



burdinola
safer labs

FUME CUPBOARDS & EXTRACTION EQUIPMENTS

become
by burdinola

elite
by burdinola



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1. Burdinola, a global company

The keys to a great brand

Burdinola is an organisation that was created in the Basque Country in 1978.

“A sustainable business model that is involved with its environment, based on people and commitment to the customer, on continuous improvement and the legitimate pride of a job well done”.

Burdinola, a company specialising in the creation of laboratories, proposes being your **supplier of comprehensive solutions** by means of a value proposal that involves the complete management and development of your project, throughout all of its phases.

Burdinola **designs and manufactures all of its furniture ranges** in compliance with strict requirements and international regulations. “Our evolution has led us to be in a select group of companies that can ensure, on a **GLOBAL BASIS**, the most advanced technological solutions for the latest generation of laboratories”.

Guaranteed, certified quality

Our commitment as a market leading company in our sector, as a manufacturer and as a service provider worldwide is reinforced by rigorous international certification:

- Management Systems Certification
- Safety Certification
- Environmental Certification
- Quality Certification

Another exponent of the same philosophy and discipline is our active participation in forums and associations such as **CEN** (European Committee for Standardisation) and **EGNATON** (European Association for Sustainable Laboratories).

An answer to your needs

We respond to the service needs of our customers throughout the life cycle of the laboratory:

- Electrical installations, plumbing, extraction of fumes and ventilation, specialist installations
- Air conditioning, fire detection systems, security systems
- Enclosure of spaces, partitions, ceilings, floors, lighting
- Removal of materials at the end of their life cycles, financing services (leasing and others), validation, training, after-sales service (maintenance, auditing and consulting), call centre
- Civil works: Walls, floors, ceilings
- Sterile or biological containment rooms, ATEX rooms
- Technical management

Specialists in Fume Cupboards

Burdinola is an engine of generation and incorporation of the latest technological advances into the laboratory market. As a result of our **research** we have been able to develop cutting-edge solutions that are applied to products of a **high added value**, such as our FUME CUPBOARDS, which incorporate exclusive technological features and patents created to resolve problems in real world situations, maximise the safety considerations of users, and facilitate the effectiveness and reliability of processes.

Our fume cupboards have been tested in testing laboratories and **submitted to rigorous performance tests** that replicate conditions of non-ideal, but realistic, use, even in complex situations.

The result of this process is our new fume cupboards, which, we can objectively say with pride, are among the **safest and most efficient in the world**.

Our fume cupboards

On the following pages we will describe the most relevant aspects of our fume cupboards, as well as the technical and quality features that define them.

- Our general use BECOME range starts with high requisites of functionality and safety.
- Our ELITE range (Low Extraction Air Flow), aimed at the most demanding environments, incorporates exclusive technologies to take it to the highest levels possible in all of its features. Maximum safety, efficiency and ergonomics.
- Other ranges or designs for specific uses emerge to provide a timely response to specific laboratory requirements, such as our fume cupboards for specific uses with acids / solvents / radionuclides; our GREEN CYCLE, a model with integrated air recirculation (not connected to external extraction systems), which sets new standards of safety and versatility, and the IKASI fume cupboard, designed for educational environments of the future.

And others which will be developed to respond to evolving market demands.



Fume cupboards

In accordance with **EN 14175 standards** to which it is subject, a fume cupboard is defined as “a protection device ventilated by means of an air flow induced through an adjustable opening”.

Commonly, it is defined as a protected work area in which tasks are carried out that may release gases, fumes, aerosols or dust in irritating or dangerous toxic concentrations. With the aim of preventing these substances reaching the respiratory systems of laboratory users, it is necessary for the work area to be sealed and connected to an air extraction system. The work cabinet or area should be accessible through a vertically moving sash window with horizontal sliding panels.

In addition to the structural characteristics and durability of the materials, the concepts of **containment** and capacity to retain contaminants inside the cabin, **robustness** and capacity to retain contaminants against disturbances, effective **purging** and the capacity to evacuate contaminants are particularly important.

BECOME fume cupboards

Burdinola fume cupboards are designed to work in professional environments. The new BECOME range provides the latest fume extraction technology, incorporating innovative characteristics for greater efficiency, achieving the maximum compromise between safety and energy consumption.

The results obtained in our test laboratories, in accordance with part 3 of the **EN 14175 standard**, vouch for the fact that the new BECOME range reduces energy consumption compared to conventional fume cupboards.

With smooth lines tested aerodynamically, using a variable air volume system (VAV), they are available in a wide range of sizes and options to suit the most demanding environments.

ELITE fume cupboards

As a leading exponent of the above, our ELITE fume cupboard deserves its own chapter. By applying a safety curtain and our own patented blower at work surface level, we exceed the highest safety levels, while developing the lowest consumption values on the market.

The results obtained in our test laboratories, in accordance with part 3 of the **EN 14175 standard**, vouch for the fact that the new ELITE range reduces energy consumption by more than 50% compared to conventional fume cupboards.

With its ELITE fume cupboards, Burdinola complies with the parameters set by AFNOR-INRS and BGchemie, with low flow rates.

Extensive knowledge

Burdinola offers extensive knowledge when designing and manufacturing fume cupboards and ventilation installations, taking into account existing regulations, safety and environment at work, efficient use of energy and ventilation, without forgetting user procedures. In short, an integrated solution in laboratory environments.



1. Monitor
2. Speed sensor
3. Temperature sensor
4. Flow sensor*
5. VAV Valve*
6. Motorisation of the sash*
7. Photoelectric curtains
8. Control electronics housing
9. Lighting

NOTE: The photographs that appear in this catalogue are representative of the range options that Burdinola offers. The descriptions correspond to technical representations.

E024 Monitor

The E024 electronic system located on the right side of the fume cupboard is based on a micro-controller and provides a complete, easy, safe control system for the electrical services fitted to the cupboard, operating at 5V.

Control buttons on the keyboard are identified with their respective synoptic symbols.

Elements of safety and aerodynamics

Maximum compliance with the operating parameters of EN standards requires an arduous aerodynamic study of the air currents formed during the extraction process. The design of the BECOME range profiles are the best example of this premise.

Both the concept and the final design were devised with the collaboration of leading technological institutions to obtain the best aerodynamic qualities in a design which eliminates issues at the air inlet area.

To this end, from the external aspect, the service-carrying side columns, sash and windows are manufactured from extruded aluminium profiles, finished with an epoxy-polyester coating. The latter incorporate guides to facilitate the movement of the 6 mm thick laminated glass panes. It also incorporates a stop or limit switch at the operational sash opening. This device acts on both sides, being perfectly integrated into the handle. This guarantees the optimum aerodynamics and level of safety. Internally, our materials ensure the highest chemical resistance, where both the interior cabin and work surface are adapted to the user's specific activity and requirements (see the detailed tables for fume cupboards).

Work surfaces are provided with a peripheral rim (marine edge) which retains 5 l/m² and a sink with a rim which prevents accidental spillage. These are mounted directly on the metal structural elements using levelling supports to guarantee a rigid and stable work surface.

Automatic Sash Locking System

This is an optional accessory, a technological innovation which, when applied to a fume cupboard, optimises energy consumption, while significantly improving the safety of users.

Safety

The presence detection system uses an infrared beam curtain, with which Burdinola sets a new market standard when compared to the traditional detection system which uses a PIR motion detector and photoelectric cell on the sash. Compared to the latter which only functions when the user is moving, with the inherent risk that the fume cupboard sash motor can close the sash when the user remains stationary, the Burdinola system detects any object, both moving and stationary, that breaks any of the 25 infrared beams that cross the sash face zone.

Robustness

As it does not require moving parts, this significantly reduces the maintenance requirements for the sensor system and the occurrence of component failures.

Durability

The construction system of our fume cupboards is exceptionally robust and built to last over time. They are equipped with structures made of tubular steel with a 1 mm sheet metal finish.

To ensure resistance against corrosion, a thermo-hardened powder coating with an epoxy resin base (epoxy-polyester powder) is applied.

The service carrying side columns are made of 4 mm extruded aluminium.

Our general use fume cupboards are equipped with an interior cabin lining of 6 mm thick acrylic urethane, with the work surface made of 26 mm thick vitrified stoneware plate with a perimeter rim for retaining 5 l/m². This is mounted directly on the metal structural elements using levelling supports to guarantee a rigid and stable work surface.

For fume cupboards with specific uses, we have also adapted our materials to the most demanding work that their use may require and these are detailed in each of the corresponding sections.

Sash and windows with extruded aluminium profiles, with an epoxy-polyester coating, incorporating guides to facilitate the movement of the 6 mm thick glass panes (3+3 mm laminated safety glass).

The counterbalance is supported by 3 mm steel cables with a 1 mm plastic coating. In the event that one of the cables breaks, the sash remains locked to avoid it falling, in accordance with the **EN 14175 standard**.



Comprehensive solutions

Burdinola offers a comprehensive solution for compensating for ventilation in the laboratory. All ventilated elements are integrated as part of the air conditioning return air system, so as to avoid duplication of the extraction networks.

From the design of the installation with a renewal ratio in accordance with DIN 1946 (25m³/h x m²), incorporating flow measurement probes, impulsion and extraction are offset to maintain an appropriate balance of air renewal, as well as a flow differential between impulsion and extraction that allows us to ensure low pressure in the laboratory, within operating values.

The Burdinola ventilation system is one of the most advanced at the present time. It combines technology and techniques which achieve the maximum possible level of safety with minimum energy consumption, without forgetting user comfort.

