



# ChemFAST Premium

Hybrid Technology  
Fume Hood



PROTECTION, SAFETY, RELIABILITY.  
AND MORE.

Partner in your choices.

---

According to FASTER  
philosophy, people, their safety  
and the environment  
in which they work come first.

*What do the lab operators need?*

*How will their work develop?*

**FASTER method is based on innovative solutions which challenge old habits making the routinary work better, easier and safer.**

Whatever the area is - analysis, planning, organization - our main goal is to increase the safety standards.

Safety is one of the basic needs of human beings and FASTER has been focusing on this for more than 30 years.

**The development of the project for this new type of safety cabinet, designed for the chemical risk, has been guided by environmental ergonomic principles:** instead of the operator trying to adapt himself to the constraints of the workstation, the workstation is now easily adapting itself to the operator.



## FOR CHEMISTS - FROM THOSE WHO KNOW CHEMISTRY

The idea of the Chemfast Premium safety cabinet comes out from a direct investigation of the expectations and needs of those who work within the chemical lab: researchers and technical people were asked what aspects of the collective protection devices against chemical risks had to be improved and the answer to this question has been the **ChemFAST Premium**.

THE CABINET FOR  
THE CHEMICAL LAB

## SAFETY – OR ENVIRONMENTAL FRIENDLINESS?

Both of them! An integrated approach without compromises has enabled us to achieve both goals: we believe that both safety and environmental friendliness are roots coming from the same tree. For these reasons, the air inside the **ChemFAST Premium** is always filtered before being exhausted externally.

Not only: even the air outside the working chamber is filtered. This made it possible to keep the level of contaminants close to the operator extremely low, and this helped us to limit to the maximum the volume of air used. On equal dimensions, the **ChemFAST Premium** consumes 80% less air than the traditional lab cabinets, and 40% less air than the cabinets that have secondary inflows.

**ChemFAST Premium** is also suitable for low intensity activities, where the use of small quantities of chemical products is implied; thanks to its innovative filtration system, this unit can also be used independently from the ducting systems.

SAFETY AND  
ECOLOGY

## LET'S DESIGN THE LABORATORY OF THE FUTURE

The energy consumption of such labs decreases by 40%. Does it seem impossible? Not for us: **we have developed an advanced aeraulic system of continuous air recycling and filtration, which thanks to the continuous filtration of the air inside the working chamber, removes the contaminants exactly from the point where they were released.**

**ChemFAST Premium** is also equipped with a ventilated compartment where reagents as well as liquids and solids for disposal can be stored. All this is perfectly integrated into this system.

FROM 40% TO 80%  
LESS ENERGY  
CONSUMPTION

# ChemFAST

*The first Hybrid Technology Chemical Fume Hood*

## CONTROL SYSTEMS

PID probe, differential pressure control, maintenance reminder: **three independent units** which control the efficiency of the filtration system.

## ANEMOMETRIC FAN

Meant for the **control of the flow rate and velocity**: utmost accuracy and quick responses without calibration issues and reliability of the hot wire probes.



## MONOLITHIC GRES WORK SURFACE

The special glossy finishing makes it **highly resistant to chemical attacks**.



## IP66 ELECTRICAL SOCKETS

In order to have a maximum level of protection when really necessary, that is when the socket is plugged. It is possible to safely install these sockets inside the cabinet too.

## FILTRATION COMPARTMENT

It is possible to choose the more suitable filters composition according to the kind of job that will be carried out. Filter replacement is easy and clean.

