

Wet Scrubber Fume Cupboards

Protecting your staff & the environment.



100% Polypropylene Fume cupboards for heavy chemicals. Ideal for Acid digestion, using HF (Hydrofluoric Acid) and where reducing environmental impact is paramount.

Wet scrubber fume cupboards increase user safety and reduce toxic chemical emissions by cleaning (scrubbing) polluted air before it is exhausted into the atmosphere. Typically, scrubber fume cupboards are the preferred option when dealing with a high volume of chemicals such as hydrofluoric or sulfuric acid. The vapour produced from heating these substances creates highly corrosive environments, so we manufacture our cabinets using medical-grade welded polypropylene.

Key Benefits:

- Polypropylene construction
- Integrated scrubber
- Optional pH monitoring
- ▶ Auto-dosing options



Integrated Wet Scrubber

Cupboard mounted scrubber system removes chemicals from the airstream.



Ability to add caustic soda or similar to the scrubbing system to alleviate the requirement for a manual top-up.



Optional pH Monitoring

Real-time monitoring of scrubber tanks to ensure contents is pH neutral before disposal.



100% polypropylene carcass

No corrosion, ever. Allows for ultimate flexibility in design.



Worksurface Options

We manufacture ceramic, stainless steel and polypropylene work surfaces.



Intuitive User Interface

Monitor every aspect and control all elements of the unit operation with our user-friendly, full-colour interface.



TION's wet-scrubber 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.

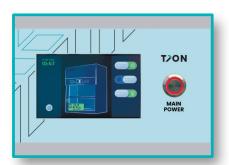
Duct Connection



- Fishtail outlet
- 250mm or 315mm size

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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
- Air volume is controlled based on the cabinet's face velocity
- Comms with electronic dampers
- Configurable PID-controlled auto-closing sash
- BMS connection enabled

Base Cabinets

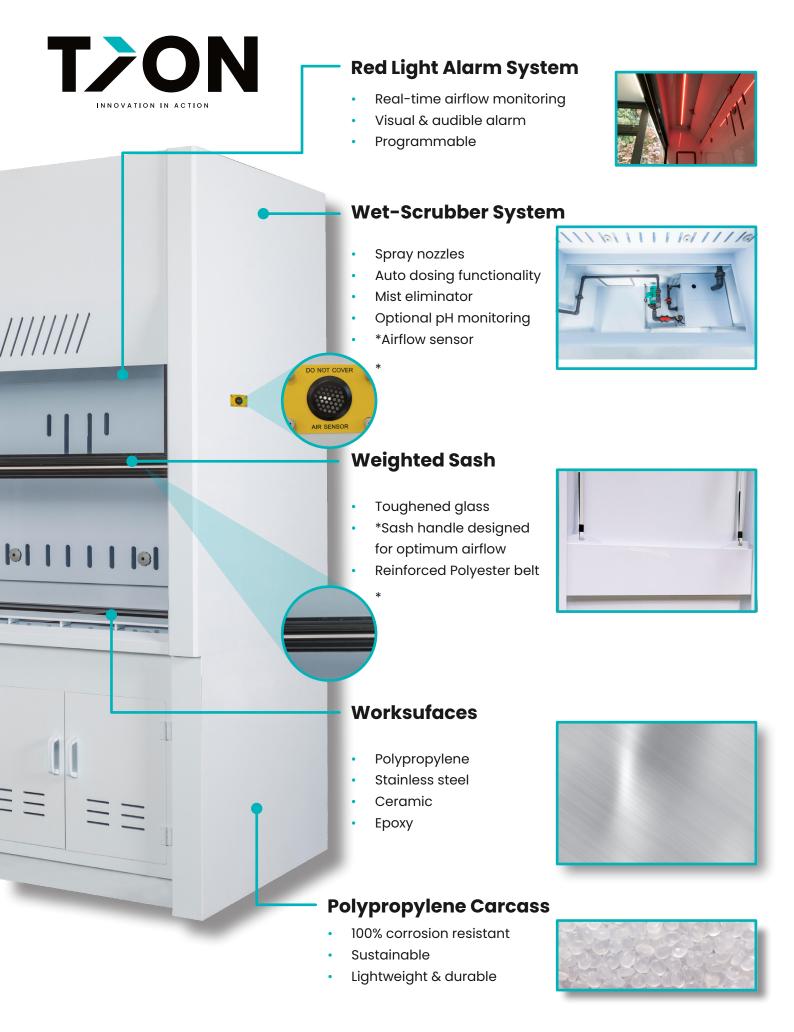


- * Vented Storage
- 90-minute cabinets
- Drawer units
- · Height adjustable stand
- Custom / hybrid options

Aerofoil



Improved performance through smoothing of inflow air



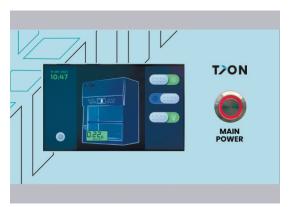




The TION control system and software are manufactured in-house, working as one centralised unit. This removes the breakdown potential between third-party systems and provides greater design flexibility.