To do this, the PLC-managed system controls air extraction and impulsion from the laboratory, maintaining a differential at all times which ensures low pressure in the laboratory with regard to the annexed areas.

Additionally, an HMI screen gives the operating parameters for each of the ventilated elements (fume cupboards, arms, cabinets, air impulsion and additional extraction), in addition to room conditions (temperature, humidity and pressure).



FUME CUPBOARDS

2. ELITE low extraction airflow fume cupboards

2.1 ELITE FUME CUPBOARD

Burdinola has based the development of its new ELITE fume cupboard on the knowledge gained from over 20 years of experience in the laboratory market. The ELITE fume cupboard achieves optimum containment values:

It is tested in accordance with the criteria of **UNE EN 14175** part 3, which establishes the general test conditions as:

- Air temperature of the test area: 23°C +/- 3°C. During the assessment, the temperature of the incoming air was equivalent to the temperature of the air in the room +/- 1°C, avoiding temperature gradients.
- The incoming air is supplied from a distance in excess of 2 metres from the front of the fume cupboard.
- The exhaust air is directed through the side symmetrically opposite to the supply of the incoming air and is exhausted outside of the test area.
- Air velocity < 0.1 m/s in the test area.
- Pressure differential: +/- 5 Pascals.

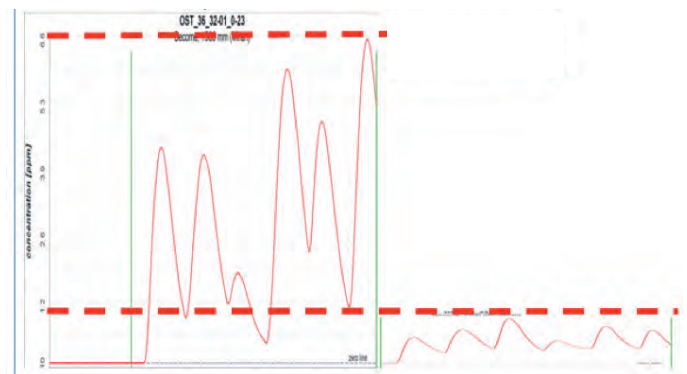
The ELITE fume cupboard achieved optimum containment results during tests, with a flow rate of **250 m³/h* mlin** complying with the European reference values set by the German BG Chemie and the French INRS.

However, what distinguishes the ELITE fume cupboard from other low-flow cupboards is the incorporation of a **patented Microclimate system**: In accordance with **UNE EN 14175** standards, the performance of a fume cupboard is expressed in qualitative terms, such as the ability to contain and extract one or more pollutants emitted by a source in the work area of the fume cupboards, **as well as the ability to minimise the influence of possible disturbances, such as air currents, operator movements or the movement of personnel.**

The Microclimate system creates an artificially controlled environment at the face of the fume cupboard, thus minimising the influence of external disturbances and achieving a significant increase in both **safety and efficiency** levels.

The effect achieved is shown schematically on the following graph.

The Microclimate creates an extremely stable environment for the fume cupboard to operate within, and thus minimises the negative effects of external disturbances (temperature fluctuation in the room, air currents, movement of staff, etc.), effectively reducing these effects by more than 70%.



Services (Basic)					
Model ELITE	ELITE 1200	ELITE 1500	ELITE 1800	ELITE 2100	ELITE 2400
Electrical bases 230V/16A	4	4	4	4	4
Circuit breaker	1	1	1	1	1
Cold water tap	1	1	1	1	1
Worktop	Stoneware	Stoneware	Stoneware	Stoneware	Stoneware
Sink	1	1	1	1	1
Cabin	Acrylic urethane FIRE RESISTANT 6 mm.	Acrylic urethane FIRE RESISTANT 6 mm.	Acrylic urethane FIRE RESISTANT 6 mm.	Acrylic urethane FIRE RESISTANT 6 mm.	Acrylic urethane FIRE RESISTANT 6 mm.
Control	E024	E024	E024	E024	E024
Lighting	>500lux	>500lux	>500lux	>500lux	>500lux
Extraction outlet	1x200ø (*)	1x200ø (*)	1x200ø (*)	1x250ø (*)	1x250ø (*)
Support for busbar	9	9	9	12	12
No. of sash windows	1	1	1	1	1
No. of sliding panes	2	2	2	2	4

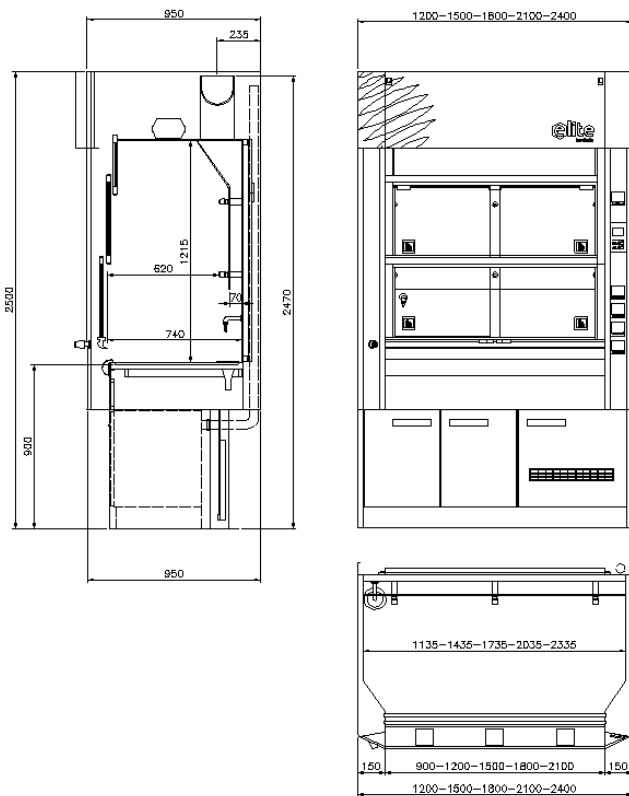
Ceiling height required to completely open 2725 mm sash window.
 (*) The diameters of the outlet may vary depending on the installation.

Variants:

The aerodynamic design of the ELITE fume cupboard with its Microclimate system provides a comprehensive solution for state of the art laboratories:

- Optimum containment capacity with reduced energy costs and carbon footprint.
- Robustness and reliability with its Microclimate system which “adapts” the laboratory environment to the ideal operating conditions.

- Automatic motorised sash, with infrared safety curtain.
- VAV systems with an exterior regulating valve.
- Communication on Profinet and Modbus networks.
- Flowmeter.
- Services located under the worktop.



Dimensional Data (Tolerance ± 5 mm)

Model ELITE	ST 1200	ST 1500	ST 1800	ST 2100	ST 2400
Total width (mm)	1200	1500	1800	2100	2400
Total height (mm)	2500	2500	2500	2500	2500
Height of extraction outlet (mm)	2670	2670	2670	2670	2670
Total depth (mm)	950	950	950	950	950
Usable interior width (mm)	1135	1435	1735	2035	2335
Usable interior height (mm)	1415	1415	1415	1415	1415
Usable interior depth (mm)	740/620	740/620	740/620	740/620	740/620
Height of work surface (mm)	900	900	900	900	900
Sash window opening (mm)	850	850	850	850	850

2.2 ELITE LOW FUME CUPBOARD

Burdinola has based the development of its new ELITE fume cupboard on the knowledge gained from over 20 years of experience in the laboratory market. The ELITE fume cupboard achieves optimum containment values:

It is tested in accordance with the criteria of **UNE EN 14175** part 3, which establishes the general test conditions as:

- Air temperature of the test area: 23°C +/- 3°C. During the assessment, the temperature of the incoming air was equivalent to the temperature of the air in the room +/- 1°C, avoiding temperature gradients.
- The incoming air is supplied from a distance in excess of 2 metres from the front of the fume cupboard.
- The exhaust air is directed through the side symmetrically opposite to the supply of the incoming air and is exhausted outside of the test area.
- Air velocity < 0.1 m/s in the test area.
- Pressure differential: +/- 5 Pascals.

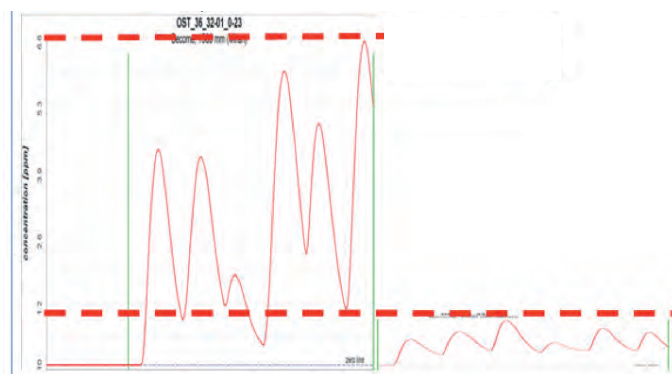
The ELITE fume cupboard achieved optimum containment results during tests, with a flow rate of **250 m³/h* mlin** complying with the European reference values set by the German BG Chemie and the French INRS.

However, what distinguishes the ELITE fume cupboard from other low-flow cupboards is the incorporation of a **patented Microclimate system**: In accordance with **UNE EN 14175** standards, the performance of a fume cupboard is expressed in qualitative terms, such as the ability to contain and extract one or more pollutants emitted by a source in the work area of the fume cupboards, **as well as the ability to minimise the influence of possible disturbances, such as air currents, operator movements or the movement of personnel.**

The Microclimate system creates an artificially controlled environment at the face of the fume cupboard, thus minimising the influence of external disturbances and achieving a significant increase in both **safety and efficiency** levels.

The effect achieved is shown schematically on the following graph.

