TECHNICAL SHEET

PRODUCT LINE

- **CLASS I MICROBIOLOGICAL SAFETY CABINET**

MODEL

- **SCS I**

Introduction

SCS Class I safety cabinet belongs to the latest generation of laminar airflow systems, combining rigid safety requirements with high quality construction.
SCS Class I has been designed as a Class I Biohazard cabinet according to EN-12469.
It is an open-fronted safety cabinet with room air flowing in to provide containment. Before being exhausted the air is filtered through a G3 pre-filter and an H14 HEPA filter.

Applications

SCS Class I cabinets can be used in a wide range of disciplines, as defined in appropriate standards.
Especially suitable for applications such as:

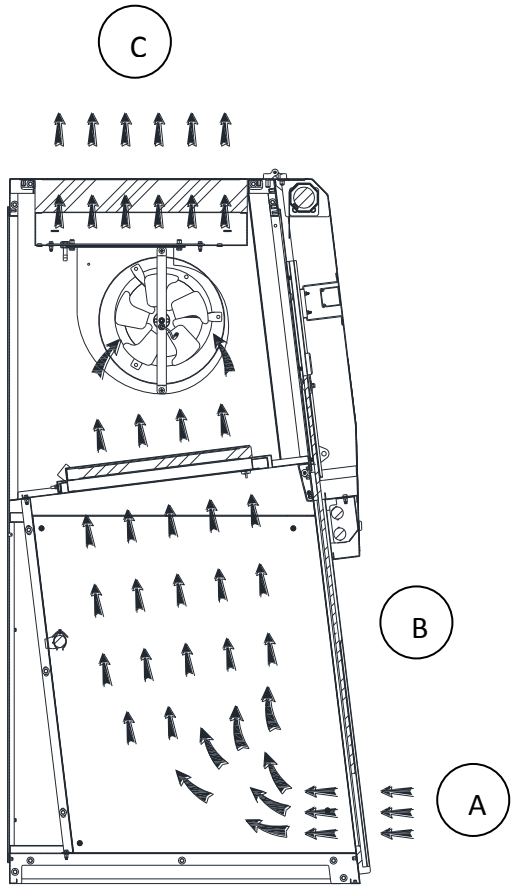
- Microbiology
- Virology
- Haematology
- Cell culture
- Recombinant DNA

Handling of hazardous agents to human beings or animals

How it works:

Potentially contaminated air coming directly from the external environment, is re-circulated in the back wall chamber prior to pre-filtration stage positioned on the rear panel of the internal chamber. Air is finally exhausted from the HEPA H14 filter positioned on the top of the equipment.

A Front opening
B Front screen
C Exhaust HEPA filter
D Prefilter



Benefits

Ergonomic Design: The angled sloping (7°) front stratified 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 200 mm.

Real Laminar AirFlow: Frontal screen 7° sloped as well as back side wall to convey in unidirectional pattern the air flow. As a consequence, the front and back panels are parallel one with the other and there is the real presence of Laminar AirFlow in the whole working area.

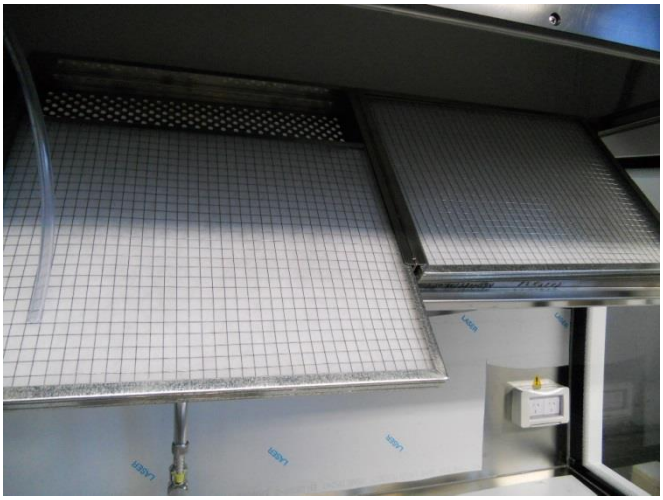
ECS® Eco Controlling System: The new ECS® microprocessor employs the latest innovative methods of integrated management of all principal functions of ventilation and filtration - self-regulating all the main filtration and ventilation system components - compensating for declining pressure drops and 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.

Anti Bacterial Coating: Exclusive Dupont™ ALESTA® anti-bacterial "Ag+ cations-based solution", capable to prevent microbial contamination of surfaces thereby inhibiting long term surface growth.

Inflatable gasketing is also available as an option to provide effective sealing of the internal workspace of the chamber for purposes of fumigation/sterilization and when gas-tight is needed.

Silent Operation: The TNT plenum, the structures of the electric motors of the fans 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 European Standard for Microbiological Safety Cabinets.

Prefilters removal: prefilters can be removed directly from the working chamber



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 cabinet can pass through standard 800 mm wide door openings. In fact, the overall depth of the cabinet can be reduced to approx. 777 mm by removal of the rear panel. All service operations are available from the front of the cabinet.

Automatic safety service connections for gas and vacuum and one (for size 209 and 212) or two (for size 215 and 218) electrical socket(s) fitted as standard in each size model.

Technical Specifications

External structure in epoxy powder coated cold-rolled steel for excellent corrosion resistance to the attack by aggressive common chemicals. **Alternatively special models with external structure made in AISI 304L stainless steel** for superior cleanability are also available on demand.

Support stand equipped as standard (**Special electrical stand** with automatic lifting system, stroke: 700-1000 mm, available under request).

Internal back wall in stainless steel AISI 304 L, designed to conform to requirements and pass the "cleanability test" according to EN12469:2000.

Work surface in stainless steel AISI 316L as standard supplied with 1 piece solid work surface.

Front window: electrically operated vertically sliding safety glass sash window**.**

Filtration:H14 HEPA/ULPA filters with an efficiency better than 99,995 % MPPS (EN-1822).

Prefiltration: Inlet G3 pre-filter efficiency 80≤AM≤90 according to EN 779 and UNI 10339.

Operation Condition: Air cleanliness in Class ISO 3 as per ISO:EN 14644-1.

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/ULPA filters, UV Lamp and activated carbon filter (if fitted)
• display of total number of hours of operation
• display of saturation level of HEPA/ULPA filters.

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

Lighting: fluorescent tubes in built-in housing, placed outside the contaminated area

D.O.P.-DEHS inlet port for testing the HEPA/ULPA filters

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

Technical Table

SCS CLASS I					
Model		**3**	**4**	**5**	**6**
Overall dimension (w x d x h)	mm	1045 x 781 x 2345	1350 x 781 x 2345	1655 x 781 x 2345	1960 x 781 x 2345
Useful dimensions (w x d x h)	mm	887 x 580 x 740	1192 x 580 x 740	1497 x 580 x 740	1802 x 580 x 740
Air flow speed	m/s	0,7	0,7	0,7	0,7
Noise level	dB(A)	<55	<55	<58	<58
Lighting	Lux	>1100	>1200	>1300	>1300
Voltage/Frequency (different settable available upon request)	V/Hz	230 AC F+N+P.E. / 50	230 AC F+N+P.E. / 50	230 AC F+N+P.E. / 50	230 AC F+N+P.E. / 50
Power socket (protected by single fuse 4A)		2P+T	2P+T	2P+T	2P+T
Protection category		IP20	IP20	IP20	IP20
Electrical classification (with feeding cable)		1	1	1	1
Power	W	900	1000	1250	1600

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The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.