Euro Clone

s@feflow TWO

Microbiological Safety Cabinet

Euro Clone

serving science through innovation

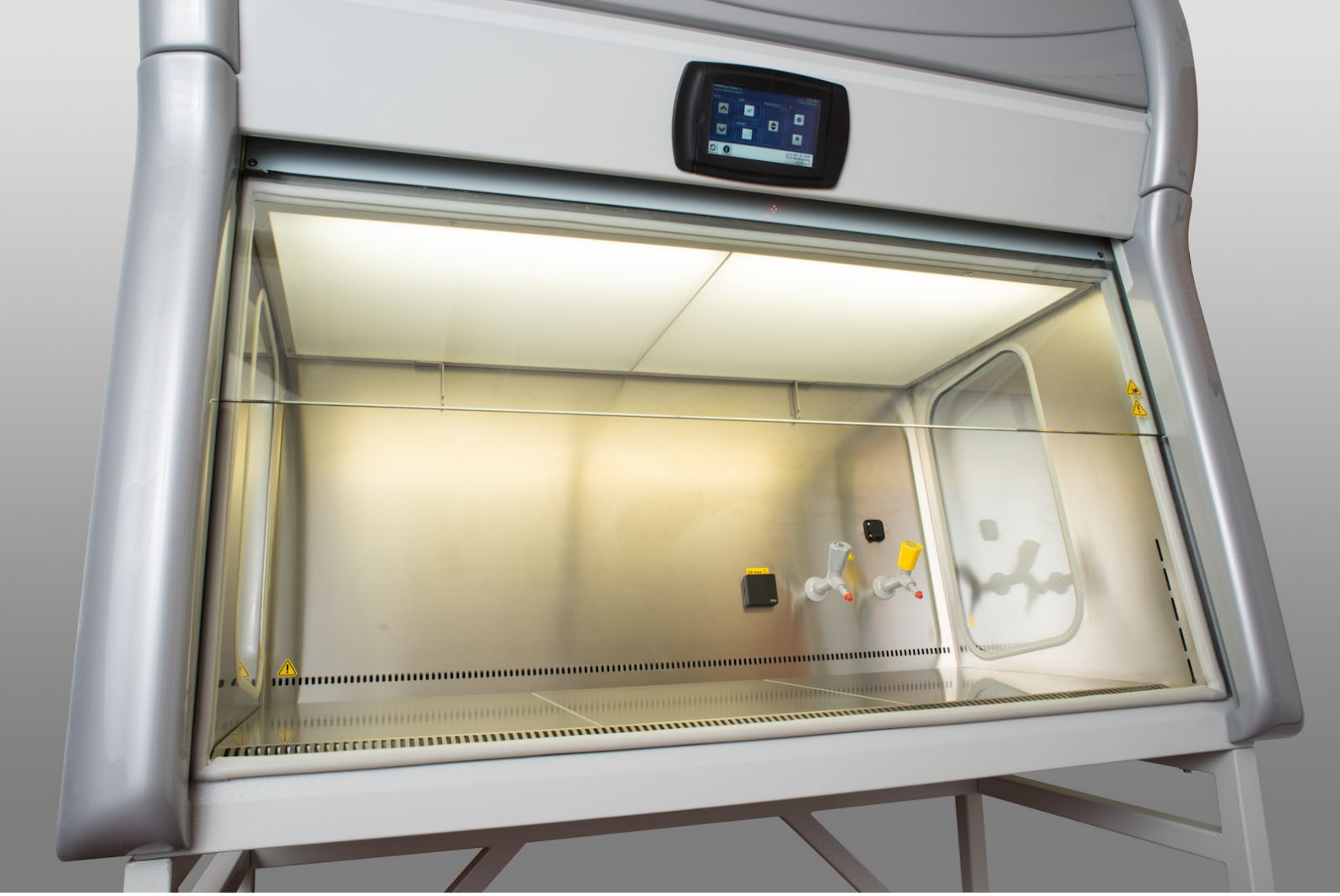
The new look of safety

Being safe has never looked so appealing! The new look of the S@feflow Two is not just for show! This mix of plastic & steel elements allowed us to create a very soft looking cabinet: the curved design helps reducing the bulkiness of standard cabinet design, easing the strain on the eyes! And it's not just an optical effect: the cabinet is about 10cm lower than our other models, and by easily removing the plastic elements can reach an overall depth of 79cm: a boon for logistics!