The Microclimate creates an extremely stable environment for the fume cupboard to operate within, and thus minimises the negative effects of external disturbances (temperature fluctuation in the room, air currents, movement of staff, etc.), effectively reducing these effects by more than 70%.



Services (Basic)					
Model ELITE Low	ELITE 1200 Low	ELITE 1500 Low	ELITE 1800 Low	ELITE 2100 Low	ELITE 2400 Low
Electrical bases 230V/16A	4	4	4	4	4
Circuit breaker	1	1	1	1	1
Cold water tap	1	1	1	1	1
Worktop	Stoneware	Stoneware	Stoneware	Stoneware	Stoneware
Sink	1	1	1	1	1
Cabin	Acrylic urethane FIRE RESISTANT 6 mm.	Acrylic urethane FIRE RESISTANT 6 mm.	Acrylic urethane FIRE RESISTANT 6 mm.	Acrylic urethane FIRE RESISTANT 6 mm.	Acrylic urethane FIRE RESISTANT 6 mm.
Control	E024	E024	E024	E024	E024
Lighting	>500lux	>500lux	>500lux	>500lux	>500lux
Extraction outlet	1x200ø (*)	1x200ø (*)	1x250ø (*)	1x250ø (*)	1x250ø (*)
Support for busbar	6	6	6	8	8
No. of sash windows	2	2	2	2	2
No. of sliding panes	4	4	4	4	8

Possibility of only 1 sash window.

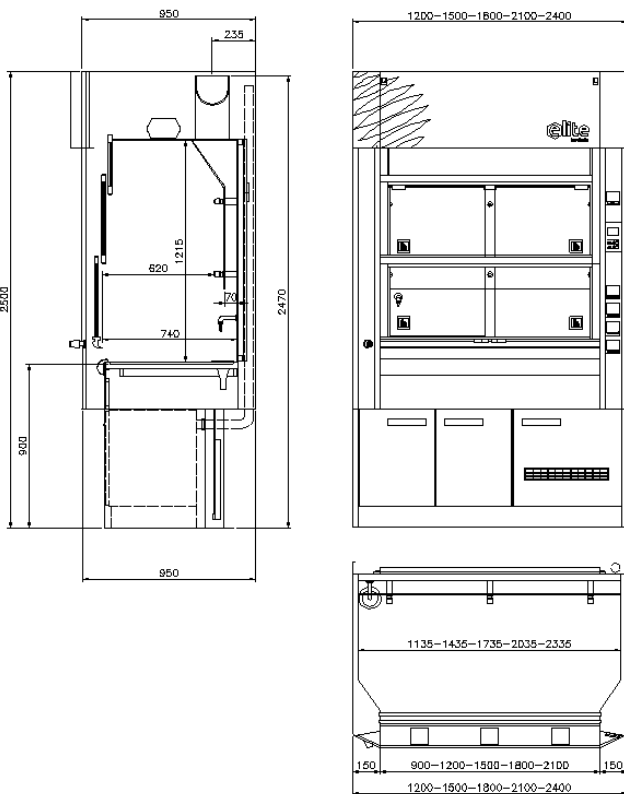
Variants:

The aerodynamic design of the ELITE fume cupboard with its Microclimate system provides a comprehensive solution for state of the art laboratories:

- Optimum containment capacity with reduced energy costs and carbon footprint.
- Robustness and reliability with its Microclimate system which “adapts” the laboratory environment to the ideal operating conditions.

- Automatic motorised sash, with infrared safety curtain.
- VAV systems with an exterior regulating valve.
- Communication on Profinet and Modbus networks.
- Flowmeter.
- Services located under the worktop.

Specifically designed for laboratories with a minimum ceiling height of 2.55 metres.



Dimensional Data (Tolerance ±5 mm)

Model ELITE Low	ELITE 1200 Low	ELITE 1500 Low	ELITE 1800 Low	ELITE 2100 Low	ELITE 2400 Low
Total width (mm)	1200	1500	1800	2100	2400
Total height (mm)	2500	2500	2500	2500	2500
Height of extraction outlet (mm)	2470	2470	2470	2470	2470
Total depth (mm)	950	950	950	950	950
Usable interior width (mm)	1135	1435	1735	2035	2335
Usable interior height (mm)	1215	1215	1215	1215	1215
Usable interior depth (mm)	740/620	740/620	740/620	740/620	740/620
Height of work surface (mm)	900	900	900	900	900
Sash window opening (mm)	850	850	850	850	850

3. BECOME fume cupboards

3.1 FUME CUPBOARDS FOR GENERAL USE

BECOME ST

Designed for general use in the laboratory with the maximum use of interior space.

Designed and tested in accordance with the **EN 14175 standard**.

Optimum behaviour in the evacuation of fumes, aerosols, fine dust and light particles from the work area to avoid contamination of the laboratory atmosphere.

Not recommended for compounds emitting ionising radiation, concentrated mineral acids with a high thermal load or pathogens.

Available for installation with individual or shared ventilation, with optimised VAV systems.

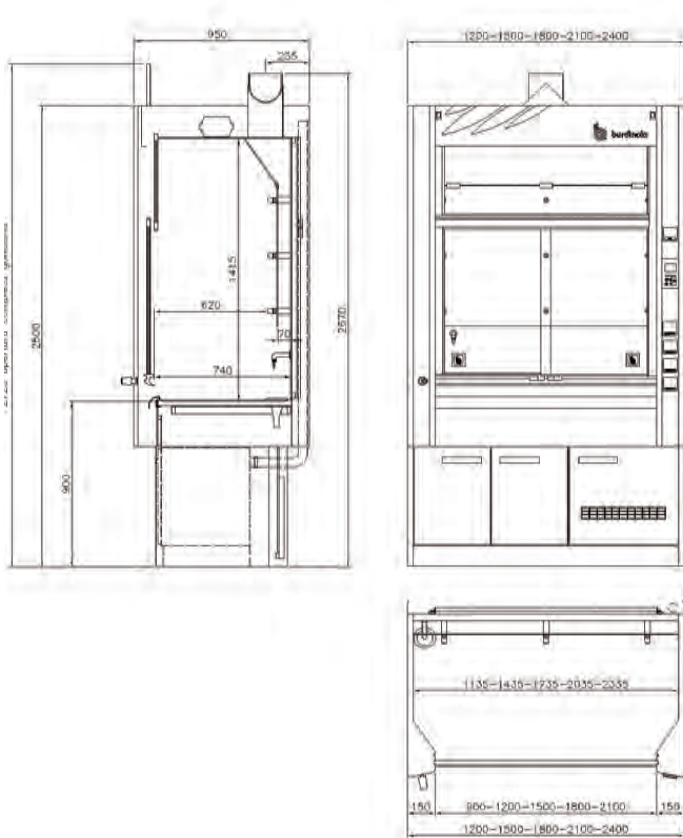
Equipped as standard with a VAV system frequency converter.

Variants:

- Automatic motorised sash, with infrared safety curtain
- VAV systems with a regulating valve
- Electrical bases inside with cut-off outside
- Communication on Profinet and Modbus networks
- Flowmeter
- Services located under the worktop

Services (Basic)					
Model BECOME ST	ST 1200	ST 1500	ST 1800	ST 2100	ST 2400
Electrical bases 230V/16A	4	4	4	4	4
Circuit breaker	1	1	1	1	1
Cold water tap	1	1	1	1	1
Worktop	Stoneware	Stoneware	Stoneware	Stoneware	Stoneware
Sink	1	1	1	1	1
Cabin	Acrylic urethane FIRE RESISTANT 6 mm.	Acrylic urethane FIRE RESISTANT 6 mm.	Acrylic urethane FIRE RESISTANT 6 mm.	Acrylic urethane FIRE RESISTANT 6 mm.	Acrylic urethane FIRE RESISTANT 6 mm.
Control	E024	E024	E024	E024	E024
Lighting	>500lux	>500lux	>500lux	>500lux	>500lux
Extraction outlet	1x200ø (*)	1x200ø (*)	1x200ø (*)	1x250ø (*)	1x250ø (*)
Support for busbar	9	9	9	12	12
No. of sash windows	1	1	1	1	1
No. of sliding panes	2	2	2	2	4

Ceiling height required to completely open 2725 mm sash window



Dimensional Data (Tolerance ± 5 mm)

Model BECOME ST	ST 1200	ST 1500	ST 1800	ST 2100	ST 2400
Total width (mm)	1200	1500	1800	2100	2400
Total height (mm)	2500	2500	2500	2500	2500
Height of extraction outlet (mm)	2670	2670	2670	2670	2670
Total depth (mm)	950	950	950	950	950
Usable interior width (mm)	1135	1435	1735	2035	2335
Usable interior height (mm)	1415	1415	1415	1415	1415
Usable interior depth (mm)	740/620	740/620	740/620	740/620	740/620
Height of work surface (mm)	900	900	900	900	900
Sash window opening (mm)	850	850	850	850	850

3.1 FUME CUPBOARDS FOR GENERAL USE

BECOME ST Low

Designed for general use in the laboratory with the maximum use of interior space.

Specifically designed for laboratories with a minimum ceiling height of 2.55 metres.

Designed and tested in accordance with the **EN 14175 standard**.

Optimum behaviour in the evacuation of fumes, aerosols, fine dust and light particles from the work area to avoid contamination of the laboratory atmosphere.

Not recommended for compounds emitting ionising radiation, concentrated mineral acids with a high thermal load or pathogens.

Available for installation with individual or shared ventilation, with optimised VAV systems.

