

ASTECC

MONAIR

Recirculating Fume Cabinet



Low cost, efficient and State-of-the-art design ●

Reliability and safety assured ●

Fully compliant to BS 7989:2001 ●



BIOQUELL
Bio-decontamination solutions

Why choose an ASTEC filtration fume cabinet?

The principle of filtration is simple. Contaminated air is drawn through two separate filters with clean air recirculating back into the laboratory. Astec fume cabinets are used in a diverse range of applications, from standard laboratory usage, through to complex forensic applications. Our highly trained team can advise on cabinets and filters suitable for your specific requirements. BIOQUELL have manufactured and supported products to protect your health for over 40 years. You will remember the **MICROFLOW** and **MDH** brands. More recently BIOQUELL has added **CLARUS** bio-decontamination equipment and services in order to provide even higher levels of control and safety into your working environment.

For know-how...

- Avoid the costs and disruption associated with the installation of ductwork
- Save on wasted HVAC energy costs for similar ducted units
- Eliminate the problems of insufficient make-up air available in your laboratory
- "Plug and play" - easy positioning and relocation within your laboratory
- Safety - provides the same containment performance as a ducted fume cabinet
- Quality assured - designed, manufactured and tested in the UK



For performance...

Simple and ergonomic design

- Aerodynamic sash opening to give largest working aperture*
- Translucent panels on all sides to provide "all round" visibility of your processes and experiments
- Florescent lighting to enhance natural or room illumination*
- A combination of filter types to remove both fumes and/or particulates
- Digital display window indicating airflow velocity
- Unique filter clamping mechanism for safe and easy installation and removal of filters



For safety...

Filtration designed to protect you and your environment

- Sensors automatically sample the filtered air downstream of the main filters and alert the operator of any potential break-through of contaminants*
- Audio/visual alarms to indicate filter break-through
- Sash open alarm to ensure the correct operating position is maintained*
- Safety filters (optional) to capture any breakthrough from main filter
- Integral fan and filter plenum head to ensure all fumes pass through the filter system
- Filter inspection window to confirm the correct filter is being used



For quality...

Designed to BS 7989:2001

- Complies with all parts of BS 7989:2001 for filtration fume cabinets
- Microprocessor electronic control and monitoring system
- Robust construction of epoxy powder coated steel framework
- CE approved

* Optional on the Monair Standard range.

MONAIR



Recirculating Fume Cabinet

Our new Monair range is a result of 25 years of ongoing research, development and manufacture. No other cabinet manufacturer has more experience of understanding your needs and safeguarding you and your working environment - the emphasis remains one of safety and reliability.



Unique filter clamping mechanism offering a safe and secure housing for filters, whilst remaining simple to remove and install



One touch control panel with clear digital display window (applies throughout the Monair and Monair Plus range)



Formed edges offering extra comfort, strength and rigidity



Hinged side panels for large equipment access and cleaning

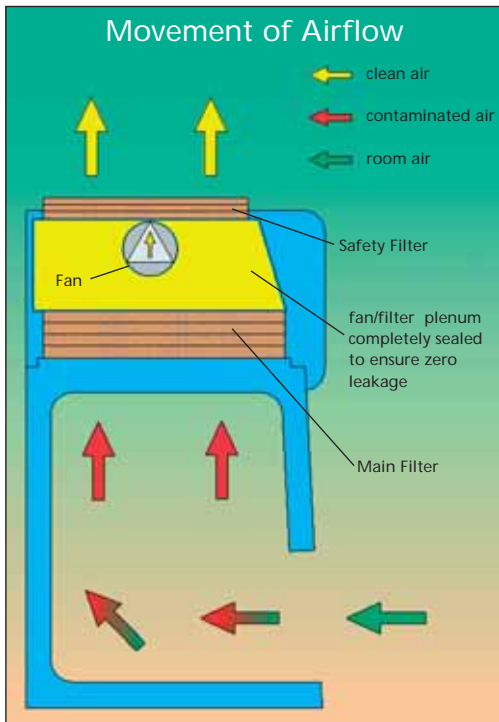
Profiled work tray - angled to assist cleaning, improve airflow and avoid contaminant build up