Your Safety is our Commitment

No compromise for Operator, Product and Environment.

Protection guaranteed as required by EN12469:2000 standard.



Technology at your service!

Better ergonomy: the front glass has a 10° inclination for improved ease of use and visibility when working.

New partial double skin with lateral windows: while keeping the added security of lateral double skin like its predecessor, the new S@feflow Two also sports two side windows to give more light to the working area.

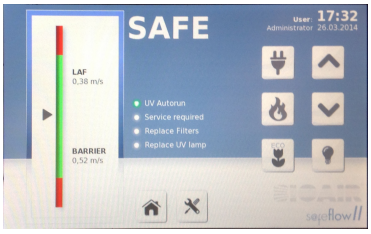
New full touch control panel: the cabinet is fully controlled by a full-touch color screen, which allows us to use high definition graphics for icons and status monitoring. The inclined position of the screen allows an optimal view of the situation while working, allowing the users to always have the cabinet status under control! The new system is also highly expandable, allowing for easy update and implementation of new features/apps in the future.

Italian Design & Technology

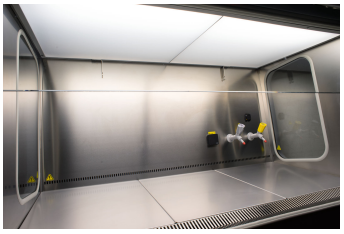
Our cabinet are completely made in Italy using components of italian or european origins. We use only the best for our cabinets.

Optional UPS: keep you safe even in case of power outage. The UPS is installed inside the cabinet and it is fully controlled by the touch panel, allowing you to safely close the cabinet in case of power outages.

Full color touch screen: control the cabinet status and all its functions from this 7" touch screen with a very intuitive graphical user interface.



New partial double skin with lateral windows
Added security thanks to lateral double skin, **more comfort** thanks to lateral side windows: why choosing one if you can have both?



Choose your light!
- Two available light sources: **fluorescent lamps (default) or LEDs (optional).** Both sources are be **dimmerable**.
- Light diffusing membrane: provides a **very soft and uniform** illumination to **reduce eye fatigue** when working.

Variable height support stand: improve ergonomy and comfort.

Our quality has been certified by the most prestigious body in Europe. All of our cabinets have been tested according to the most rigorous requirements to provide the best performance possible.

Main Specifications

Microprocessor controlled EC motorblower enhances energy efficiency, reducing operating costs.

- Fully compliant with the EN 12469 safety standard as independently tested and certified by TUV Nord – the leading testing agency in Europe.
- Air and aerosol tight electrical sliding sash with unique "YZY" movement.
- Dual use UV Kit: back wall installable or functioning as a mobile kit.
- 10° Sloping front aperture to maximise comfort.
- Innovative Lower Edge Tilting System for safe cleaning of the front glass
- Double skin with windows for increased protection and comfort.
- ECO Mode to reduce power consumption
- Dual lighting system: choose between fluorescent or LED!

Features for Unbeaten Safety, Quality & Usability

- Air and aerosol tight electrical sliding sash system with unique "YZY" movement ensures the containment of aerosol within the chamber when the front window is fully closed. The sash can be rapidly closed in an emergency situation.
- Continuous monitoring of the front barrier airflow for the highest operator safety.
- Permanent monitoring of HEPA filters life span.
- Multilevel alarm system.
- Full color Touch screen control panel
- Stainless steel internal surfaces with full access to exposed surfaces for ease of cleaning.
- Sloping front aperture and rear chamber lining for optimal downflow air distribution across the work surface.
- Self calibration cycle performed each time the cabinet is switched on.
- Removable stainless steel three part work surface for easy steam sterilisation in an autoclave.
- Safety grid in the backwall to prevent filter clogging.
- Interconnected UV and fluorescent lights.
- Side windows for maximum illumination of the working area.

