

Green Cycle fume cupboards



Application

The Green Cycle fume cupboard is intended for general use in the laboratory. Fume cupboard with integrated filtration system, no extraction ducts required. Adaptable to the vast majority of ways of handling chemical reagents in laboratories. Not recommended for compounds emitting ionising radiation, concentrated mineral acids with a high thermal load or pathogens.

Specially designed for laboratories where flexibility is a critical aspect, the Green Cycle version with wheels is a unique item on the market.

Safe Product

Designed and tested in accordance with the EN 141756 standard parts 2, 3 and 6. Filtration tests in accordance with NFX 15-211. Large useful interior capacity with a cabinet which is 1,100 mm high inside, with a glazed upper part that allows full visibility of the tests being carried out inside.

Models



1. BECOME GC



2. BECOME GCR

Materials

- Resistant to chemical and mechanical stress
- Filtration system: it has filtration columns applicable to the vast majority of ways of handling products in laboratories, with the capacity to handle liquids and powder.
- Quick and easy reconfiguration of the filtration columns if requirements change.

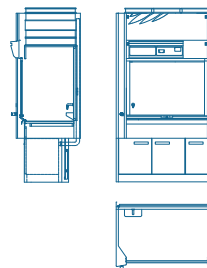
Optional accessories

- Motorised sash.
- Waste collection.
- Power sockets inside.
- Side window.
- Pass box.
- Cable glands.
- Storage under the fume cupboard.

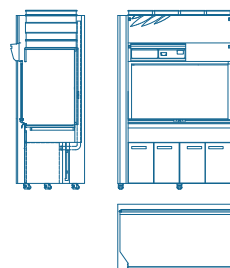
**For more details, see the chapter on "Accessories for fume cupboards".*

Drawings

BECOME GC



BECOME GCR



Technical data

External dimensions	
Width(mm)	1.500 1.800 2.200
Depth (mm)	950
Height including filters (mm)	2.670
Height (mm) (*)	2.500

(*) Minimum recommended laboratory height: 3000mm See lower heights.

Interior dimensions	
Width (mm)	1.435 1.735 2.135
Depth (mm)	740
Height (mm) (*)	1.100

All dimensional data Tol: +/- 5mm.

Technical data

Work dimensions	
Work height (mm)	900
Maximum operational height (mm) (*)	400
Recommended distance from sash (area directly behind the sash)(mm)	150
Recommended free space between bulky equipment and the interior walls of the fume cupboard (mm)	100
Recommended elevation of large equipment over the surface of the worktop (mm)	from 25 to 50

(*) When working, keep the sash as low as possible or closed, for th greater protection of the user and lower energy consumption. In the case of installing bulky equipment inside fume cupboards, it is recommended that in situ tests are carried out to ensure containment in these circumstances.

Technical characteristics

Models	BGC 1500	BGC 1800	BGC2200
Frame(*)	Side frames made of steel pipe, with sheet metal lids, coated with polyester resin. Lower frame.		
Worktop(**)	White, 26mm thick vitrified stoneware panel, with a ridged edge for retaining liquids.		
Interior of the cabinet	6mm compact high pressure with an acrylic urethane coating. Resistant to impact, humidity, chemical attack and antibacterial in accordance with DIN ES ISO 10545-13 and DIN EN ISO 10545-14. Reaction to fire B-s2-d0, as per EN 438-7..		
Sash	Sash made of 3+3 mm bi-laminar safety glass.		
No. of sashes	1		
No. Filtration Columns	3	4	5
Optional: Retractable wheels	They have a retractable system that makes it possible to move the fume cupboard or immobilise it with Silentblock support.		
No. of support for scaffold			12
Maximum load per scaffold support (kg) (*)	5		

(*) Optionally, the fume cupboard will be equipped with wheels to facilitate its movement in the laboratory.

(**) Optionally, a glass or Trespa Toplab Plus worktop with epoxy perimeter rim.

