

Monmouth



















Product Catalogue







THE MARKET LEADER IN CLEAN AIR SOLUTIONS

THE MARKET LEADER IN CLEAN AIR SOLUTIONS

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Our Story

Monmouth Scientific Limited, established in 2004, are one of the UK's leading designers, manufacturers and suppliers of Clean Air Solutions.

From our UK Headquarters in Somerset we specialise in Recirculating Filtration and Ducted Fume Cupboards, Laminar Flow and Biological Safety Cabinets. Our experienced team also offer a wide range of ISO Class Cleanrooms.

We carry out servicing, repair and calibration of Air Handling Equipment all over the UK and we are now regarded as one of the leading suppliers and manufacturers of Clean Air solutions, not only in the UK, but in Europe, Africa, The Middle East and Australasia.

Our client base consists of many prestigious companies and organisations in a wide range of sectors from Education, Defence, Aerospace, Motorsport and Private enterprise – the NHS, MoD, F1 Racing Teams, Royal Mint and Nuclear Power Stations, as well as many Schools and Universities across the country.



Circulaire® Fume Cupboards



The Circulaire® Recirculating Filtration Fume Cupboard is fitted with ultra-deep Activated Carbon or HEPA filters to guarantee maximum fume filtration efficiency.

Fully compliant with COSHH regulations and international standards including BS7989:2001 for Filtration Fume/Particulate Cupboards.

To ensure the cabinet is functioning correctly, every model has an animated colour LCD display showing the airflow is working within safe and calibrated parameters.

All Monmouth products are designed to have both low noise levels and low energy consumption to help your company stay carbon neutral. LED Lighting further improve efficiency.

C 650	C 900
650mm x 650mm	900mm x 650mm
x 1125mm	x 1125mm

Circulaire® Touchscreen Fume Cupboards



The Circulaire® Touchscreen Recirculating Filtration Fume Cupboards feature the very latest in air filtration technology.

Fully compliant with COSHH regulations and international standards, the cupboards are certified to BS7989:2001 for Filtration Fume/Particulate Cupboards.

The units employ extra-large capacity Activated Carbon filters for removal of fumes and/or HEPA filters for particulate removal. The filters are up to 30% bigger than those of rival Fume Cupboards and are significantly deeper making fume removal more efficient and effective.

Our revolutionary Visionaire® Touchscreen Control Interface is integrated into the cabinet to control & monitor all aspects of product operation.



CT 800	CT 1100	CT 1400	CT 1800
800mm x 700mm x 1285mm	1100mm x 700mm x 1285mm	1400mm x 700mm x 1285mm	1800mm x 700mm x 1285mm
CT PRO 800	CT PRO 1100	CT PRO 1400	CT PRO 1800

^{*}When Sliding Sash is at Maximum Opening.

Circulaire® ATEX Fume Cupboards



The Circulaire® EX is an ATEX Zone 1 / T4 Rated Fume Cupboard range which incorporates the latest in containment technology to provide full compliance with COSHH regulations and BS7989:2001.

Compliance with the ATEX Essential Health and Safety Requirements is certified to EN13463-1: 2009.

The main filters consist of HEPA for particulate removal or Activated Carbon that will be specifically matched to your application and are monitored with a hydrocarbon detection system to assist in the replacement of the filters. Clean air is drawn through the front aperture by the fan at a speed of 0.50 m/s collecting any fumes that may be present before passing through the particulate pre-filter and carbon filter in the head section. The filtered air is then expelled back into the room.

EX 1100	EX 1400
1115mm x 823mm	1415mm x 823mm
x 2176mm	x 2176mm

Circulaire® Powder Containment Booth



The Circulaire® Powder Containment Booth offers first class operator protection from both Powders and Particulate.

The booth is designed specifically for control of medium to heavy powders whilst dispensing from containment drums to a balance or smaller container.