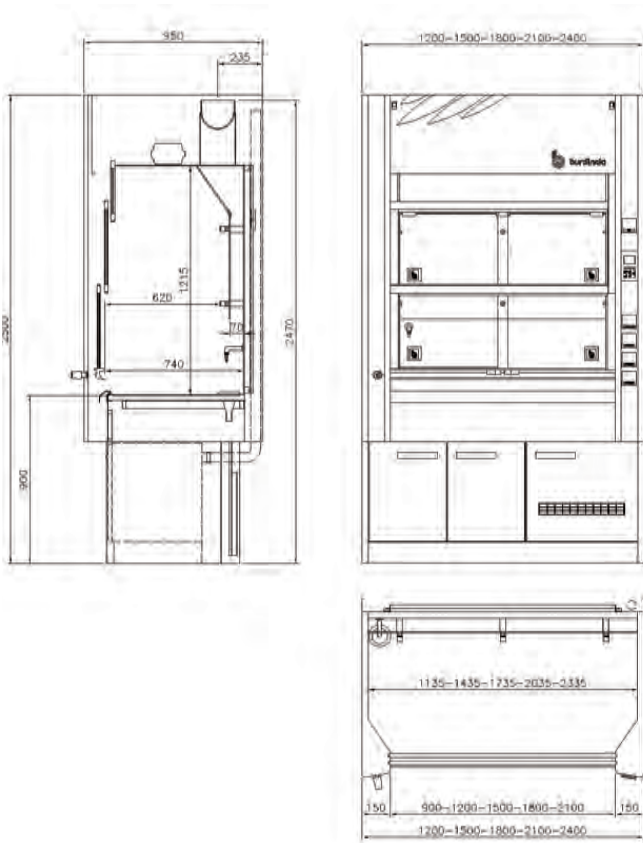
Equipped as standard with a VAV frequency converter.

Variants:

- Automatic motorised sash, with infrared safety curtain
- VAV systems with a regulating valve
- Electrical bases inside with cut-off outside
- Communication on Profinet and Modbus networks
- Flowmeter

Services (Basic)					
Model BECOME ST Low	ST 1200 Low	ST 1500 Low	ST 1800 Low	ST 2100 Low	ST 2400 Low
Electrical bases 230V/16A	4	4	4	4	4
Circuit breaker	1	1	1	1	1
Cold water tap	1	1	1	1	1
Worktop	Stoneware	Stoneware	Stoneware	Stoneware	Stoneware
Sink	1	1	1	1	1
Cabin	Uretano acrílico FIRE RESISTANT 6 mm.	Uretano acrílico FIRE RESISTANT 6 mm.	Uretano acrílico FIRE RESISTANT 6 mm.	Uretano acrílico FIRE RESISTANT 6 mm.	Uretano acrílico FIRE RESISTANT 6 mm.
Control	E024	E024	E024	E024	E024
Lighting	>500lux	>500lux	>500lux	>500lux	>500lux
Extraction outlet	1x200ø (*)	1x200ø (*)	1x250ø (*)	1x250ø (*)	1x250ø (*)
Support for busbar	6	6	6	8	8
No. of sash windows	2	2	2	2	2
No. of sliding panes	4	4	4	4	8

Possibility of only 1 sash window.



Dimensional Data (Tolerance ± 5 mm)

Model BECOME ST Low	ST 1200 Low	ST 1500 Low	ST 1800 Low	ST 2100 Low	ST 2400 Low
Total width (mm)	1200	1500	1800	2100	2400
Total height (mm)	2500	2500	2500	2500	2500
Height of extraction outlet (mm)	2470	2470	2470	2470	2470
Total depth (mm)	950	950	950	950	950
Usable interior width (mm)	1135	1435	1735	2035	2335
Usable interior height (mm)	1215	1215	1215	1215	1215
Usable interior depth (mm)	740/620	740/620	740/620	740/620	740/620
Height of work surface (mm)	900	900	900	900	900
Sash window opening (mm)	850	850	850	850	850

3.1 FUME CUPBOARDS FOR GENERAL USE

BECOME M

Designed for general use in the laboratory with the maximum use of interior space.

Especially recommended for use with large apparatus.

Designed and tested in accordance with the **EN 14175 standard**.

Optimum behaviour in the evacuation of fumes, aerosols, fine dust and light particles from the work area to avoid contamination of the laboratory atmosphere.

Not recommended for compounds emitting ionising radiation, concentrated mineral acids with a high thermal load or pathogens.

Available for installation with individual or shared ventilation, with optimised VAV systems.

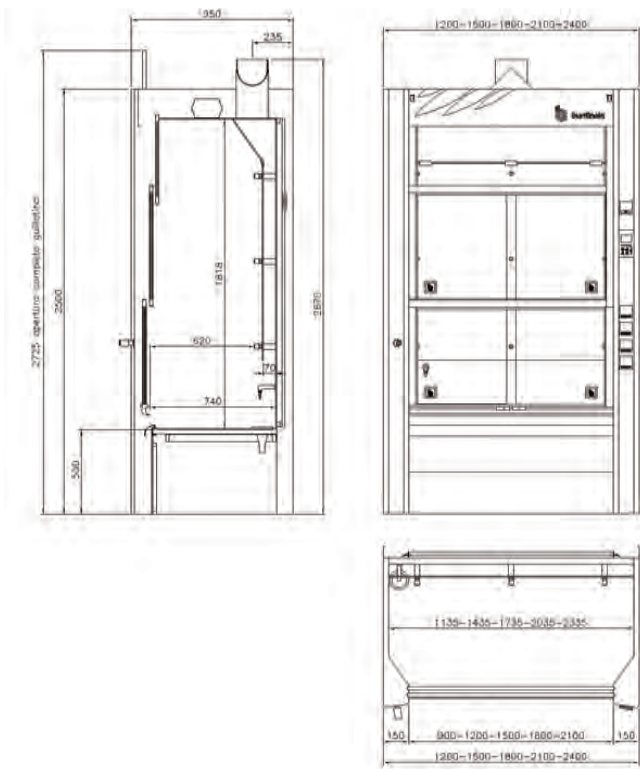
Equipped as standard with a VAV system frequency converter.

Variants:

- Automatic motorised sash, with infrared safety curtain
- VAV systems with a regulating valve
- Electrical bases inside with cut-off outside
- Communication on Profinet and Modbus networks
- Flowmeter
- Services located under the worktop

Services (Basic)					
Model BECOME M	M 1200	M 1500	M 1800	M 2100	M 2400
Electrical bases 230V/16A	4	4	4	4	4
Circuit breaker	1	1	1	1	1
Cold water tap	1	1	1	1	1
Worktop	Stoneware	Stoneware	Stoneware	Stoneware	Stoneware
Sink	1	1	1	1	1
Cabin	Acrylic urethane FIRE RESISTANT 6 mm.	Acrylic urethane FIRE RESISTANT 6 mm.	Acrylic urethane FIRE RESISTANT 6 mm.	Acrylic urethane FIRE RESISTANT 6 mm.	Acrylic urethane FIRE RESISTANT 6 mm.
Control	E024	E024	E024	E024	E024
Lighting	>500lux	>500lux	>500lux	>500lux	>500lux
Extraction outlet	1x200ø (*)	1x200ø (*)	1x250ø (*)	1x250ø (*)	1x250ø (*)
Support for busbar	9	9	9	12	12
No. of sash windows	2	2	2	2	2
No. of sliding panes	4	4	4	4	8

Possibility of only 1 sash window.



Dimensional Data (Tolerance ±5 mm)

Model BECOME M	M 1200	M 1500	M 1800	M 2100	M 2400
Total width (mm)	1200	1500	1800	2100	2400
Total height (mm)	2500	2500	2500	2500	2500
Height of extraction outlet (mm)	2670	2670	2670	2670	2670
Total depth (mm)	950	950	950	950	950
Usable interior width (mm)	1135	1435	1735	2035	2335
Usable interior height (mm)	1818	1818	1818	1818	1818
Usable interior depth (mm)	740/620	740/620	740/620	740/620	740/620
Altura de superficie de trabajo(mm)	500	500	500	500	500
Sash window opening (mm)	1250	1250	1250	1250	1250

3.1 FUME CUPBOARDS FOR GENERAL USE

BECOME W

Designed for general use in the laboratory with the maximum use of interior space.

Specifically designed for full access of large apparatus or tests to be carried out on mobile tables or on the floor of the fume cupboard. Total comfort and safety in tests to be carried out with large-sized elements.

Designed and tested in accordance with the **EN 14175 standard**.

Optimum behaviour in the evacuation of fumes, aerosols, fine dust and light particles from the work area to avoid contaminating the laboratory atmosphere.

Not recommended for use with compounds emitting ionising radiation, nor for concentrated mineral acids with a high thermal load or pathogens.

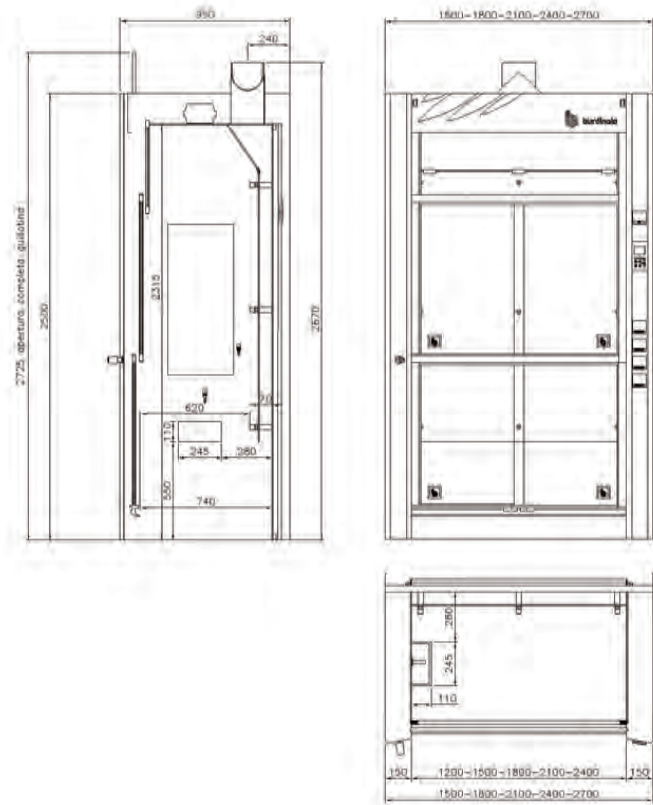
Available for installation with individual or shared ventilation, with optimised VAV systems.