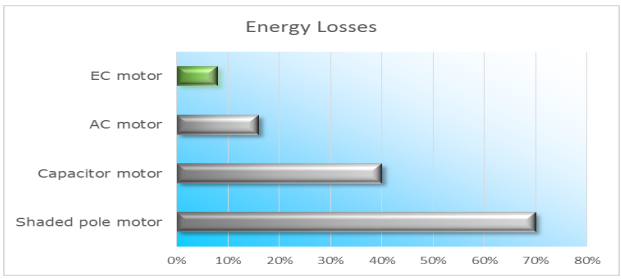
Sustainable Technology

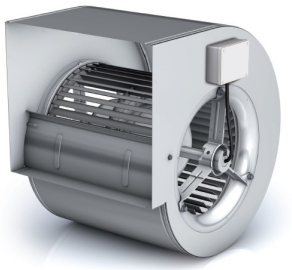
The new S@feflow Two follows the philosophy we started with the S@feMate ECO series, by sporting low power consumption motorblowers. This, along with the LED illumination system and the new "ECO Mode", contributes to the reduction of CO2 emissions and running costs!

Advantages of ECM motors

- **Reduced running costs**: energy consumption is reduced by about 30% with comparison to standard single-phase triac-controlled motors

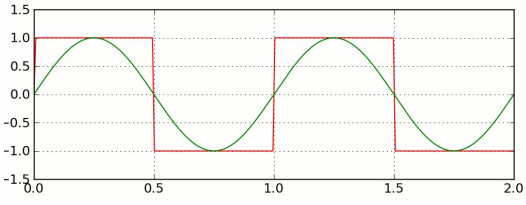
- **Reduced heat output**: helps reducing the overall air conditioning costs

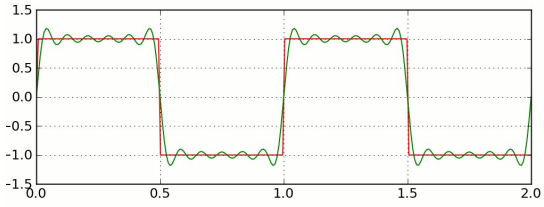




- **Stepless speed regulation**: extremely efficient and precise regulation of airflows

- **Reduced sound level**: thanks to the sinusoidal waveform, ECM motors are more silent than conventional single-phase AC motors





- **External electronics**: the inverter is not in the contaminated area allowing for easier maintenance than with DC motors

- **Long life**: reduce maintenance costs!

ECO Mode

By selecting this mode the S@feflow Two will partially lower the front glass in order to reduce the inward air speed at the front, while keeping both the work area and the operator perfectly safe, and saving energy! This is perfect when leaving the cabinet on during incubations or when switching between different users.

Safe Always!

The S@feflow Two has been designed to keep you always safe, even during routine maintenance operations like cleaning the front glass. Enters the new Lower Edge Tilting System: the front glass **tilts forward** allowing the access for cleaning purposes from above, **eliminating the risk of exposure to detergent or contaminants!**

OLD

Drops of detergent and contaminants can fall outside the cabinet toward floor or operator!

NEW

Nothing can fall from the contaminated surface outside of the cabinet!

Moreover during the procedure the motorblower stays on providing high level of containment and avoiding unnecessary exposure!