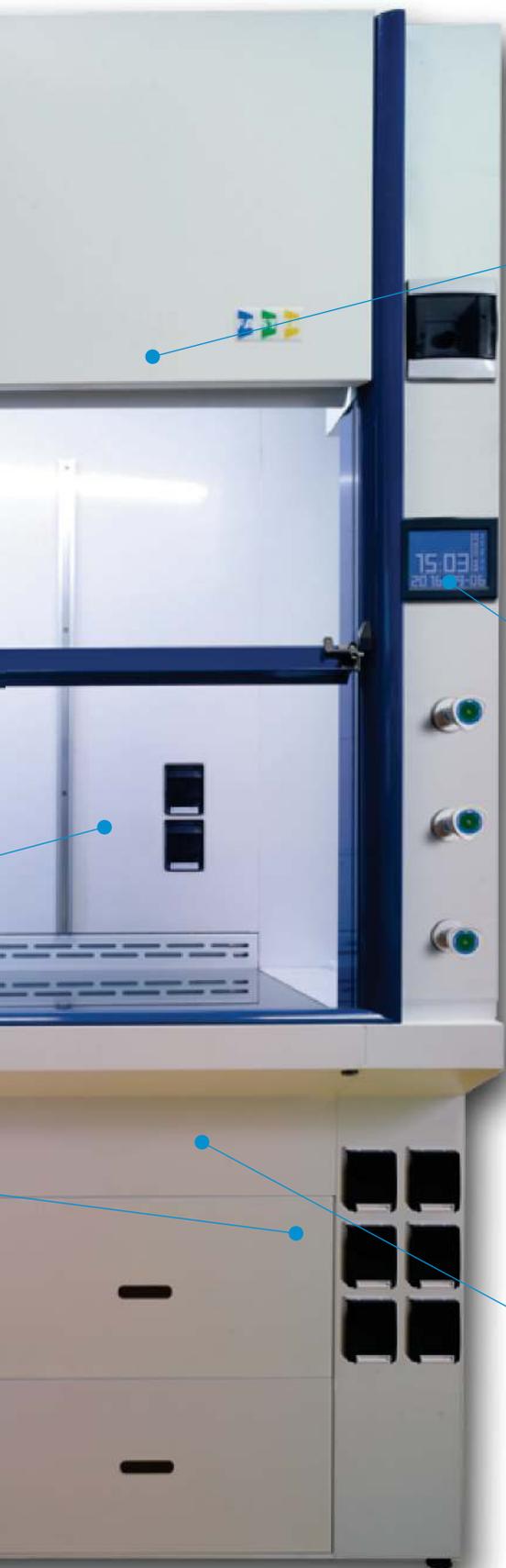
## VENTILATED COMPARTMENT

Meant for the daily storage of acids and bases or storage of waste material tanks.



# T Premium

Fume Hood fitted with double fan



## LED LIGHTING

High internal lighting and reduced energy consumption

## SIDE WALLS

High visibility mean safety

## COMPACT DESIGN

Maximum use of the internal volumes and depth, thanks to an advanced internal aerualics and reduced depth utilities columns.



## TOUCHSCREEN CONTROL PANEL

With **self-explanatory icons**: the cabinet must be safe and operative at first touch.

## ENERGY SAVING

**80% less energy** consumption compared with a fixed flow rate unit.



## ERGONOMICS

At last a comfortable chemical fume hood where **the operator can work sitting on a stand**.



## SAFETY MUST BE SIMPLE

Visibility and intuitiveness of the important elements, clear functional friendly installations, full accessibility; all this contributes to create a safe working environment. By simply pressing a key you will have an operative ChemFAST Premium.

No keyboard and no menu to let the operator fully concentrate on his work.

NO KEYBOARD,  
NO MENU

## PRESERVE THE PERFORMANCE, THE VALUE

In order to guarantee and keep the safety of the performance over the time it is essential to follow a specific protocol of programmed maintenance.

With more than 30.000 installations over the world, FASTER know well how all this is important. ChemFAST Premium is an instrument projected to be continuously improved in its multiple aspects: with this aim in mind, we have thought of a unit that could be connected to get a remote check from *FASTER ON CALL* service.

FASTER  
ON CALL

## OPERATOR PROTECTED = PROTECTION OF THE ENVIRONMENT

Conditioning air in the laboratory is a valuable asset, and since it is expensive producing it, it is important not to waste it. The particular aeraulics of the new generation cabinets, characterized by controlled and regulated flows, enabled us to reduce to the minimum the volumes of conditioning air taken from the environment.

This process goes even beyond the severe constraints of the UNI EN 14175 standards: fully aiming at the protection of the environment, even that small quantity of air used, is filtered before being exhausted.

A traditional chemical fume hood, 1,5 cm in width, working for 8 hours a day, has the same energy consumption as an apartment of 120 mq. With our ChemFAST Premium it is possible to reduce it by 80%, once for ever.