The unit's open front design allows for very easy access to the working area for the easy transfer and manoeuvring a range of differing size containment drums whilst the high velocity rear extraction offers excellent containment, filtering air up to 1350m³/hr and achieving an air velocity of up to 0.9m/s.

The 1800mm wide booth is 2600mm high and utilises H14 HEPA Filters, 99.997% efficient @ 0.3µm, to meet COSHH compliance.

Manufactured from polyester powder coated mild steel, the unit is fitted with a recessed 48W LED Light to illuminate the working area offering optimal visibility.

The system is designed for a 950mm high work surface (not included), for balance placement on one side, the opposite side will be left open.

Size Specification (W x D x H)

PCB 1800

1800mm x 750mm x 2480mm (Fixed) / 2590mm (Mobile)

Ductaire® Ducted Fume Cupboards



The Ductaire® Ducted Fume Cupboard has been designed with the end-user in mind and can be installed into virtually any environment.

Compliant with BS EN 14175, the Ductaire® has a high chemical resistance and a fully welded polypropylene construction, offering an integral spillage containment area.

Each unit is fully tested and certified and offers exceptional airflow characteristics and user safety. The front glazing folds up to allow full access to the working chamber and all electronics are fully isolated from this chamber.

Size Specification (W x D x H)

D 700	D1000	D 1200	D 1500	D 2000	D 3000
700mm x 700mm	1000mm x 700mm	1200mm x 700mm	1500mm x 700mm	2000mm x 700mm	3000mm x 700mm
x 1026mm *	x 1026mm *	x 1026mm *	x 1026mm *	x 1026mm *	x 1026mm *

*Including 50mm Duct Spigot.

Ductaire® Titan Ducted Fume Cupboards



The Ductaire® Titan offers the very best features and quality in a Ducted Fume Cupboard.

Applications include; Laboratory, Pharmaceutical and Industrial Analytical Research as well as Industrial, Medical and Educational Establishments requiring extraction systems for operator protection.

Standard Features Include:

- Outer Carcass fabricated from Zintec Mild Steel, Powder Coated in Textured Matt White (RAL9016).
- 6mm Toughened Glass Sash, includes stops set at 500mm and 25mm.
- Alarm System LCD Air Speed read-out, Fan stop/start and programmable relay outputs and inputs.
- Interior 55W, Low Energy Lighting.
- Removable back baffle for easy cleaning and maintenance.
- Fully BS EN 14175 & COSHH compliant.

Their robust design and quality fabrication mean the systems offer years of uninterrupted use and like all Monmouth products, the range comes with a 5-Year Warranty.

DT 1000	DT 1200	DT 1500	DT 1800	DT 2000
1000mm x 900mm	1200mm x 900mm	1500mm x 900mm	1800mm x 900mm	2000mm x 900mm
x 2400mm				

Circulaire® Vertical Laminar Flow Cabinets



The Circulaire® Vertical Laminar Flow Cabinet offers clean air to ISO Class 4 (Class 10) using U15 ULPA particulate filters for the very best in product protection.

Air is initially drawn through an easy-change, high-quality EU4 pre-filter to remove all gross particulate. All air then passes through the fan system, before being pushed through a U15 ULPA filter, removing 99.9998% of all particles at 0.12 µm in size.

- Airflow Monitoring in m/sec or ft/min.
- Audible and highly visual alarms should levels exceed specified limits.
- As standard, the cabinets conform fully to BS EN ISO 14644 and BS EN 1822.
- Fitted with the Visionaire® Touchscreen Control System for control and monitoring of all aspects of product operation.
- Optional UV light with electronically interlocked night door for ultimate operator safety.
- Filter Differential Pressure Monitoring.
- Eco-Mode allows the option to place the cabinet into Standby after a set period of inactivity.

VLFT 1000	VFT 1200	VLFT 1500	VLFT 1800
1000mm x 663mm x	1200mm x 663mm x	1500mm x 663mm x	1800mm x 663mm x
1267mm *	1267mm *	1267mm *	1267mm *

^{*}Allow +150mm above for Air Intake/Filter Change and Service.

