



ChemFAST Classic&Sharp

Total Exhaust Fume Cupboard
with constant air volume
and variable air volume



LABORATORY AND
INDUSTRIAL EQUIPMENT

ChemFAST Classic&Sharp

Total Exhaust Fume Cupboard

CHEMFAST CLASSIC AND SHARP ARE FUME CUPBOARDS ABLE TO PREVENT ANY TYPE OF CHEMICAL RISK

ChemFAST Classic and Sharp assures flexibility, safety and user friendliness and represents the ideal solution for chemical labs thanks to a combination of high standards of protection for the operator with a reduced air consumption. It prevents the risk of chemical agents, vapors and aerosols contamination, during normal routine laboratory work.

Modulated air volume is determined by the degree of exposure of the operator.

Get ready to move forward your safety targets.

APPLICATIONS

ChemFAST are suitable for the containment and removal of toxic vapors and aerosol. Applications for may be found in many laboratories: [clinical diagnostic testing](#), [biological and medical research](#), [analytical chemistry](#), [Q. C.](#), [biotechnology](#), [pharmaceutical industries](#), [food](#), [fine chemical](#), [petrochemical](#), [cosmetic](#), [photographic laboratories](#) and [electronics industries](#).

	Low heat load	High heat load	Organic solvents	Flamable Substances	Weak acid and diluted inorganic acids	Concentrated inorganic acids (Room Temperature)	Concentrated inorganic acids (High Temperature)	Cytotoxic Substances
ChemFAST Premium	😊	😊	😊	😊	😊	😊	😞	😐
ChemFAST Sharp	😊	😊	😊	😊	😊	😊	😐	😞
ChemFAST Classic	😊	😊	😊	😊	😊	😊	😐	😞
ChemFAST Custom	😊	😊	😊	😊	😊	😊	😞	😞
ChemFAST Elite/Top	😊	😐	😐	😐	😊	😊	😞	😞
CytoFAST Elite	😊	😐	😐	😞	😐	😐	😞	😊



Suitable



Suitable for occasional use and/or with dedicated accessories and/or with personal protective devices



Not suitable

ChemFAST Classic&Sharp

Total Exhaust Fume Hoods

SMART
COMBINATION OF
HIGH STANDARDS
OF PROTECTION
WITH REDUCED AIR
CONSUMPTION

ChemFAST Classic are **total exhaust** chemical fume hoods using the **Constant Air Volume technology (CAV)** allowing to choose the safest inflow speed for the removal of chemical agents.

Designed to guarantee operator and environmental safety with a ventilation unit outside the building, these units comply with the requirements of the EN 14175 part 2, 3 and "Machinery Directive 2006/42/ CE" standards and their performances are tested by accredited laboratory ILAC-MRA member.

ChemFAST Sharp are **total exhaust** chemical fume hoods using the **Variable Air Volume technology (VAV)**, which regulates the volume of exhausted air depending on the opening of the sliding front sash.

Designed to guarantee operator and environmental safety with a ventilation units outside the building, these units comply with the requirements of the EN 14175 part 2, 3, 6 and "Machinery Directive 2006/42/ CE" standards and their performances are tested by accredited laboratory ILAC-MRA member.



ChemFAST Classic

Constant air volume, continuous safety, real savings

ChemFAST Classic is the latest generation of **Constant Air Volume** fume hood where the inflow speed can be adjusted during the installation phases (and preventive maintenance) in a range between 0.3 and 0.7 m/s while a pressure switch installed inside the plenum, controls the correct flow rate. **This allows to select the safer speed according to the chemicals to be removed** offering then the best compromise when it comes to HVAC needs and energy savings.

HOW IT WORKS

The operation of **ChemFAST Classic** is based on the principle of a **constant flow vented system**: thanks to a remote fan, the air is drawn in from the room where the hood is installed through the front opening, then is drawn on the worktop removing the chemical contaminant, prior being exhausted from the top via a 250 mm duct.

SIMPLE AS IT IS

Exhaust flow rate and inflow speed of **ChemFAST Classic** can be calibrated during installation at three different levels (0,3-0,5-0,7 m/s) in order to find the perfect compromise between air conditioning consumption and pollutants to be removed.



Backlit user friendly keys inform the operator about

- Power on/off
- Alarms

Customized Option on Classic Model are available for handling strong acids at high temperatures: ceramic covers and teflon coating are the available options.



LIGHTING

The combination of LED lights and the presence of lateral glasses provide the highest lighting level to the work area creating an ideal working space.



SLIDING FRONT SASH

Easy for maintenance due to the front-mounted counter weight blocks, the vertical sliding sash is mounted in an aluminum frame with an ergonomic handle running from left to right thus ensuring a smooth sliding of the glass.

INTERNAL CHAMBER

The internal space is designed to use the entire working surface. Special baffles ensuring the best air performance, are present on the internal back wall.

FREE SPACE UNDER THE HOOD

The wide space left under the cabinet leaves complete liberty to the user who can then choose to install a variety of solutions, from safety storage cabinets (classic or vented) to normal storage compartments.



WORK SURFACE

As standard an ipergres ceramic work surface is supplied for strong acids handling at high emperature.

Anyway, a variety of different solutions can be offered, from polypropylene work surface to handle hydrochloric acid to TRESPA work work surface.





SEMI-GLOSS PAINT WITH SURFACE

Roughness LO,15 RA, is made of mixture of epoxy resin powders applied electrostatically with a thickness of >100 microns, RAL 9010 color for the main shell and RAL 5015 for the front panel with heat resistance >200 °C and resistance to direct impact 5 Nm.

TECHNICAL COMPARTMENT

Fixtures are located in the upper part on the right side in a compartment specifically designed to host multiple service fixtures.

Smart pass-through ports are located instead in the lower part of the right side.