MAXIMUM  
PROTECTION



# ChemFAST Premium

Chemical Fume Hood

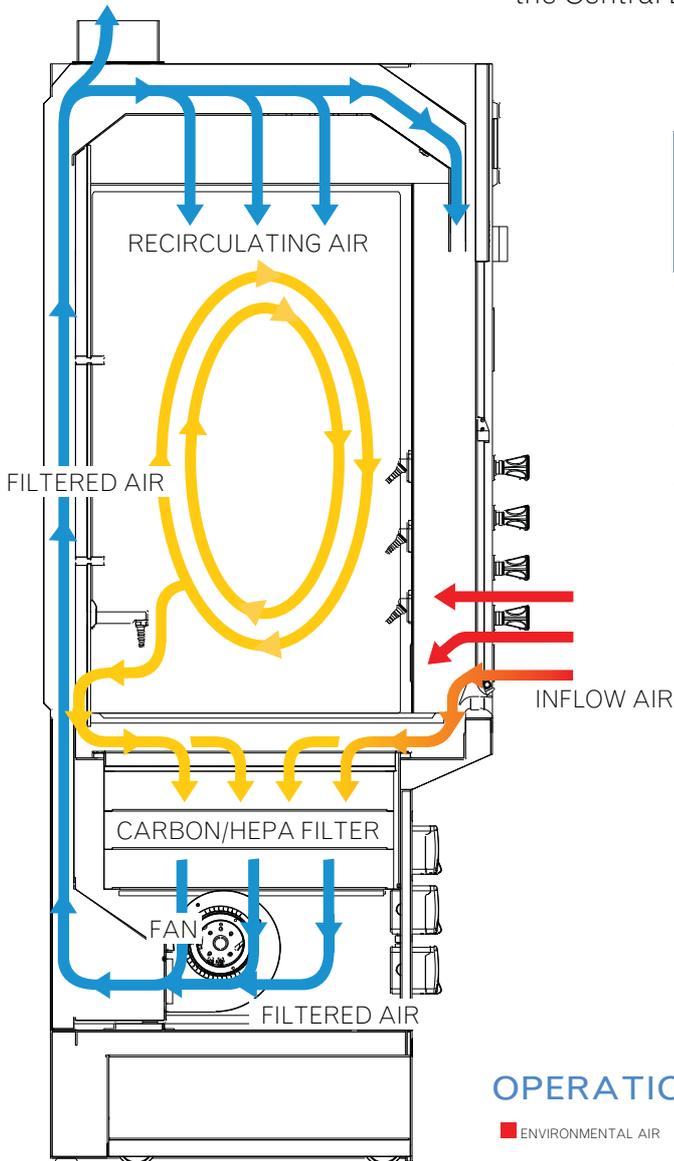
SAFETY, FRONT VELOCITY, REDUCTION OF THE ENERGY CONSUMPTION

*Not too long ago, the inflow velocity was an important parameter to make an estimation of the energy consumption and see how safe a chemical fume hood is.*

With a low velocity, drafts caused by doors, windows, vents oriented towards the front of the cabinet are enough to cause a leakage of dangerous products from the working area.

High aspiration velocities offer more protection but consume thousands of cubic meters of conditioning air. **ChemFAST Premium** reduces the inflow velocity bringing it very close to zero, but at the same time, thanks to a dynamic vertical barrier on the work surface, the unit ensures containment, filtration, complete removal of contaminating products and compounds. Moreover, a **ChemFAST Premium 15**, if compared to a fixed air flow rate cabinet, same size, both operative for 8 hours each day, 220 working days and both installed in the Central Europe, enables a saving of 1.000 € per year.

EXHAUSTED FILTERED AIR



## ChemFAST Premium

- ✓ No more exhaust bulky ducting
- ✓ No more exhaust of non-filtered air
- ✓ No more complicated installations

### OPERATIONAL PRINCIPLES

■ ENVIRONMENTAL AIR ■ CONTAMINATED AIR ■ FILTERED AIR



## TECHNICAL SPECIFICATIONS

Description	Unit	ChemFAST Premium 12	ChemFAST Premium 15	ChemFAST Premium 18
Overall dimensions (wxdxh)	mm	1200x945x2200	1500x945x2200	1800x945x2200
Useful dimensions (wxdxh)	mm	1148x750x1200	1480x750x1200	1780x750x1200
Worktop dimensions (wxd)	mm	1200x700	1500x700	1800x700
Internal filters weight	Kg	29,5	36,5	45,0
Electrical data	V/Hz	230/50	230/50	230/50
Power consumption	W	200	250	300
Exhaust flow rate	mc/h	198	270	338
Inflow velocity (*)	m/s	0,122	0,125	0,125
Vertical barrier velocity (*)	m/s	1,40	1,55	1,55

(\*) Front glass at 500 mm from the worktop



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

### Faster S.r.l.

Via R. Merendi, 22 20010 Cornaredo (MI) Italy  
Tel +39 02 93 991 92 Fax +39 02 93 991 608  
[www.faster-air.com](http://www.faster-air.com) [info@faster.dgroup.it](mailto:info@faster.dgroup.it)