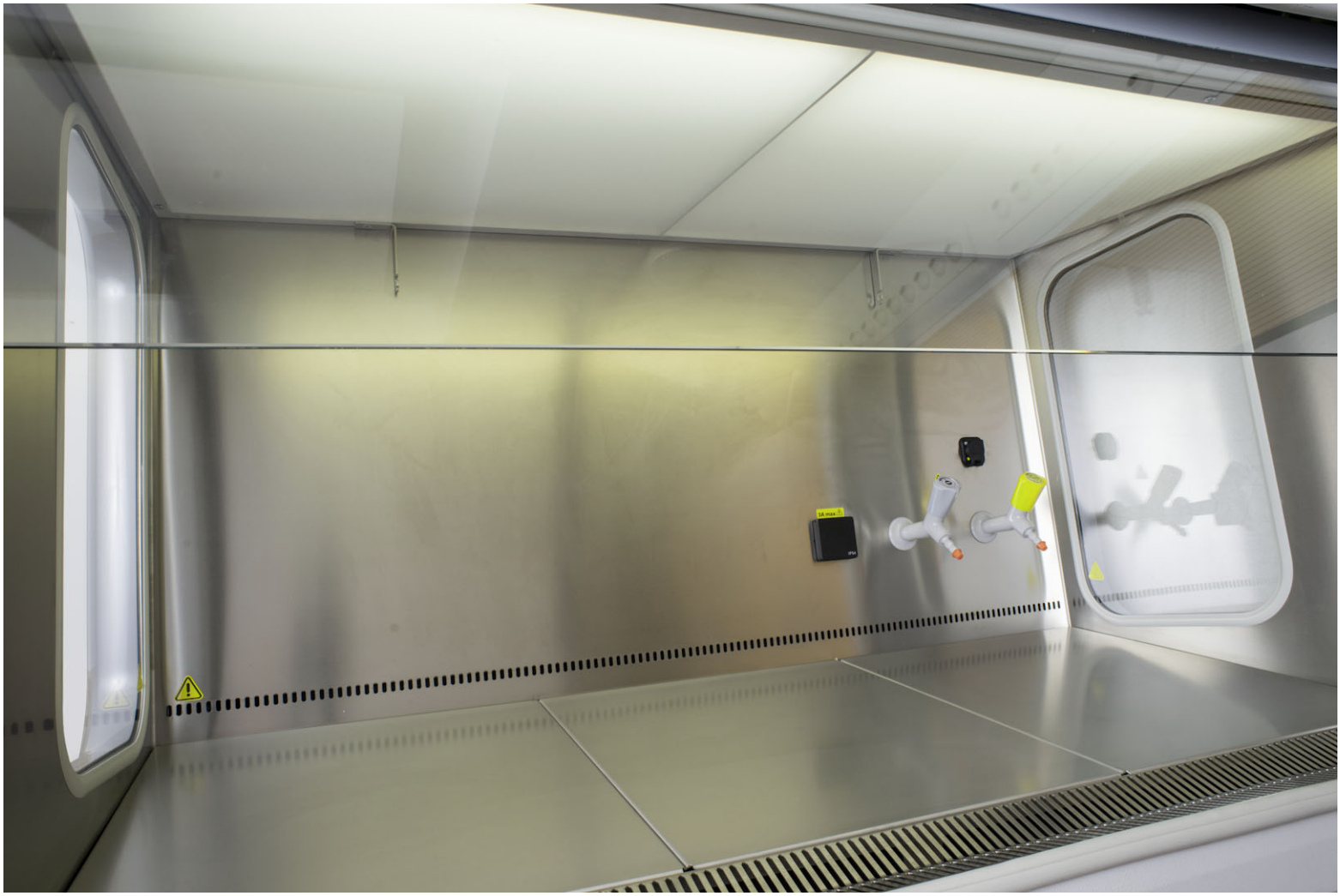
Standard utilities

STANDARD ELECTRICAL EQUIPMENT	
Automatic electronic airflow velocity control PCB	✓
Motorblower (fan)	✓
Inverter	✓
Fluorescent lamps	✓
Sliding window electric motor	✓
Combustible gas solenoid valve.	✓

STANDARD UTILITIES	
Tap for combustible gas line	✓
Tap for inert fluids/vacuum line	✓
Auxiliary electrical service socket	✓
2nd auxiliary electrical service socket	optional
UVC lamp socket	✓
Voltage-free contact (VFC) outlet	✓

Options & Accessories

PART No.	DESCRIPTION	NOTES	
AC10000	CHEST DRAWER	2 drawers – with castors	✓
AS1H400	SUPPORT STAND 1.2	Variable height	✓
AK1H000	UV SMART	Installable on back wall or as mobile kit - 230V~50/60Hz	✓
AZ1H050	INTERNAL UPS KIT	For emergency shutdown of the cabinet in case of power outage	✓
AZ1H000	LED ILLUMINATION KIT		✓