Full range of utilities available including double electric sockets, gas taps and water, tailored to suit your requirements



Increased opening (one of the largest on the market) for ease of use with a horizontal mid-position opening of 780mm, providing maximum accessibility at the working interface

Note: The image and details on this page refer to the Monair Plus 1250



BIOQUELL Filters

The filter is an essential part of the filtration fume cabinet. To achieve the highest air quality, our in-house specialists manufacture proprietary carbon filters specific to your application, using specially impregnated activated carbon.

Carbon filters can be used to remove the vast majority of chemical fumes. There are 7 types commonly used in the Monair range (extending to 14 for specialist applications - see technical specification data sheet) with some filters containing up to 4 different carbon types offering maximum protection.

Where powders are used - Astec HEPA filters offer particulate removal efficiency of 99.997% at particles down to 0.3 microns. Should your application require it, our carbon and HEPA filters can be combined to remove both vapours and particulates.

The filtration system is enhanced by the pre-filter which is fitted to every cabinet, in order to remove aerosols and larger particulates, with an efficiency of 95%.

BIOQUELL manufacture the ASTEC Monair filtration fume cabinets to meet the very highest of standards recognised by the industry - worldwide.

BS 7989:2001

The British Standard 7989:2001 specifies requirements for fume cupboards designed to recirculate air back to the room after filtering specified pollutants. Independent and in-house testing has certified that Monair Fume Cabinets (Plus and Standard models) conform to the stringent standards as defined by BS 7989:2001. Conformity includes electrical, mechanical and chemical testing, sound levels, ergonomics, ease of access, monitoring devices, assessment of potential hazard before use, materials of construction, the filtration system and the testing of filters and commissioning. The standard also incorporates BS EN 61010:2001 Safety requirements for electrical equipment for measurement, control and laboratory use.



EMC Certification - EN 61326:1997 - EN 61000:1995

Electromagnetic compatibility or EMC is the ability of a product to operate within its intended electromagnetic environment and to accept or emit RF disturbances within defined limits with the electromagnetic spectrum.

BS.EN.ISO.9001:-2000 - Cert No: Q 11436

BIOQUELL are accredited to BS.EN.ISO.9001:-2000 status as laid down by the British Standards Institution - further proof of our commitment to provide first class, high quality products, backed up with excellent pre-sales and after sales support.



BIOQUELL
Bio-decontamination solutions

ASTEC Monair Fume Cabinets

Astec fume cabinets offer the largest choice of standard sizes and features available on the market today. No external ducting is required as all filtered clean air is passed straight back into the room, keeping controlled environments (such as cleanrooms) balanced and working to maximum efficiency.

Supplied as bench mounted, free standing or as a mobile unit, duct-free filtration is available simply by connecting to an electrical outlet - almost anywhere.