Up to 4 controls or alternatively, 3 pressure reducers can be installed, while a drip cup can be installed in the work area on the right side.

SERVICES AND UTILITIES

Electric sockets IP66 rated can be placed outside from min. 4 to max. 8.

ERGONOMICS. Plenty of space beneath the fume hood allows the operator to work sitting on a chair.



ChemFAST Sharp

Variable air volume, constant safety

ChemFAST Sharp is the latest generation of **Variable Air Volume** fume hoods able to modulate the inflow air volume **according to the opening of the vertical sliding sash**.

The presence of vane anemometers allows an accurate measurement of the air flow. Such solutions have been put in place keeping a strong focus on operator's safety and power consumption savings.

HOW IT WORKS

The operation of **ChemFAST Sharp** is based on the principle of a **variable flow vented system**.

Differently from CAV hoods, VAV units are supplied with an inverter unit or damper actuator adjusting the exhaust flow rate proportionally to the opening/closing of the front sash.

MORE ENERGY SAVINGS

The power and air consumption of **ChemFAST Sharp** are variable. On the other hand, face velocity is fixed at 0,5 m/s, whatever level the front glass is opened (alternative setting at 0,3 m/s).

Optimized energy consumption and reduced CO₂ emissions in environment thanks the innovative ECS microprocessor able to control all the main ventilation functions as well as regulating the air flow speed by compensating the pressure drop and restoring the ideal conditions.

More precision. A real vane anemometer supplies the most accurate reading of the air velocity within the exhaust duct.

Easy connection to an external remote blower.

Silent operation: the plenum, the hood structures and the software itself, are designed to provide an optimal air management ensuring then silent operation with sound pressure levels far lower than the parameters specified in the current European standard EN 14175 for chemical fume hoods.

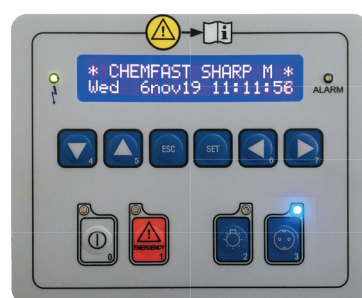
HMI & CONTROL UNIT

An user-friendly HMI with an intuitive control panel and soft touch keyboard with:

- Power on/off
- Light on/off
- Sockets on/off

Microprocessor monitoring system to control the main functional parameters

- Audible and visual alarms for air speed
- Emergency key for maximum air exhaust



TECHNICAL SPECIFICATIONS



Description	Unit	Classic 12	Classic 15	Classic 18	Classic 21	Classic 24
Overall Dimension WxDxH ⁽¹⁾	mm	1200x957x2380	1500x957x2380	1800x957x2380	2100x957x2380	2400x957x2380
Useful Dimension WxDxH	mm	1180x750x1200	1480x750x1200	1780x750x1200	2080x750x1200	2380x750x1200
Maximum frontal opening	mm	755	755	755	681	607
Working opening	mm	500	500	500	500	500
Weight	Kg	296	344	398	452	508
Lighting	Lux	>800	>800	>800	>800	>800
Electrical Input Data	V	380V AC 3P+T				
Frequency	Hz	50	50	50	50	50
Power Consumption ⁽¹⁾	W	150	150	200	200	350
Exhaust diameter	mm	250	250	250	250	250
Inflow Air Velocity ⁽²⁾	m/s	0.3/0.5/0.7	0.3/0.5/0.7	0.3/0.5/0.7	0.3/0.5/0.7	0.3/0.5/0.7
Air Flow Rate in Working Condition ⁽³⁾	m³/h	490/815/1140	650/1085/1520	810/1355/1900	975/1625/2275	1135/1895/2645

⁽¹⁾ External exhaust fan excluded

⁽²⁾ Selected during installation (0,3/0,5/0,7) without compromising containment

⁽³⁾ Measured with 500 mm frontal opening and 0,3/0,5/0,7 m/s inflow air velocity

Description	Unit	Sharp 12	Sharp 15	Sharp 18	Sharp 21	Sharp 24
Overall Dimension WxDxH ⁽¹⁾	mm	1200x957x2380	1500x957x2380	1800x957x2380	2100x957x2380	2400x957x2380
Useful Dimension WxDxH	mm	1180x750x1200	1480x750x1200	1780x750x1200	2080x750x1200	2380x750x1200
Maximum frontal opening	mm	755	755	755	681	607
Working opening	mm	500	500	500	500	500
Weight	Kg	296	344	398	452	508
Lighting	Lux	>800	>800	>800	>800	>800
Electrical Input Data	V	230V AC 2P+T	230V AC 2P+T	230V AC 2P+T	230V AC 2P+T	230V AC 2P+T
Frequency	Hz	50	50	50	50	50
Power Consumption ⁽¹⁾	W	150	150	200	200	350
Exhaust diameter	mm	250	250	250	250	215
Inflow Air Velocity ⁽²⁾	m/s	0,5	0,5	0,5	0,5	0,5
Air Flow Rate in Working Condition ⁽³⁾	m³/h	815	1085	1355	1625	1890
Minimum Air Flow Rate ⁽⁴⁾	m³/h	50	65	80	97	115

⁽¹⁾ External exhaust fan excluded

⁽²⁾ Selected during installation (0,25-0,75) without compromising containment

⁽³⁾ Measured with 500 mm frontal opening and 0,5 m/s inflow air velocity

⁽⁴⁾ Measured with minimum frontal opening and 0,5 m/s inflow air velocity



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Striving everyday to improve our environmental performance, FASTER developed environmental procedures are founded on three guiding principles:

- Protect the Environment for present and future generations manufacturing low energy consumption equipments
- Reduce risks and improve efficiencies
- Introduce improved technology and processes