Technical Data

DESCRIPTION	SIZE 1.2
Part No. (solid work surface)	LDH4200
SPECIFICATIONS	
Reference Standards:	IEC 61010-1:2010 / EN 61010-1:2010 IEC 61326-1:2012 / EN 61236-1:2013 EN 12469:2000
Electrical insulating/protection class [IEC 61140]:	I
Mains supply voltage:	220-240 V~ 50/60 Hz
Required power line (W): *(700 W service socket included)*	1200
Absorbed power (W): (*) *(fan and light on only)*	250
Window glass UVC radiations retention (%):	98
Combustible gas fixture max pressure (mbar):	20
Inert fluids/vacuum fixture max pressure (bar):	4
Electrical service socket max current (A):	3
WEIGHT AND SIZE	
Weight (kg):	260
Overall size L x D x H (mm): *(without support stand)*	1490 x 850 (790 with opened plastics) x 1365
Front aperture size L x H (mm):	1250 x 210
Working space size L x D x H (mm):	1280 x 595 x 700
MATERIALS	
Main structure:	cold rolled steel, stove enamel coated RAL 7035 + ABS plastics
Working space surface:	stainless steel AISI 304 - 2B finishing
Front and side walls windows:	laminated safety glass
PERFORMANCES	
Laminar Air Flow mean velocity [EN 12469](m/s):	0,33 ÷ 0,40
Inflow Air Barrier mean velocity [EN 12469](m/s):	0,53 ±10%
Exhaust Air flow rate (m3/h):	480 ±10%
Exhaust Air flow ratio (%):	30 ±10
Apf - Aperture Protection Factor [EN 12469]: *(Retention efficiency at front aperture)*	≥1,0 x 10^5
Working space air cleanliness class [EN 14644-1]:	ISO 5
Illuminance [EN 12469] (lux):	>850
Sound level [EN ISO 3744] (dB[A]): (**)	<50
Vibration [EN 12469] (mm RMS):	<0,005
Max increase inside cabinet in temperature from the ambient [EN 12469] (°C):	<5
FILTERS	
Filters efficiency class [EN 1822-1]:	H14 (***)
Filters global MPPS efficiency [EN 1822-1](%):	99,995
MPPS diameter [EN1822-1](µm):	0,1 ÷ 0,3

* Motorblower on, lights on (flow 0.28m/s, LED lights)

** Measured in operating conditions. Actual values at customer site may be different due to room structure

*** Efficiency higher than ULPA (Class F) as per IESP-RP-CC001

More than 40 years of experience

The experience of **EuroClone®** in manufacturing **Biohazard** and **Laminar Air Flow** cabinets goes back to the early 70s', when the brand *Gelaire®* became the "*gold standard*" for airborne contamination control in many laboratories throughout the world.

A family of **Recirculating Fume Hoods**, based on the adsorption of toxic vapors by means of charcoal filters, was successfully introduced a few years later, thus characterizing the Company as the only one really focused on the protection of the operators and inspired by its motto.

This unique know-how was cherished and brought to an even higher level of quality twenty-five years later, when under the name of **BioAir®**, the entire range was completely re-designed to meet the growing requirements of the laboratory staff and the most stringent regulations.

At the top of the range, particularly noteworthy are the **Biohazard** (or Microbiological Safety) **Cabinets**, representing the sum of the Company's know-how certified to European standards (EN12469:2000) and complying with the Australian regulations; in other words, they are designed to provide the technicians with the maximum level of safety, when they are used according to GLP/GMP in their respective environments.

Today, in a plant occupying more than 2.800 square meters, **EuroClone®** manufactures a *complete range of microbiological safety cabinets*, *laminar flow cabinets and fume cupboards*, encompassing more than 15 models, with many of them available in different sizes; customized models and/or designed for specific applications can be produced thanks to the competence of a team of skilled engineers and dedicated workers.

The experience deriving from decades of sales and support to Cell Biologists, allowed EuroClone® to bring into the market an *extremely innovative CO_2 Incubator*, the **S@fegrow 188**, which is the result of a deep knowledge of the best conditions required by the most critical tissue culture methods, supported by the suggestions received from the scientists involved in growing cells *in vitro*.

The core business of the recently established **BioAir® Industrial** Team is the design, manufacturing and validation of customized equipment for the protection of the operator and of the product within *pharmaceutical and healthcare production facilities*.

This dedicated team will take advantage of the long experience and the production capacity acquired through laboratory LAF applications, to offer dedicated and complex equipment, ranging from **dispensing/sampling Downflow Booths** and **Clean Rooms**, to **RABS** and **Isolators** for Regenerative Medicine and Advanced Cell Therapy.

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Quality Management Systems and Enviromental certified according to EN ISO 9001, ISO 13485 and EN ISO 14001

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