(***) Load considered at a distance of 100mm from the support. Higher support loads on the worktop.

Services(**)

LED lighting (20W)	3	4	5
230V/16A IP55 power sockets	4		
Magneto-thermal protection	1		

Optional services(**)

Sink	300x120x11mm made of PP.		
Water tap with remote control	Acid-resistant handle with identification code in accordance with EN 13792. Brass body and EPDM seal. Maximum working pressure of 10 bar.		
Combustible gas tap with remote control	Acid-resistant handle with identification code in accordance with EN 13792. Taps with safety lock. Brass body, ceramic seal with a nitrile gasket. Maximum working pressure of 07 bar.		
Instrumental gas tap with remote control	Acid-resistant handle with identification code in accordance with EN 13792. Brass body, fine adjustment valve, PTFE shut-off. Acid-resistant epoxy powder coating.		
Pressure reducers for instrumental gases	Compact design, brass body, with shut-off and control valve and pressure display. Maximum input pressure of 20 bar, output pressure of 1.0 bar to 8.0 bar. Optional tap for fine tuning.		
Pressure reducers for corrosive gases	Diseño compacto, cuerpo de Inoxidable,disponen de llave de corte, regulación y visualización de presión. Presión máxima de entrada 20bar, presión de salida 1,0bar a 8bar. Opcional llave para regulación fina.		
Power sockets (***)	Socket voltage 230 V - 16 A.		
	Socket voltage 230 V - 13 A.		
	Computer socket.		
	Telephone socket.		
	Voice and data socket.		

Thermal-magnetic cut-outs	16 A single-phase thermal magnetic circuit breaker.
	16 A three-phase thermal magnetic circuit breaker.
	20 A single-phase thermal magnetic circuit breaker.
	20 A three-phase thermal magnetic circuit breaker.
Socket power (**)	Single-phase power socket (3 poles) 230 V - 16 A.
	Single-phase power socket (3 poles) 230 V - 32 A.
	Three-phase power socket (5 poles) 400 V - 16 A.
	Three-phase power socket (5 poles) 400 V - 32 A.
Start / stop for accessories in fume cupboard	Start / stop switch.
	Emergency stop button.

(**) The services will be located on the side and front panels, the configuration will be carried out according to the needs of each customer. Models will be adjusted to the regulations in each country.
(***) Optionally, electrical outlets will be installed inside the fume cupboard with an externally-operated safety keypad.

Technical Installations

Models	BGC 1500	BGC 1800	BGC 2100
Height of output of filtration columns (mm)	2.670		
Minimum laboratory height	3.000		
Fume cupboard control	GFH		
Test flow rate (*)	440m ³ /hx mln.		
Electricity	The installation of shielded hoses and super-immunised protection is recommended for the feed to a fume cupboard or group of fume cupboards.		

(*) The flow rate data provided refers to that obtained in the tests in accordance with EN14175 part 3 and NFX 15-211 for an operational height of 375 mm, taking the limit values set by the German conglomerate BG Chemie and the French research institute INRS as a reference for containment. The dimensions of the HVAC system are not affected by these fume cupboards, as they recirculate 100% of the flow.

GFH Control System

Monitoring	Control	Operation of each fan.
		Extraction flow rate.
		Temperature measurement.
Alarms	Sistema de detección	Solvents.
		Acids.
		Ambient air quality.
Access control	Ventilation failure	Alarm in the event of failure with an indication of the fan number in question.
	Operational height	Alarm in the event of exceeding the operational height.
	Flow alarm	Alarm in the event of insufficient flow.
	Temperature	Temperature alarm at 60 °C. Temperature alarm at 80 °C with indication of interruption of ventilation.
Access control	Changing filters	Alarm to change filters with identification of the filter to replace.
	Username	Access to use the fume cupboard.
	Administrator	Access to loom up data and usage parameters.
	Maintenance	Access to all functions of the GC fume cupboard.