Specification Summary

	750		1000		1250		1500		1750	
	PLUS	STANDARD	PLUS	STANDARD	PLUS	STANDARD	PLUS	STANDARD	PLUS	STANDARD
Dimensions: external										
W x D x H (mm)	780 x 700 x 1220*		1030 x 700 x 1220*		1280 x 700 x 1220*		1530 x 700 x 1220*		1780 x 700 x 1220*	
Dimensions: internal										
W x D x H (mm)	730 x 640 x 790		980 x 640 x 790		1230 x 640 x 790		1480 x 640 x 790		1730 x 640 x 790	
*including safety filter (1190mm without safety filter)										
Total Weight:										
excluding filters (kg)	69		101.5		110.5		119		156	
Main filter:										
weight (kg)	1 x 10		2 x 10		2 x 10		2 x 10		3 x 10	
dims W x D x H (mm)	350 x 556 x 110									
Safety filters: (optional)										
weight (kg)	1 x 4		2 x 4		2 x 4		2 x 4		3 x 4	
dims W x D x H (mm)	← 344 x 490 x 54 →									
Pre-filter:										
size (mm)	← 560 x 355 →									
efficiency	F8 EN.779:2002									
HEPA Filter:										
dims W x D x H (mm)	← 350 x 556 x 110 →									
efficiency	H13 en.1822-1:1998									
Working aperture:										
W x H (mm) *horizontal mid-point	*410 x 280	*515 x 210	*635 x 340	*765 x 210	*780 x 340	*1015 x 210	*680 x 345	*1100 x 210	*1000 x 345	*1515 x 210
Face velocity:										
m/sec	← 0.5 →									
Internal lighting:										
450 lux	2 x 15 Watt	Optional	2 x 15 Watt	Optional	3 x 15 Watt	Optional	3 x 15 Watt	Optional	4 x 15 Watt	Optional
Noise level:										
dB (A)	59		58		59		61		58	
Alarms:										
Low airflow / fan failure	Fitted on all models									
Filter alarm (solvents)	✓	Optional	✓	Optional	✓	Optional	✓	Optional	✓	Optional
Filter alarm (acids)	Optional on all models (in place of solvent alarm)									
Sash open	✓	Optional	✓	Optional	✓	Optional	✓	Optional	✓	Optional
Power supply:										
	230V 50Hz - 120V 60Hz - 100V 50/60Hz									
Construction:										
Head unit	Epoxy powder coated steel									
Enclosure	Epoxy powder coated steel frame. Acrylic sash, side & rear panels									
Tray	GRP	Polypropylene	GRP	Polypropylene	GRP	Polypropylene	GRP	Polypropylene	GRP	Polypropylene
Fans	1 x Centrifugal IP44		← 2 x Centrifugal IP44 →						3 x Centrifugal IP44	
Certification to:										
	BS 7989:2001 / BS EN 61010:2001 / EN 61326:1997 / EN 61000:1995 / CE Marked									

FILTER INFORMATION

Type:	General Description:
GP	General purpose use, primarily for solvent fumes
AMM	Ammonia and low molecular weight amines
ACI	Acid gases, sulphur dioxide
SUL	Hydrogen sulphide, organic sulphides, low molecular weight mercaptans and mercury vapour
FOR	Formaldehyde, gluteraldehyde
ETH	Low molecular weight ethers
CYN	Hydrogen cyanide and isocyanates
HEPA	Particulates and fine powders

Note:- For further details on filter selection, please consult our technical experts who can assist you in selecting the correct filter, designed to give you optimum performance and protection.

Other air filtration products from the ASTEC range

Monair 5 Fume Cupboard

- Compact bench mounted unit
- Integral lighting gives full illumination
- Low airflow alarm
- Simple to maintain
- Ideal for using or weighing small amounts of chemicals



Miniflow 8 Fume Cupboard

- Compact bench mounted unit
- Cut away sides for unrestricted access
- Low airflow alarm
- Simple to maintain
- Ideal for using or weighing small amounts of chemicals

EDU Mobile Fume Cupboard

- Fully mobile unit - will fit through a standard door opening
- All round visibility - clear acrylic glazing
- Low airflow alarm
- Safe to manoeuvre with low centre of gravity design
- All electrical components isolated from contamination
- Removable spillage tray
- Suitable for educational demonstrations and industrial applications
- Design conforms to BS7258, Building Bulletin 88 Design Note 29
- Has been tested to CLEAPSS and SSERC to meet stringent educational standards



After-sales customer service and support

BIOQUELL offers our customers comprehensive sales and service support before, during and after your purchase via our network of Area Managers and Service Engineers. Our technical expertise is available for help in selecting the right cabinet model for your application, with our in-house sales and service teams providing assistance with:

- | | | |
|---------------------------------|------------------------------|------------------------|
| • Preventative maintenance | • Calibration/validation | • Emergency breakdowns |
| • Cleanrooms | • Spare/replacement parts | • Service contracts |
| • Equipment bio-decontamination | • Installation/commissioning | • Technical queries |



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