Equipped as standard with a VAV system frequency converter.

Variants:

- Automatic motorised sash, with infrared safety curtain
- VAV systems with a regulating valve
- Electrical bases inside with cut-off outside
- Communication on Profinet and Modbus networks
- Flowmeter

Services (Basic)					
Model BECOME W	W 1500	W 1800	W 2100	W 2400	W 2700
Electrical bases 230V/16A	4	4	4	4	4
Circuit breaker	1	1	1	1	1
Cold water tap	1	1	1	1	1
Worktop	-	-	-	-	-
Sink	1	1	1	1	1
Cabin	Acrylic urethane FIRE RESISTANT 6 mm.	Acrylic urethane FIRE RESISTANT 6 mm.	Acrylic urethane FIRE RESISTANT 6 mm.	Acrylic urethane FIRE RESISTANT 6 mm.	Acrylic urethane FIRE RESISTANT 6 mm.
Control	E024	E024	E024	E024	E024
Lighting	>500lux	>500lux	>500lux	>500lux	>500lux
Extraction outlet	1x200ø (*)	1x200ø (*)	1x250ø (*)	1x250ø (*)	1x250ø (*)
Support for busbar	9	9	9	12	12
No. of sash windows	2	2	2	2	2
No. of sliding panes	4	4	4	4	8



Dimensional Data (Tolerance ± 5 mm)

Model BECOME W	W 1500	W 1800	W 2100	W 2400	W 2700
Total width (mm)	1500	1800	2100	2400	2700
Total height (mm)	2500	2500	2500	2500	2500
Height of extraction outlet (mm)	2670	2670	2670	2670	2670
Total depth (mm)	950	950	950	950	950
Usable interior width (mm)	1200	1500	1800	2100	2400
Usable interior height (mm)	2315	2315	2315	2315	2315
Usable interior depth (mm)	740/620	740/620	740/620	740/620	740/620
Height of work surface (mm)	0	0	0	0	0
Sash window opening (mm)	1725	1725	1725	1725	1725

3.2 FUME CUPBOARDS SPECIFICALLY USED FOR ACIDS

BECOME AC

Designed for use with and handling concentrated acids and with a high thermal load (except hydrofluoric acid).

In accordance with the **EN 14175-7 standard**.

Efficient in the evacuation of fumes and aerosols generated in reactions with concentrated acids handled in the work area, thus avoiding the contamination of the laboratory atmosphere.

Not recommended for use with compounds emitting ionising radiation, large quantities of solvents or pathogens.

Available for installation with individual or shared ventilation.

Equipped as standard with a fixed flow system and frequency converter.

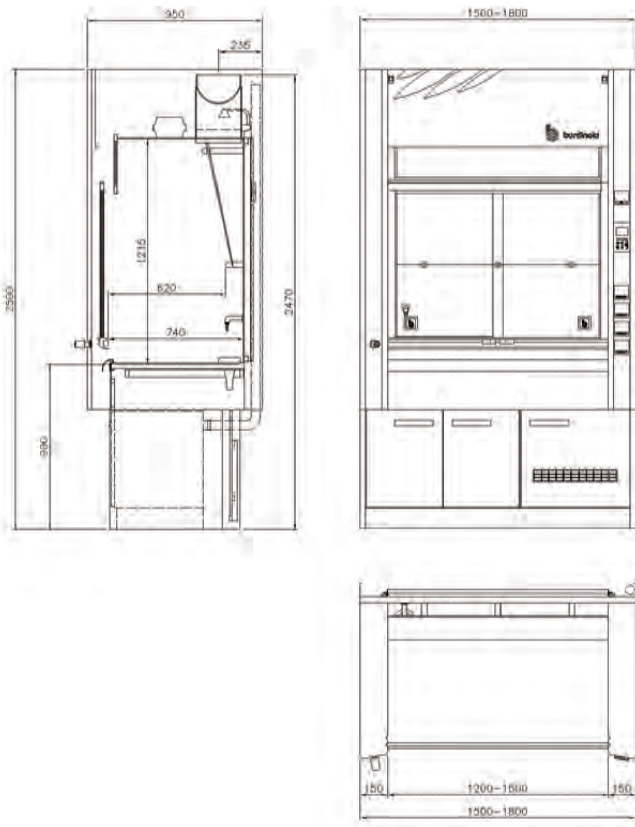
Variants:

- Automatic motorised sash window
- Flow control systems with a regulating valve
- Communication on Profinet and Modbus networks
- Flowmeter
- Services located under the worktop

Services (Basic)		
Model BECOME AC	AC 1500	AC 1800
Electrical bases 230V/16A	4	4
Circuit breaker	1	1
Cold water tap	1	1
Worktop	Stoneware	Stoneware
Sink	1	1
Cabin	Stoneware 6 mm.	Stoneware 6 mm.
Control	E024	E024
Lighting	>500lux	>500lux
Extraction outlet	1x200ø (*)	1x250ø (*)
Support for busbar	No	No
No. of sash windows	1	1
No. of sliding panes	2	2

The diameters of the outlet may vary depending on the installation.

[**] Shower hood



Dimensional Data (Tolerance ± 5 mm)

Model BECOME AC	AC 1500	AC 1800
Total width (mm)	1500	1800
Total height (mm)	2500	2500
Sash window opening (mm)	780	780
Height of extraction outlet (mm)	2470	2470
Total depth (mm)	950	950
Usable interior width (mm)	1200	1500
Usable interior height (mm)	1215	1215
Usable interior depth (mm)	740/620	740/620
Height of work surface (mm)	900	900

3.2 FUME CUPBOARDS SPECIFICALLY USED FOR ACIDS

BECOME ACL

Designed for use with and handling concentrated acids and with a high thermal load (except hydrofluoric acid).

In accordance with the **EN 14175-7 standard**.

Efficient in the evacuation of fumes and aerosols generated in reactions with concentrated acids handled in the work area, thus avoiding the contamination of the laboratory atmosphere.

Not recommended for use with compounds emitting ionising radiation, large quantities of solvents or pathogens.

Available for installation with individual or shared ventilation.

Equipped as standard with a fixed flow system and frequency converter.

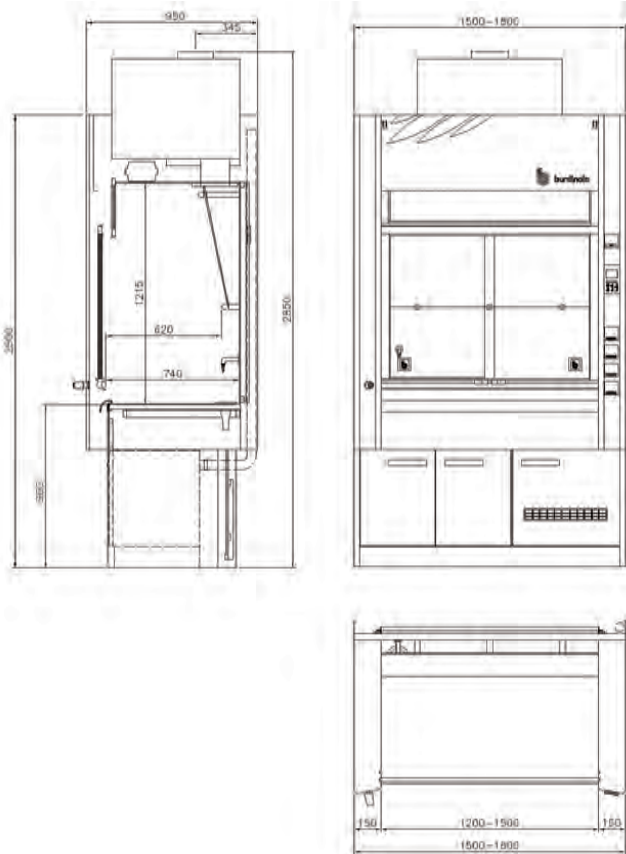
Designed to be fitted with scrubber (see separate scrubber information).

Variants:

- Automatic motorised sash window
- Communication on Profinet and Modbus networks
- Flowmeter
- Services located under the worktop

Services (Basic)		
Model BECOME ACL	ACL 1500	ACL 1800
Electrical bases 230V/16A	4	4
Circuit breaker	1	1
Cold water tap	1	1
Worktop	Stoneware	Stoneware
Sink	1	1
Cabin	Stoneware 6 mm.	Stoneware 6 mm.
Control	E024	E024
Lighting	>500lux	>500lux
Extraction outlet	1x200ø (*)	1x250ø (*)
Support for busbar	No	No
No. of sash windows	1	1
No. of sliding panes	2	2

The diameters of the outlet may vary depending on the installation.



