

Walk-In Fume Cupboards

Safe enclosures prioritising
accessibility & safety



TION's walk-in fume cupboards safely house heavy or large equipment and materials that cannot be contained inside a regular fume cupboard. Helping to shield laboratory workers and protect sensitive processes.

Walk-in fume cupboards or ventilated enclosures are designed to house heavy equipment like bioreactors and drum mixers. It supports access to the workspace at high and low levels, allowing staff to position and manoeuvre their testing apparatus or materials safely and efficiently. We manufacture both ducted and ductless walk-in fume cupboards using 100% medical-grade welded polypropylene.

Key Benefits:

- 7" Full Colour Screen
- EN 14175 Certified.
- Customisable Dimensions
- Polypropylene Construction



Energy-Efficient LED Lighting

Sealed LED lighting offers eco-friendly, cost-effective 800 LUX illumination.



Lining Materials

We offer different lining materials including polypropylene, stainless steel, PPS, and TRESPA.



Sash Design

Large front opening for easy access. With a variety of bespoke options available.



Totally Customisable

We make our cabinets to ANY specification you need and without any bespoke charge.



Intuitive User Interface

All controls in one place with our user-friendly interface with intuitive calibration and night setback mode.



Polypropylene Construction

We manufacture our fume cupboards using 100% virgin medical-grade welded polypropylene.

Call now on **+44 (0) 1223 790028** to place your order or email **support@tion.co.uk**

For further product details and to see more from our range, visit **www.tion.co.uk**

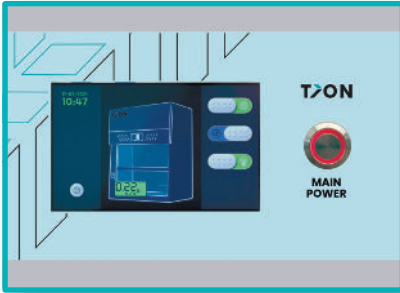
TION's walk-in fume cupboards are customisable systems prioritising technology and ergonomics. If your cabinet requires specific materials or functionality that is not listed below, contact our solution design team on 01223 790028.

Ducted & Ductless



- Ducted: Fishtail outlet 250mm or 315mm in size
- Ductless: HEPA, ULPA and carbon filters available

Touch Screen Control Panel



- Available in 7 (Standard model) or 9 (Pro model) inches.
- Airflow velocity display
- Low airflow alarm display
- Fan control on/off
- Calibration settings
- Energy-efficient "Eco Mode"

Variable Air Volume & Auto Sash



- Only available on the 9" Pro panel & vertical sash models
- Air volume is controlled based on the cabinet's face velocity
- Comms with electronic dampers
- Configurable PID-controlled sash
- BMS connection enabled

Walk-In Fume Cupboard Type



- Horizontal sliding doors
- Vertical single sash (weighted)
- Vertical duel sash (weighted)

Rear Baffle Plate



- Improved airflow performance
- * Baffle adjustment screws



Red Light Alarm System

- Real-time airflow monitoring
- Visual and audible alarm
- Programmable



Drainage

- 200 mm side well (drip cup)
- Rubber or polypropylene sink



Custom Accessories

- *Taps
- Fould out benchtops
- Power outlets
- Centrifugal fans



Bund Cover

- Manufactured from high-quality, 304 stainless steel
- Grated or sheet design



Polypropylene Carcass

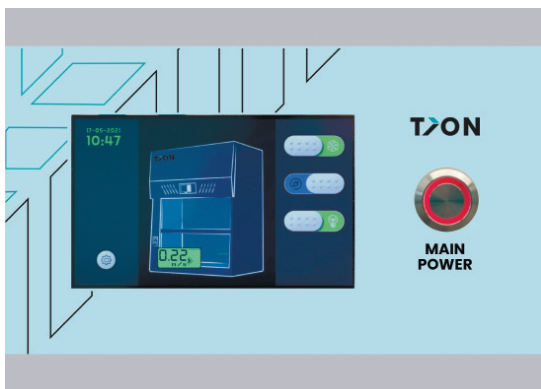
- 100% corrosion resistant
- Sustainable
- Lightweight & durable





The TION touch-screen control systems are manufactured in-house, providing our engineers with a greater degree of access and flexibility over the final product.

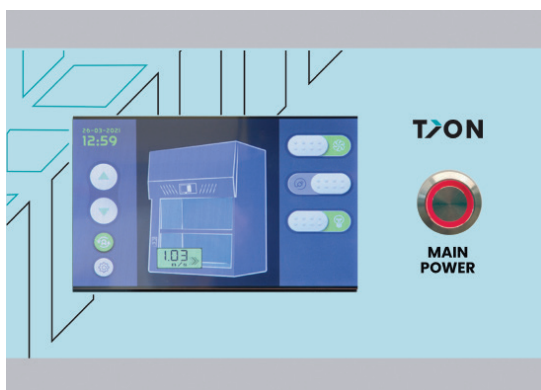
The software functions as a self-contained ecosystem, removing the breakdown costs associated with third-party solutions. Because we control the software development process, the requirement for manual buttons and switches are also reduced.