Circulaire® Horizontal Laminar Flow Cabinets



The Circulaire® Horizontal Laminar Flow Cabinet offers clean air to ISO Class 4 (Class 10) using U15 ULPA particulate filters for the very best in product protection.

Air is initially drawn through an easy-change, high-quality EU4 pre-filter to remove all gross particulate. All air then passes through the fan system, before being pushed through a U15 ULPA filter, removing 99.9998% of all particles at $0.12 \, \mu m$ in size.

- Airflow Monitoring in m/sec or ft/min.
- Audible and highly visual alarms should levels exceed specified limits.
- As standard, the cabinets conform fully to BS EN ISO 14644 and BS EN 1822.
- The Large Working Aperture allows for easy work area access
- Fitted with the Visionaire® Touchscreen Control System for control and monitoring of all aspects of product operation.
- Optional UV light with electronically interlocked night door for ultimate operator safety.
- Filter Differential Pressure Monitoring.
- Eco-Mode allows the option to place the cabinet into Standby after a set period of inactivity.

HLFT 1000	HLFT 1200	HLFT 1500	HLFT 1800
1000mm x 721mm x 1195mm	1200mm x 721mm x 1195mm	1500mm x 721mm x 1195mm	1800mm x 721mm x 1195mm

Guardian® Class I Biological Safety Cabinets



The Guardian® Class I Biological Safety Cabinet offers operator and environmental protection from biological materials and activities involving animal pathogens and genetically modified organisms.

Designed to incorporate the latest features to BS EN 12469:2000 Standards, the range of Microbiological Safety Cabinets offer total practicality and suitability for a huge variety of applications.

The units are provided as a re-circulating, or optionally ducted, system and utilise HEPA filtration to offer environmental and operator protection. The H14 HEPAs are rated at 99.997% efficient at 0.3µm particulate, the filter seals under negative pressure to prevent leaks into the cabinet.

The MSC1200C1 can be fitted with Carbon Filters to allow use with a multitude of chemical compounds, including formalin. Universal ports allow connection to proprietary VHP and formalin systems to ensure safe and complete disinfection.

Size Specification (W x D x H)

MSC 1200 C1

1200mm x 700mm x 1350mm *

*Add 15mm height for Outlet Carbon Filter, if fitted.

Guardian® Class II Biological Safety Cabinets



The Guardian® Guardian® Class II Biological Safety Cabinet utilises a specially ventilated enclosure, developed for sterile material handling.

The unit guarantees both operator and working materials protection from potential biohazard infections and complies to BS EN 12469:2000 and independently type tested by Public Health England.

Standard Features include:

- Low Energy 120watts of power.
- UV Lighting Strip ensures VHP & Formalin Disinfection.
- Electric Sash Adjustment & Closure.
- H14 HEPA Filters that help create an ISO Class 4 Clean Environment.
- Air Diffuser and Sloped Intake for efficient and smooth airflow.
- Removable Polished Stainless Steel Sectional Work Surface.
- Infra-Red Intelligent Sash Safety (IRISS).

Visionaire® Touchscreen Control Interface

The Visionaire® Touchscreen Control Interface is designed to control & monitor all aspects of product operation including; Air Velocity (m/sec or ft/min), Sash Adjustment, UV Sterilisation Cycles, Electrical Sockets, Cabinet Power and Light Variable intensity.

Audible and Visual alarms alert the user to maintenance requirements including: Service, UV Light replacement and Cabinet Hours Run. Formalin and VHP Cycles are also controllable.

MSC 800	MSC 1200	MSC 1800
800mm x 750mm	1200mm x 750mm	1800mm x 750mm
x 1351mm *	1351mm *	1351mm *

^{*+46}mm height for Outlet HEPA Filter.

Circulaire® Downflow



The Circulaire® Downflow Range, including Benches and Workstations, can be used in a variety of applications including: histological slide staining or minor cut-up work, routine testing on a laboratory bench and extraction within a production facility.