Thanks to its touch-screen functionality and form factor, no buttons or manual switches are required.

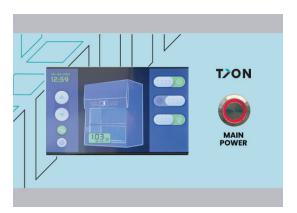
The control system is available in two types:



Standard 7" Touch Screen Panel

As standard, the TION non-VAV cabinets include a 7" touchscreen control panel that includes:

- → Airflow velocity display
- Low airflow alarm display



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







Red Light Alarm System

The TION control system incorporates a programmable red-light airflow alarm, which alerts 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 & 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.



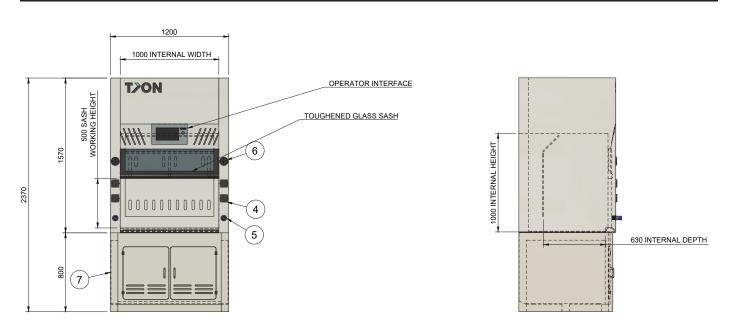
100% Polypropylene Carcass

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.



Wet Scrubber 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	720mm (unless otherwise specified)						
Sash Work Height	500mm (unless otherwise specified)						

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





Wet Scrubber Fume Cupboards

Our wet scrubber products come in a variety of sizes ranging from 1200 to 2500mm. We also offer delivery, installation, and commissioning services to ensure your cabinets are fully operational.

Spec/Model	PPFC1200 -WS	PPFC1500-WS	PPFC1800-WS	PPFC2000-WS	PPFC2500-WS		
Wet Scrubber Fume Cupboard: Standard & Pro							
External Size WxDxH (mm)	1200 x 980 x 2370 mm 47.3x 38.6 x 93.3"	1500 x 980 x 2370 mm 59 x 38.6 x 93.3"	1800 x 980 x 2370 mm 70.9 x 38.6 x 93.3"	2000 x 980 x 2370 mm 78.7 x 38.6 x 93.3"	2500 x 980 x 2370 mm 98.4 x 38.6 x 93.3"		
Workspace: Rear Baffle Plate To Aerofoil WxDxH (mm)	1000 x 580 x 1000 mm 39.4 x 22.8 x 39.4"	1300 x 580 x 1000 mm 51.2 x 22.8 x 39.4"	1600 x 580 x 1000 mm 63 x 22.8 x 39.4"	1800 x 580 x 1000 mm 70.8 x 22.8 x 39.4"	2300 x 580 x 1000 mm 90.5 x 22.8 x 39.4"		
Stand Dimensions WxDxH (mm)	1200 x 950 x 800 mm	1500 x 950 x 800 mm	1800 x 950 x 800 mm	2000 x 950 x 800 mm	2500 x 950 x 800 mm		
Front Sash Max Opening (mm)	720 mm / 28.3"						
Front Sash Working Height (mm)	500 mm						
Certification	EN - 14175/ASHRAE 110-1995						
Air Velocity	0.5±0.1 m/s, 100±20 FPM						
Cabinet Material	White Polypropylene						
Work Table Material	HPL/Ceramic/Epoxy/Polypropylene/Stainless Steel						
Control System	7" colour touch-screen with air velocity, low airflow alarms, fan control, calibration settings and energy-efficient Eco mode						
Optional Control System (Pro Model)	9" full-colour touch screen with dynamic 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 LED lights						
Customisation Options	Taps: (water, gas nitrogen, vacuum, others), sinks, sumps, shelves, multi-sash, partitions, glove apertures, dimensions, storage, height adjustable stands, auto-dosing and pH monitoring						





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, PPM (Planned preventative maintenance) is covered by our methodology.