Dimensional Data (Tolerance ± 5 mm)

Model BECOME ACL	ACL 1500	ACL 1800
Total width (mm)	1500	1800
Total height (mm)	2500	2500
Height of extraction outlet (mm)	2850	2850
Total depth (mm)	950	950
Usable interior width (mm)	1200	1500
Usable interior height (mm)	1215	1215
Usable interior depth (mm)	740/620	740/620
Height of work surface (mm)	900	900

3.2 FUME CUPBOARDS SPECIFICALLY USED FOR ACIDS

BECOME ACF

Designed for use with and handling hydrofluoric acid.

Sash window with sliding windows in transparent methacrylate.

In accordance with the **EN 14175-7 standard**.

Efficient in the evacuation of fumes and aerosols generated in reactions with concentrated acids handled in the work area, thus avoiding the contamination of the laboratory atmosphere.

Not recommended for use with compounds emitting ionising radiation, large quantities of solvents or pathogens.

Available for installation with individual or shared ventilation.

Equipped as standard with a fixed flow system and frequency converter.

Cabin made in PP welded to form a one piece cabinet.

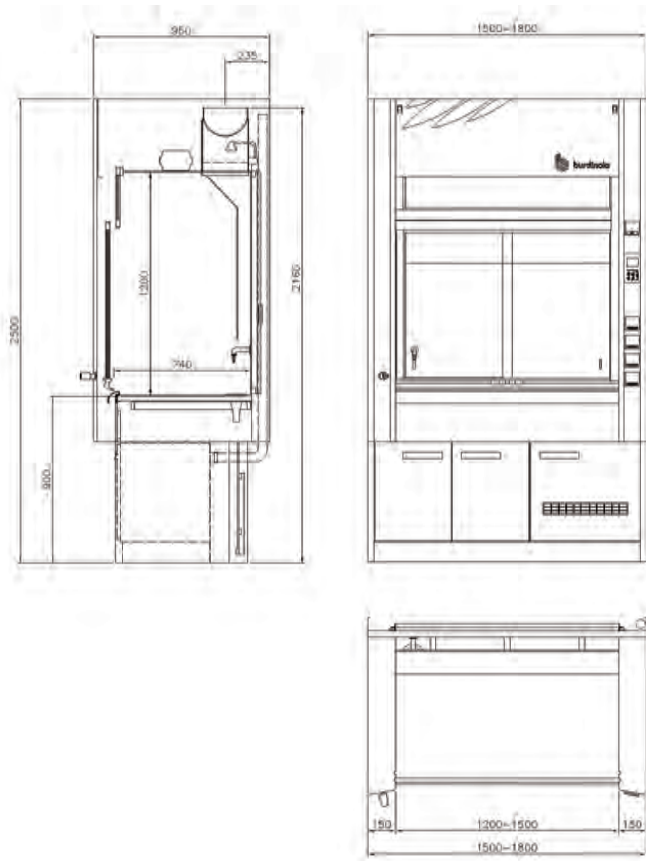
Variants:

- Automatic motorised sash window
- Communication on Profinet and Modbus networks
- Flow level indicator
- Interior cabin in 5 mm PVDF

Services (Basic)		
Model BECOME ACF	ACF 1500	ACF 1800
Electrical bases 230V/16A	4	4
Circuit breaker	1	1
Cold water tap	1	1
Worktop	PP	PP
Sink	1	1
Cabin	20 mm PP	20 mm PP
Control	E024	E024
Lighting	>500lux	>500lux
Extraction outlet	1x200ø (*)	1x250ø (*)
Support for busbar	No	No
No. of sash windows	1	1
No. of sliding panes	2	2

(*) Note: The sash window panes are made of methacrylate and do not have lighting.

(**) Shower hood



Dimensional Data (Tolerance ± 5 mm)

Model BECOME ACF	ACF 1500	ACF 1800
Total width (mm)	1500	1800
Total height (mm)	2500	2500
Height of extraction outlet (mm)	2160	2160
Total depth (mm)	950	950
Usable interior width (mm)	1200	1500
Usable interior height (mm)	900	900
Usable interior depth (mm)	740/620	740/620
Height of work surface (mm)	900	900

3.2 FUME CUPBOARDS SPECIFICALLY USED FOR ACIDS

BECOME ACFL

Designed for use with and handling hydrofluoric acid.

Sash window with sliding windows in transparent methacrylate.

Prepared to house an air scrubber in the upper part.

In accordance with the **EN 14175-7 standard**.

Efficient in the evacuation of fumes and aerosols generated in reactions with concentrated acids handled in the work area, thus avoiding the contamination of the laboratory atmosphere.

Not recommended for use with compounds emitting ionising radiation, large quantities of solvents or pathogens.

Available for installation with individual or shared ventilation.

Equipped as standard with a fixed flow system and frequency converter.

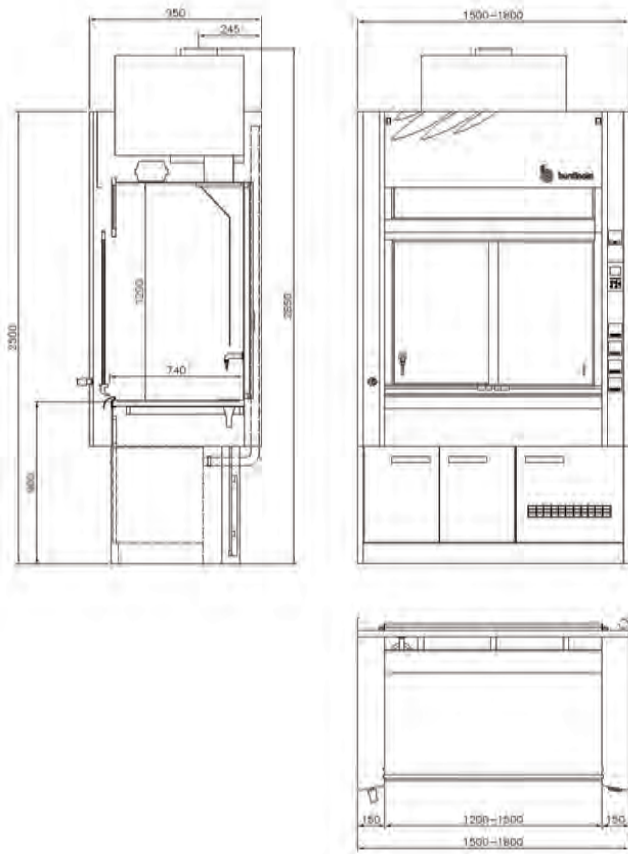
Designed to be fitted with scrubber (see separate scrubber information).

Cabin made in PP welded to form a one piece cabinet

Variants:

- Automatic motorised sash window
- Communication on Profinet and Modbus networks
- Flow level indicator
- Interior cabin in 5 mm PVDF

Services (Basic)		
Model BECOME ACFL	ACFL 1500	ACFL 1800
Electrical bases 230V/16A	4	4
Circuit breaker	1	1
Cold water tap	1	1
Worktop	20 mm PP	20 mm PP
Sink	1	1
Cabin	10 mm PP	10 mm PP
Lighting	>500lux	>500lux
Extraction outlet	1x250ø (*)	1x250ø (*)
Support for busbar	No	No



Dimensional Data (Tolerance ± 5 mm)

Model BECOME ACFL	ACFL 1500	ACFL 1800
Total width (mm)	1500	1800
Total height (mm)	2500	2500
Total depth (mm)	950	950/1000
Height of extraction outlet (mm)	1200	1500
Usable interior width (mm)	900	900
Usable interior height (mm)	740/620	740/620
Usable interior depth (mm)	900	900
Height of work surface (mm)	780	780

3.3 FUME CUPBOARDS SPECIFICALLY USED FOR SOLVENTS

BECOME D

Optimum for the evacuation of fumes from flammable solvents in the work area to avoid contamination of the laboratory atmosphere.

Cabinet interior and work surface made of 1 mm thick AISI 316 stainless steel sheets, fabricated to form a single welded piece, with rounded joints to facilitate cleaning.

Designed and tested in accordance with the **EN 14175-7 standard**.

Not recommended for compounds emitting ionising radiation, concentrated mineral acids or pathogens.

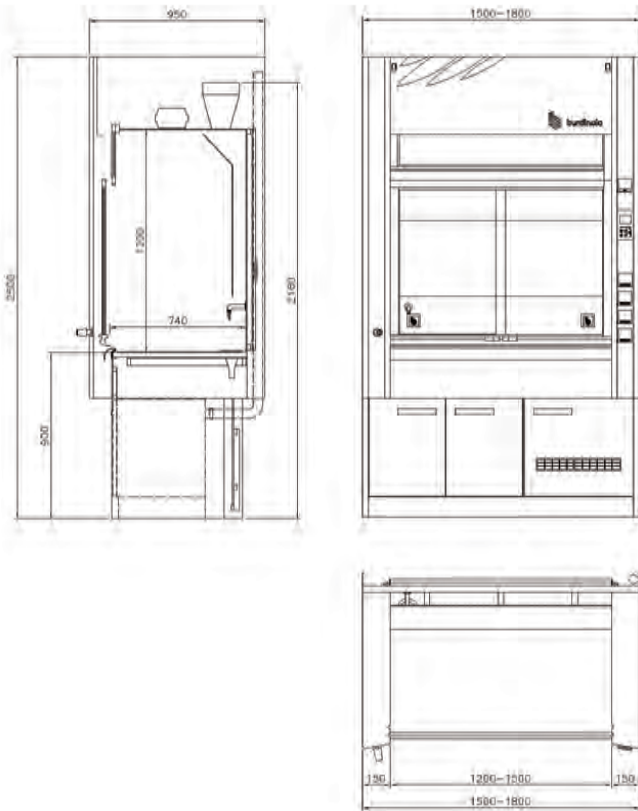
Available for installation with individual or shared ventilation, with optimised VAV systems.