The solutions provide protection from fumes and particulate by drawing air through the stainless steel perforated worksurface, ensuring compliance with COSHH regulations.

With a wide choice of activated carbon and HEPA filter types available, the Circulaire® Downflow range is suitable for many different laboratory, industrial and forensic applications.

Size Specification $(W \times D \times H)$

W 700		W 1000
700mm x 600mm x 840mm		1000mm x 600mm x 840mm

DOWNFLOW BENCH BESPOKE DESIGN

Our experienced Design Team enable us to offer bespoke Downflow Bench units including Height Adjustable and Ducted solutions.

To discuss a requirement please contact a member of our Technical Sales Team.

Circulaire® Chemical Containment



The Circulaire® Chemical Dispensing Station and Chemical Storage units provide a compact and safe solution to the dispensing and safe storage of Formalin and chemicals in Operating Theatres, Pathology Laboratories & Mortuaries.

Circulaire® Chemical Dispensing Station

Within the Free standing unit, place a container into the base section, connect up and dispense through the tap. The large capacity carbon filter ensures that no fumes are returned into the working area. Where additional safety is required an outlet carbon filter can be fitted along with a Filter Condition alarm.

Circulaire® Chemical Storage

We are able to offer a number of COSHH compliant solutions for the containment and handling of Formalin or Formaldehyde fumes.

Whilst these products are all designed for use with Formalin this is not exclusive. We can offer a myriad of different filters that make the products suitable for a whole host of chemical applications.

		C	550 FDS		
650mm x 600mm x 2023mm					
FSC 600 L	FSC 600	FSC 900	FSC 1200 L	FSC 1200	FSC 1300
600mm x 500mm x 1234mm	600mm x 500mm x 2154mm	900mm x 500mr x 2154mm	n 1200mm x 500mm x 1234mm	1200mm x 500mm x 2154mm	1300mm x 500mm x 2154mm

Flexible Wall Cleanroom Canopies



Flexible Wall Clean Air Canopies can be constructed in any size or shape. They can offer cleanliness levels between ISO Class 7 and ISO Class 9.

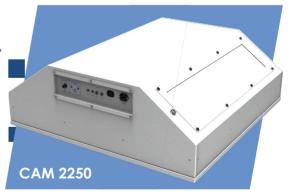
The system consists of an aluminium or powder coated steel frame with floor to ceiling strip curtains hung on 1, 2, 3 or all 4 sides.

They can be provided on adjustable feet for permanently locating in a fixed area, or the system can be mounted on lockable wheels enabling them to be wheeled over equipment when necessary.

Clean Air Modules

Clean Air Modules (CAM) can be fitted to a wall, floor or ceiling designed to create a positive pressure environment within Cleanrooms.

These systems have varied air speed controls and provide clean air through an EU4 grade pre filter and an H14 HEPA filter, which is 99.997% efficient at 0.3 microns.



Size Specification

CAM 400	CAM 900	CAM 1000	CAM T 2000	CAM 2250
400 m ³ /hr	900 m ³ /hr	1000 m³/hr	2000 m ³ /hr	2250 m ³ /hr

Cleanroom Kits







BRITISH MANUFACTURED



FIVE YEAR WARRANTY



SIMPLE BUILD & CONSTRUCTION



ISO CLASS 7 & 8 ENVIRONMENTS



Self Assembly Cleanroom Kits are constructed in a number of standard sizes guaranteeing ISO Class 7 and 8.

Quick Delivery

Entirely designed & manufactured at our HQ in the UK, select from multiple available setups and we will ship to you in a matter of weeks.



Simple Construction

We provide a solution with detailed instructions that is easily constructed by anyone with basic DIY skills.



Flexible Validation

Once installed, the cleanroom is ready to be validated to the required classification.



Improved Aluminium Framework

Specifically designed for Cleanroom use, Monmouth have developed a structure that is constructed from smooth profiles and free of horizontal surfaces, significantly reducing the potential of particulate build-up.