Standard 7" Touch Screen Panel

As standard, the TION walk-in fume cupboards use a 7" touch screen control panel that includes:

- Airflow velocity display
- Low airflow alarm display
- Lighting controls
- Calibration settings



Pro 9" Touch Screen Panel

The pro version of the TION control system comes with a 9" panel which provides all of the features of the 7" panel and also enables:

- VAV control
- Electronic auto sash (when fitted)
- Upgradable software system



Red Light Alarm System

The TION control system incorporates a red-light airflow alarm, alerting the user to a potential airflow fault or obstruction inside the cabinet.

This system is particularly effective in noisy environments or large facilities where visual fault recognition is a priority. When alerting, the cabinet will glow red until the issue is resolved.



VAV Technology

VAV, or Variable Air Volume, is a smart energy conservation system designed to mitigate excessive energy usage and costs. It achieves this by limiting airflow according to the cabinet's sash height. If the sash is closed, airflow stops, consuming less electricity by reducing external fan speeds.

When used in conjunction with our auto-sash solution our clients can save up to 80% on their energy costs.

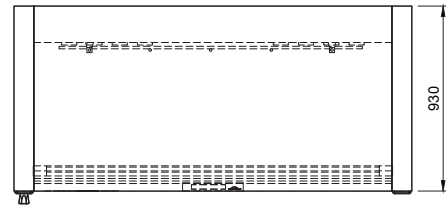
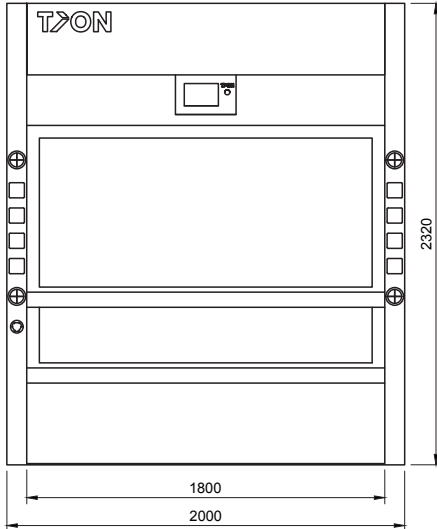


100% Polypropylene Carcass

No corrosion, ever. Enables ultimate flexibility in the design process, providing our clients with limitless customisation options.

The preferred fume cupboard material of choice, medical-grade welded polypropylene, offers increased chemical resistance and durability. It's a lightweight material with a high tensile strength that's able to support up to 4800psi.

Walk-In Fume Cupboard Technical Data



Design Data

Cabinet Material	Medical-Grade Welded Polypropylene
Work Surface Material	Medical-Grade Welded Polypropylene
Internal Lining Material	Medical-Grade Welded Polypropylene
Design Life	20 Years
Technology	Optional constant air velocity/variable air velocity

Electrical Data

Master Supply	1Ph/13A/240V/50Hz
Slave Supply	As required
Power Outlets	4 x 1Ph/3A/240V/50Hz

Safety Equipment

Fire Suppression	Optional Co2/powder
Emergency Stop	Optional external interlock

Operational Data

Max Sash Height	1800 mm (unless otherwise specified)
Sash Work Height	500 mm total opening (unless otherwise specified)

Disclaimer: Technical Specifications may be subjected to further changes without notice.



Ducted Walk-In Fume Cupboards

Our ducted products use DW154-certified ductwork with energy-efficient VAV technology (optional). We also offer delivery, installation & commissioning services to ensure your cabinets are fully operational.

Spec/Model	WI1200-D	WI1500-D	WI1800-D	WI2000-D	WI2500-D
Walk-In Fume Cupboard: Ducted					
External Size WxDxH (mm)	1200 x 930 x 2320 mm 47.3x 36.6 x 91.3"	1500 x 930 x 2320 mm 59.0 x 36.6 x 91.3"	1800 x 930 x 2320 mm 70.8 x 36.6 x 91.3"	2000 x 930 x 2320 mm 78.7 x 36.6 x 91.3"	2500 x 930 x 2320 mm 98.4 x 36.6 x 91.3"
Workspace: Rear Baffle To Aerofoil / Door WxDxH (mm)	1000 x 600 x 1990 mm 39.4 x 25.5 x 78.3"	1300 x 600 x 1990 mm 51.2 x 25.5 x 78.3"	1600 x 600 x 1990 mm 63 x 25.5 x 78.3"	1800 x 600 x 1990 mm 70.8 x 25.5 x 78.3"	2300 x 600 x 1990 mm 90.5 x 25.5 x 78.3"
Front Sash Max Opening (mm)	1800 mm / 70.8"				
Front Sash Working Height (mm)	500 mm / 19.7" total opening				
Certification	EN - 14175/ASHRAE 110-1995				
Air Velocity	0.5+0.1 m/s, 100+20 FPM				
Cabinet Material	White polypropylene				
Floor Material	Polypropylene, stainless steel or ESD (electro static dissipative)				
Control System	7" full-colour touch screen with air flow velocity, low airflow alarms, fan controls and calibration settings				
Optional Control System (Pro Model)	9" full-colour touch screen with VAV controls				
Power Supply Options	110/220V, 50/60 Hz, includes a single phase power supply. A three-phase power supply can be specially ordered				
Illumination	800 LUX eco-friendly LED lighting				
Customisation Options	Sashes (vertical sliding sash or horizontal doors) taps (water, gas nitrogen, vacuum, others), sinks, sumps, shelves, multi-sash, partitions, glove apertures, dimensions				

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Ductless Walk-In Fume Cupboards

Our ductless fume cupboards are compatible with carbon, HEPA and ULPA filters and adhere to strict EN-14175 standards. Each model is fully customisable, including dimensions, gas taps and shelves.