Equipped as standard with a VAV system frequency converter.

Variants:

- Automatic motorised sash window
- VAV systems with a regulating valve
- Electrical sockets on the inside with a switch on the outside
- Communication on Profinet and Modbus networks
- Flowmeter
- Varying types of filtration equipment can be integrated, depending on the specific needs of the techniques to be used within the fume cupboard.
- Services located under the worktop
- Filter unit with pre-filter and activated carbon filter

Services (Basic)		
Model BECOME D	D 1500	D 1800
Electrical bases 230V/16A	4	4
Circuit breaker	1	1
Cold water tap	1	1
Worktop	S/Steel AISI 316 mm	S/Steel AISI 316 mm
Sink	1	1
Cabin	S/Steel AISI 316 mm	S/Steel AISI 316 mm
Lighting	>500lux	>500lux
Extraction outlet	1x200ø (*)	1x250ø (*)
Support for busbar	No	No
No. of sash windows	1	1
No. of sliding panes	2	2



Dimensional Data (Tolerance ± 5 mm)

Model BECOME D	D 1500	D 1800
Total width (mm)	1500	1800
Total height (mm)	2500	2500
Height of extraction outlet (mm)	2160	2160
Total depth (mm)	950	950
Usable interior width (mm)	1200	1500
Usable interior height (mm)	900	900
Usable interior depth (mm)	740/620	740/620
Height of work surface (mm)	900	900

3.4 FUME CUPBOARDS FOR RADIONUCLIDES

BECOME RB

Fume cupboard for handling radionuclides emitting beta type ionising particles.

Interior cabin made of fibreglass and polyester, with rounded corners to facilitate possible decontamination.

Front shield (mobile window) in 10 mm polycarbonate, overlapping the work area to ensure safety.

It features access ports which allow the operator access, without the need to open the sash.

Not recommended for concentrated mineral acids, solvents or pathogens.

Triple filter set which combines an impregnated carbon filter with absolute filters, with an efficiency of 99.99%.

Equipped as standard with a fixed flow system and frequency converter.

Services (Basic)	
Model BECOME RB	RB 1500
Electrical bases 230V/16A	4
Circuit breaker	1
Cold water tap	1
Worktop	Polyester
Sink	1
Cabin	Polyester
Lighting	-
Extraction outlet	1x200ø (*)
Support for busbar	No
No. of sash windows	1

BECOME RG

Fume cupboard for use with radionuclides generating gamma type ionising emissions.

Interior cabin made of fibreglass, finished in polyester, with rounded corners to facilitate possible decontamination.

Front shield (mobile window) in 10 mm leaded glass, overlapping the work area to ensure safety.

It has access ports which allow the operator access, without using the vertically opening sash window. Not recommended for concentrated mineral acids, solvents or pathogens.

Triple filter set which combines an carbon filter with absolute filters, with an efficiency of 99.99%.

Equipped as standard with a fixed flow system and frequency converter.

Services (Basic)	
Model BECOME RG	RG 1500
Electrical bases 230V/16A	4
Circuit breaker	1
Cold water tap	1
Worktop	Polyester + Pb 2,2 mm.
Sink	1
Cabin	Polyester + Pb 2,2 mm.
Lighting	-
Extraction outlet	1x200ø (*)
Support for busbar	No
No. of sash windows	1 - Leaded Glass



Dimensional Data (Tolerance ± 5 mm)

Model BECOME RB	RB 1500
Total width (mm)	1500
Total height (mm)	2550
Total depth (mm)	950

Note: Customers should submit a document in which the relevant type of isotopes are identified and the intensity of the radiation.

Dimensional Data (Tolerance ± 5 mm)

Model BECOME RG	RG 1500
Total width (mm)	1500
Total height (mm)	2550
Total depth (mm)	950

Note: Customers should fill a form in which isotopes are identified and the intensity of work.

4. GREEN CYCLE air recirculation fume cupboard

GREEN CYCLE

Designed for general use in the laboratory with the maximum use of interior space.

Designed and tested in accordance with the **EN 14175 standard**.

Filtration tests in accordance with NFX 15-211.

ASHRAE 110-1995 and EN 14175 containment tests.

Neutrodine filtration technology that has passed the most rigorous industry tests, carried out by Intertek.

Optimum for the evacuation of fumes, aerosols, fine dust and light particles from the work area to avoid contamination of the laboratory atmosphere.

Not recommended for compounds emitting ionising radiation, concentrated mineral acids with a high thermal load or pathogens.

Equipped as standard with a VAV system.

Safety features include stacked double filters, various sensors, an alarm and notification system and remote online monitoring software.

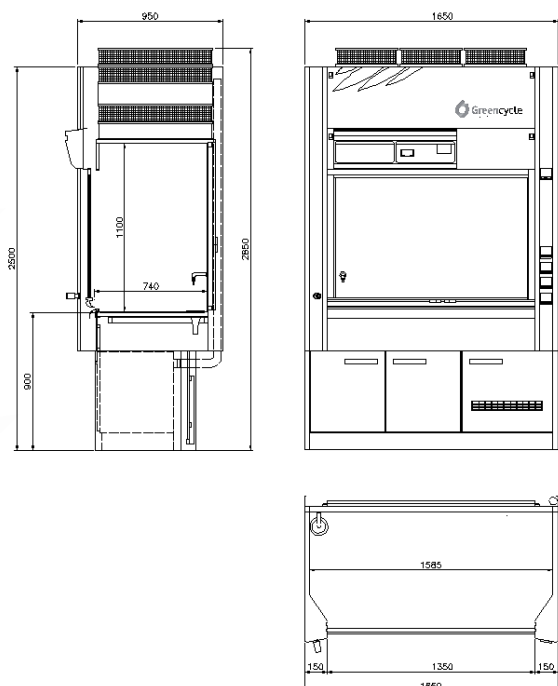


Dimensional Data (Tolerance ± 5 mm)

Model GREEN CYCLE	ST FILTER 1650
Total width (mm)	1650
Total height (mm)	2500
Height of filters (mm)	2670
Total depth (mm)	950
Usable interior width (mm)	1585
Usable interior height (mm)	1100
Usable interior depth (mm)	740
Height of work surface (mm)	900
Sash window opening (mm)	850

Services (Basic)

Model GREEN CYCLE	ST FILTER 1650
Electrical bases 230V/16A	4
Circuit breaker	1
Cold water tap	1
Worktop	Stoneware
Sink	1
Cabin	Acrylic urethane FIRE RESISTANT 6 mm.
Control	ERLAB
Lighting	>500lux
Support for busbar	9
No. of sash windows	1



STORAGE UNITS

5. Storage Units

5.1 CABINETS FOR STORING ACIDS AND BASES UNDERNEATH A FUME CUPBOARD

Built with Superan board made up of melamine resin coated MDF on the exterior faces and agglomerate particles on the interior. Provided with ventilation grille and outlet for connection to an extraction system.

Designed and manufactured in accordance with **EN 14175 standards**.

Equipped internally with trays for storing chemical products. Possible configurations:

Model	Compartments	Nº shelves	Shelf load max.	Dimensions (mm)
A-26 BECOME Fume cupboard (835)	1	1	15 kg.	835 x 500 x 635
A-27 BECOME Fume cupboard (535)	1	1	15 kg.	535 x 500 x 635
A-27 BECOME Fume cupboard (600)	1	1	15 kg.	600 x 500 x 635

5.2 MODULES FOR STORAGE UNDERNEATH A FUME CUPBOARD

Lower cabinets designed for correct storage and order of materials and products in laboratories. They feature soft closing as standard. Designed and manufactured in accordance with **EN 14727 standards**.

Possible configurations:

Modelo	Compartments	Nº shelves	Shelf load max.	Dimensions (mm)
MV-84 PA BECOME Fume cupboard	1	1	15 kg.	835 x 500 x 635
MV-54 PIA-PDA BECOME Fume cupboard	1	1	15 kg.	535 x 500 x 635
MV-60 PIA-PDA BECOME Fume cupboard	1	1	15 kg.	600 x 500 x 635

5.3 SAFETY CABINETS

Safety cabinets with resistance to fire in accordance with UNE EN-14470-1 (Type 90/90 minutes resistance to fire) with hinged doors, suitable for storing flammable liquids in work places.

Characteristics:

- Metal exterior body with plastic coating in RAL 7035 (light grey)
- Insulating filler composed of several layers of fireproof materials
- Intumescent joints for sealing gaps and spaces
- Interior surfaces with a plastic material coating with a high resistance to chemicals, impact and scratching
- Lip seals on the perimeter to prevent fumes from leaking
- Series earth connection on the rear wall of the cabinet
- Ventilation duct (NW 75, Ø 75 mm) on the rear wall of the cabinet

Model	Dimensions Exterior	Dimensions Interior	Weight (without the interior equipment)	Doors / Drawers
VBF.60.89.5-T+	890 x 500 x 600 (A x F x H) mm	770 x 380 x 500 (A x F x H) mm	130 kg.	2 hinged doors
VBF.60.11.5-T	1100 x 500 x 600 (A x F x H) mm	980 x 380 x 500 (A x F x H) mm	152 kg.	2 hinged doors
VBF.60.14.5-T+	1400 x 500 x 600 (A x F x H) mm	770 x 380 x 500 (A x F x H) mm (puertas batientes) 470 x 380 x 500 (A x F x H) mm (cajón para residuos)	210 kg.	2 hinged doors - 1 Drawer
VBF.60.59.5-S+	590 x 500 x 600 (A x F x H) mm	470 x 380 x 500 (A x F x H) mm	113 kg.	1 Drawer

OTHER EXTRACTION ELEMENTS

6. Other Suction Elements

6.1 VENTILATED ENCLOSURE (WALL / CENTRAL)

Suitable for similar uses and purposes as fume hoods, while additionally providing a physical barrier to assist with noise reduction. These enclosures make it possible to confine extensive work areas, avoiding cross-contamination between different analytical techniques and systems.