For more info please visit www.cleanroomkits.co.uk

Size Specification (WxDxH)

MODULE 4M	MODULE 6M	MODULE 9M	MODULE 12M
2000mm x 2000mm	3000mm x 2000mm	3000mm x 3000mm	4000mm x 3000mm
x 2350mm	x 2350mm	x 2350mm	x 2350mm

Available with Optional Atriums.

Aluminium Modular Cleanrooms



BRITISH <u>Manufactu</u>red

FIVE YEAR WARRANTY

BESPOKE DESIGN OPTIONS

ISO CLASS 6 - 9 ENVIRONMENTS

Our Aluminium Modular Cleanrooms offer a cost-effective solution to creating a guaranteed clean environment within an existing room or space. The area is constructed from free-standing aluminium framework which can be assembled on site in just a few hours.

Each room is entirely bespoke, allowing us to accommodate sizes from small to large scale constructions. All components are manufactured from long lasting and easily cleaned materials to ensure years of uninterrupted service. The construction is lightweight and can be dismantled and relocated if required. With a choice of different size standard elements, a variety of working areas can be constructed. Panel walling is constructed from aluminium composite, to suit requirements, and clear non-break polycarbonate creates window panels.

Air cleaning filtration device(s) are fixed to the outside walls or ceiling and as air enters the room it is drawn through a HEPA filter (99.997% efficient at 0.3 microns) creating a positive pressure and clean air environment. A variety of levels of cleanliness can be achieved from ISO Class 6-9.

The Modular Cleanrooms can be built with or without changing/entrance areas. The entrances can be constructed as sliding doors, hinged doors, strip curtains or a combination of the three. If preferred, transfer hatches can be built in to allow the safe and easy passing of items into the clean air environment.

Modular Cleanrooms



Our range of Modular Cleanrooms typically use 80mm thick double steel skinned, food safe coated, composite wall panels.

We can provide levels of cleanliness from ISO Class 6 through to ISO Class 9, depending upon customers' requirements. We can provide a full service from design and initial specification through to a full turnkey installation.

The range typically utilises a plastic-coated double steel skinned 80mm thick wall panel that deliver an impressive strength to weight ratio, hygiene and temperature control, plus fast build times.

This system will virtually eliminate the risk of mould and bacterial growth thanks to its ability to repel water and vapour.

The panels are also fibre free, so there's no risk from airborne contamination. Engineered joints give excellent air tightness for further protection and prevention of dust ingress. Lengths of up to 18m give you more flexibility in design and can speed up construction.

A choice of surface finishes and colours are available but typically include: Foodsafe laminate/polyester, PVF2 and HPS200.

Rooms can be constructed in any size or shape and can be provided with self-supported walk-on ceilings if required.

Circulaire® Powder Containment Cabinet



The Circulaire® Powder Containment Cabinet is designed to contain powders while using Micro and Semi-Micro Balances. Operating personnel and the surrounding environment are protected effectively against contamination of toxic substances.

Optimal research results start with a robust environment. The PCC balance enclosure offers the user reliable weighing results with proven safety.

The unit comes fitted with a single high efficiency H14 HEPA filter but is also available with an additional H14 exhaust HEPA filter and/or carbon filters. The low velocity inward flow of air into the cabinet protects the operator without disturbing the powder during handling.

The air flow is guided towards the interior in order to prevent released particles and aerosols from leaving the controlled working area. This guarantees personal protection. The HEPA H14 filters retain the particles effectively at the source and optimised air flow design ensures the highest possible level of safety.

Size Specification (WXDXH)

PCC 90	PCC 120	PCC 150
900mm x 854mm	1200mm x 854mm	1500mm x 854mm
x 970mm */1100mm **	x 970mm */1100mm **	x 970mm */1100mm **

^{*}Standard Exhaust | **Ducted or Carbon Exhaust Options.

