rest
Inflatable Gasket for front sealing
Vacuum pump for inflatable gasket
Sealing kit for exhaust opening
Formalin Vaporizer with ammonia neutralization
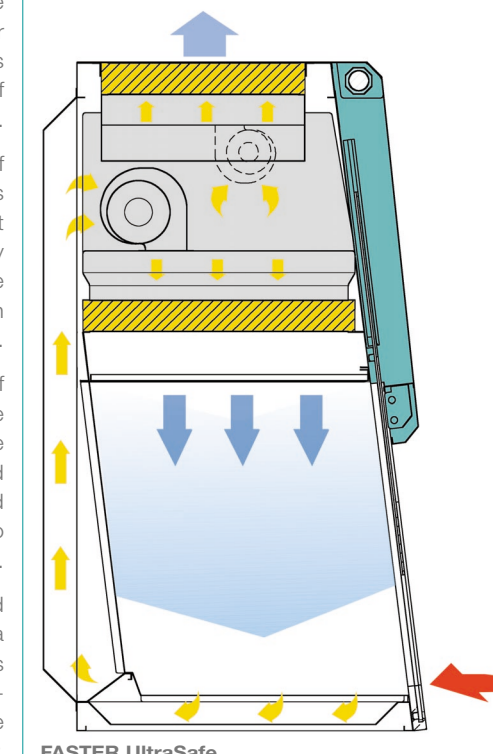
OPERATIONAL PRINCIPLES

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 5 laminar flow pattern downwards into the work chamber and the remaining 30% is exhausted to atmosphere through another H14 HEPA filter.

External air ➡   **Sterile air** ➡   **Recirculated air** ➡

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