Spec/Model	WI1200-R	WI1500-R	WI1800-R	WI2000-R	WI2500-R
Walk-In Fume Cupboard: Recirculating					
External Size WxDxH (mm)	1200 x 830 x 2420 mm 47.3x 32.6 x 95.3"	1500 x 830 x 2420 mm 59.0 x 32.6 x 95.3"	1800 x 830 x 2420 mm 70.8 x 32.6 x 95.3"	2000 x 830 x 2420 mm 78.7 x 32.6 x 95.3"	2500 x 830 x 2420 mm 98.4 x 32.6 x 95.3"
Workspace: Rear Baffle To Aerofoil / Door WxDxH (mm)	1000 x 580 x 1800 mm 39.4 x 24.8 x 70.9"	1300 x 580 x 1800 mm 51 x 24.8 x 70.9"	1600 x 580 x 1800 mm 63 x 24.8 x 70.9"	1800 x 580 x 1800 mm 70.8 x 24.8 x 70.9"	2300 x 580 x 1800 mm 90.5 x 24.8 x 70.9"
Noise Level	<60dB				
Front Sash Max Opening (mm)	1800 mm / 70.8"				
Front Sash Working Height (mm)	500 mm / 19.7" total opening				
Certification	EN - 14175/ASHRAE 110-1995				
Air Velocity	0.5+0.1 m/s, 100+20 FPM				
Cabinet Material	White polypropylene				
Floor Material	Polypropylene, stainless steel or ESD (electro static dissipative)				
Filter Types	Carbon filters for solvents, acids, bases, formaldehyde, multi gas (blend of materials) /HEPA/ ULPA				
Control System	7" full-colour touch screen with air flow velocity, low airflow alarms, fan controls and calibration settings				
Optional Control System (Pro Model)	9" full-colour touch screen with VAV controls				
Power Supply Options	110 / 220V, 50/60 Hz, single phase				
Illumination	800 LUX LED lights				
Customisation Options	Sashes (vertical sliding sash or horizontal doors) taps (water, gas nitrogen, vacuum, others), sinks, sumps, shelves, multi-sash, partitions, glove apertures, dimensions				

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Discover

This includes an extensive breakdown of key project budgets, such as building specifications, processes, workflows, and the laboratory itself. We understand the importance of capturing project details early on to reduce the chance of price complications and extended timelines.



Develop

During the development stage, you will collaborate and engage with core TION personnel and project stakeholders to develop a solution that's fit for purpose within your chosen space. Our aim is to alleviate any concerns or potential roadblocks and arrive at a final specification.



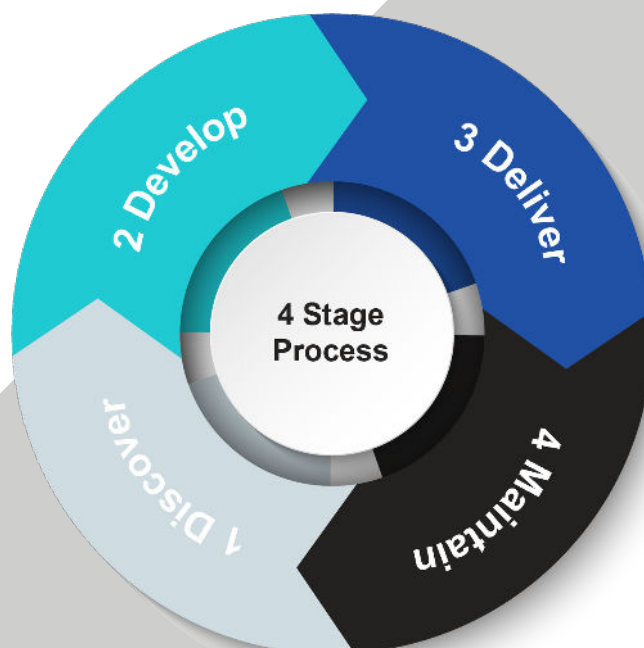
Deliver

Deliver is where the rubber meets the road, and we transform your build space into a cutting-edge laboratory. Our delivery personnel will coordinate with your team to ensure that every step of the program is clear and delivered on time by working closely with on-site contractors.



Maintain

Completing a project is really the first step. Ensuring reliability and consistency of communication following a project is paramount. Everything from asset registration, job logging, and PPM (Planned preventative maintenance) is covered by our methodology.





Contact us today for more information
Call us on +44 (0) 1223 790028
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