Characteristics

- Structural aluminium profiles 40x40
- 3+3 laminated safety glass or 6 mm polycarbonate panels
- Extraction outlet in the upper part. The diameter of the outlet will depend on the modulation
- Horizontal deflector in the upper part to improve the extraction air flow
- Front opening for air intake between the work surface and door of 20 mm

4 types of access available according to the users requirements:

- Offset sash window
- Hinged door
- Sliding door
- Folding door



Offset Sash window



Hinged Door



Sliding Door



Folding Door

Polypropylene hood



Stainless Steel Hood



6.2 EXTRACTION HOODS

We offer extraction hoods for localised extraction in laboratories. Options are available suitable for wall or ceiling mounting
 Suitable for capturing fumes and gases from hot oil or water baths, heating plates, muffles, stoves and chromatography, as well as any application which generates heat or non-toxic vapour.

Open extraction hood in polypropylene

Made of 10 mm thick welded PP. Dimensions: on demand.

Open extraction hood in stainless steel

Made of 1 mm thick austenitic stainless steel. Dimensions: on demand.

6.3 LAMINAR FLOW CABINETS

Vertical

Sterile vertical laminar flow cabins, particularly suitable for handling non-pathogenic biological samples, cell and tissue cultures, microbiological controls, preparation of pharmaceutical products, etc.

The vertical laminar flow system allows operators to work in conditions of sterility with absence of particles by means of the principle of continuous sweeping, providing total protection for the product and basic protection for the operator.

Exterior made of laminated steel, lacquered and kiln-dried, with an advanced design, which allows the filter changes to be carried out from the interior of the cabin, reducing the exterior dimensions and maintaining the spaciousness of the work area.

Work area in polished AISI-304 stainless steel.

Removable side made of tempered glass and front made of polycarbonate resistant to UV rays.

Horizontal

Sterile horizontal laminar flow cabins, particularly suitable for handling samples for hospital clinics, pharmacies, IVF, food control, in vitro cultivation in horticulture, electronics, micro-mechanics, opticians, etc. The horizontal laminar flow system allows operators to work in conditions of sterility with absence of particles by means of the principle of continuous sweeping, providing total protection for the product.

Exterior made of laminated steel, lacquered and kiln-dried, with an advanced design, which allows the filter changes to be carried out from the interior of the cabin, reducing the exterior dimensions and maintaining the spaciousness of the work area.

6.4 BIOLOGICAL SAFETY CABINETS

Biological safety cabinets offer simplicity, robustness and high reliability.

Independent fans and anemometers provide excellent control of air speed and automatic clearing of clogging in filters.

Available in various sizes:

A large variety of accessories and options complement each unit to adapt it to different applications.

Possible to be customised to client requirements.



AV 100



Mini V-PCR



AH 100



Mini H



BIO II Advance

6.5 EXTRACTION FANS FOR FUME CUPBOARDS

Polypropylene Extraction Fan

Single inlet anti-corrosive centrifugal fans made of polypropylene.

Fan:

- Casing in polypropylene
- Turbine with forward-facing blades, in polypropylene

Motor:

- Class F motors, with ball bearings, IP 55 protection
- Three-phase 230/400 V.-50 Hz. (up to 5.5 HP) and 400/690 V. Hz. (power over 5.5 HP)

Maximum temperature of the air to be transported: -20°C. + 50°C.

Finish: Plastic anti-corrosive material.

On demand: Special windings for different voltages.

Category 3 ATEX Certification

Steel Extraction Fan

Single inlet medium pressure centrifugal fans with casing and turbine in sheet steel.

Fan:

- Casing in sheet steel
- Turbine with forward-facing blades, in galvanised sheet steel

Motor:

- Class F motors, with ball bearings, IP 55 protection
- Single phase 230 V.-50 Hz
- Three-phase 230/400 V.-50 Hz (up to 5.5 HP) and 400/690 V.-50 Hz. (power over 5.5 HP)

Maximum temperature of the air to be transported: -20°C. + 120°C, maximum + 100°C model CMP-38.

Finish: Anti-corrosive in polyester resin.

6.6 AUTOMATIC REGULATING VALVES

Fume cupboards with variable air volume (VAV) monitor the position of the sash window and automatically adjust the volume of extracted air. VAV systems can achieve energy savings of up to 75%.

Burdinola has integrated components (hatch, actuator, control and sensor technology) from top manufacturers, developing a control application of that allows these elements to work together, in accordance with **EN 14175-6 standards**, creating the new VAV valve which we have called HAKA.



6.7 SCRUBBER FOR FUME CUPBOARD

Allows the installation of a decentralised solution in your fume cupboard or laboratory to remove acid and base residues from emissions to the atmosphere, having been extracted from the fume cupboard.

Características:

- Compact design scrubbers for incorporation in the upper part of the fume cupboards.
- They directly absorb the toxic and aggressive gases in the place of origin, as a result of which they actively contribute to protection of the environment.
- Toxic gases produced in the fume cupboard are extracted by the fan to pass through the scrubber.
- Gases pass through the shortest path via the suction nozzles, to the absorption chamber where the diffuser pump is located, which draws wash water from the bottom of the integrated tank and through injectors, causing a dense mist in the absorption chamber.
- In this way, an optimum mixture of harmful gases with wash water is obtained and, as a consequence, extremely efficient absorption. The wash water level is regulated by means of floats. The wash water level is maintained automatically.



C54



C90

Technical Data

MODEL	C54	C90
Materials	Exterior PP	Exterior PP
Flow m ³ /h	480-900	600-1400
Load Loss Pa	200-530	260-1140
Outlet	DN250	DN250
Width	950	1220
Depth	710	710
Height	550	550
Water tank volume in litres	90	110
Empty weight Kg.	135	170

6.8 NEUTRALISER UNIT FOR FUME CUPBOARDS

Allows the removal of acid and base residues from effluents from the laboratory or facility. The equipment carries out a neutralisation process, adjusting the PH level of the discharge to the level allowed for discharging to the drains.



6.9 ARTICULATED ARMS

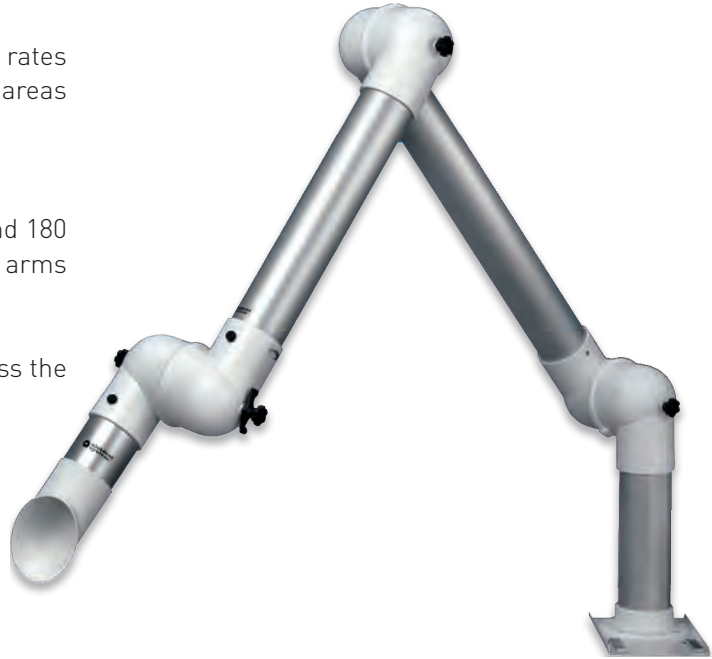
100 mm articulated arms

SYSTEM 100 is suitable for an extraction air flow rates between 140 and 400 m³/h. It covers a wide range of areas up to 2,630 mm.

75 mm articulated arms.

Suitable for an extraction air flow rate between 80 and 180 m³/h. The scope of the standard SYSTEM 75 range arms covers a wide range of areas up to 1990 mm.

Photo is an example. Please consult with us to discuss the various configurations available.



AFTER SALES SERVICE

7. After-sales service

MAINTENANCE SERVICE

Laboratory ventilation systems include safety features and high-tech components such as sensors and electronic controllers.

At Burdinola we recommend that our customers set guidelines for appropriate periodic preventive maintenance as an economical measure. To do this Burdinola has developed a procedural programme that is backed by over 20 years of experience.

The activities that we normally undertake are:

- Cleaning of the active elements of the installation
- Adjustments, re-tightening and controls
- Lubrication
- Changing elements following the safe operational life guidelines as indicated by the manufacturer
- Client own repairs scheduling

The **advantages that good maintenance offers** can be summarised in that:

- It increases operational safety
- It provides a longer useful lifetime for machines and installations
- It increases the efficiency and functional quality provided by the equipment.
- It increases availability rates.
- It increases environmental care levels

If it is considered appropriate, a more in-depth inspection can be carried out, such as tests on containment and other “in situ” parameters.

Burdinola Fume Cupboards
Leading the market





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*“We create **the safest** and most efficient laboratories in the world where researchers enjoy working towards a better society”*

Headquarters

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