Clean Tent



BRITISH MANUFACTURED



ISO CLASS 5 ENVIRONMENT



FULLY PORTABLE



SIMPLE BUILD & CONSTRUCTION



Clean Tent is an innovative design concept in cleanroom technology. It is a fully portable cleanroom, complete with gowning room.

Intended for users that require temporary cleanroom facilities, clean storage, or portability for on-site work, the Clean Tent covers most user requirements at a low capital cost.

Being fully portable, Clean Tent does not require planning, estates or building permissions.

Features & Benefits

- ISO Class 5/Class 100 Environment H14 HEPA Main Filter
- Full Portable Cleanroom
- Extremely Quick Assembly
- Compact Storage
- Cleanroom quality air in the field



Model 675	Model 750	Model 1700
3650mm x 2500mm	4250mm x 2500mm	6100mm x 3650mm
x 2150mm	x 2150mm	x 2150mm

Skanfog® Pure Laboratory Isolator



+/-PRESSURE OPERATION



LEADING ISOLATOR TECHNOLOGY



ISO CLASS 5 ENVIRONMENT



AUTOMATED DECONTAMINATION CYCLES



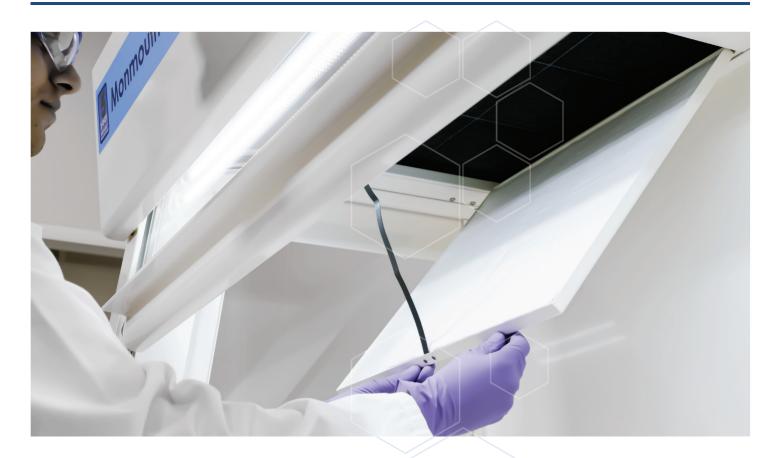
The Skanfog® Pure guarantees ISO Class 5 containment inside the enclosure, eliminating the requirement for a full Cleanroom environment.

The unit's closed containment provides a safe handling condition, including when working with highly potent products and utilises fast and safe $\rm H_2O_2$ decontamination cycles with the patented Skanfog® Pure technology.

The Modular, space saving design requires no connection to HVAC due to the integrated Skan Nano® catalyst system.

The unit is fitted with a 10" full colour touch screen control system that allows the highest level of control and monitoring. Audible and Visual alarms alert the user to maintenance requirements. The unit has two working chamber sizes available, either with two or four glove ports. The airlock (equipped as standard with a shelf) can be available on the right, on the left or on both sides.

2 GLOVE PORT	4 GLOVE PORT
2811mm x 955mm x 2277mm	3300mm x 955mm x 2277mm



Trusted Support & Maintenance

Our range of Service Solutions cater for client specific needs, from single visits to long term service contracts, covering multiple sites all over the UK & Ireland.

We pride ourselves on offering a comprehensive service, carried out by skilled and qualified engineers, to safeguard your employees.

We can advise on product suitability for changes of application or arrange maintenance visits to ensure your investment remains in perfect working order.

High Quality Manufacturing

Our Manufacturing Facility can produce single one-off bespoke cabinets all the way through to large scale production runs and utilises the latest production techniques to ensure on-time delivery.

All products are rigorously tested to ensure compliance with the latest requirements to British and European standards.

We offer a comprehensive installation and commissioning service supplying solutions to clients that are ready for use.

Monmouth Scientific

The UK's leading designer, manufacturer and supplier of Clean Air Technology.

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