

LABOSYSTEM
IS ALSO...

We produce various lines of modular systems in compliance with the EN 13150 Quality Standard.



WS3 laboratory furniture

A line of innovative furniture in a range of colours with cutting edge design. A furniture system designed to meet the ongoing needs of the modern laboratory as it adapts to new situations introduced by developments in scientific and technological research.



ASTROLAB

A highly flexible satellite furniture system to meet the changing needs of the modern laboratory with the arrival of new sophisticated equipment and the consequent introduction of new operating methods and plant design.



Models				
WT5001	WT5002	WT5003	WT5004	WT5005
External dimensions L x D x H (mm)				
1200 x 1050 x 2500	1500 x 1050 x 2500	1800 x 1050 x 2500	2100 x 1050 x 2500	2400 x 1050 x 2500
Internal dimensions L x D x H (mm)				
1180 x 730 x 1200	1480 x 730 x 1200	1780 x 730 x 1200	2080 x 730 x 1200	2380 x 730 x 1200
Work surface dimensions L x D (mm)				
900 x 750	1200 x 750	1500 x 750	1800 x 750	2100 x 750
Height of surface from ground H (mm)				
900	900	900	900	900
Weight with work surface (solid stone) Kg				
250	280	305	330	350
Dimensions of suction hose fittings Ø (mm)				
200 - 250	250	250	250 - 315	315 - 350
Output voltage				
AC 220 - 240 V 50 - 60 Hz				
Max. input power (watt)				
600	600	600	1150	1150
Min – max nominal capacity of hood with H.I.C. (V.A.V.) and constant rate of 0.5 m/sec (m³/h)				
80 - 810	110 - 1080	135 - 1350	160 - 1620	180 - 1890
Containment capacity* (ppm) < 0.1				
Nominal capacity of hood with economy drive and constant rate of 0.3 m/sec (m³/h)				
486	648	810	972	1134
Containment capacity* (ppm) < 0.1				

*all data referring to retention indices obtained with face sash opening height of 500 mm



LABOSYSTEM
MODULAR LABORATORY SYSTEMS

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TYPHOONTWIN



LABOSYSTEM
MODULAR LABORATORY SYSTEMS

TYPHOONTWIN

Safety and ecology
are finally evolving

Awareness of the fact that research laboratories have an ongoing relationship with the unknown makes the pursuit of safety a particularly arduous task. Similarly, the gradual realisation that ecology plays a fundamental role in project economy and that in order to be classified as such a project must guarantee sustainability over time has led us to explore innovative solutions. These are the ideas behind the TYPHOON-TWIN, a modern “collective protection device”, which we have given an eco-sustainable slant by successfully providing technological content that makes this product unique and exclusive.

MATERIALS

TYPHOON-TWIN uses only the highest quality materials thus guaranteeing the high durability and chemical resistance that is characteristic of LABOSYSTEM products. The total absence of porous materials such as a fibre board or the excessive use of painted sheets, which are easily corroded in areas exposed to prolonged contact with corrosive deposits, provide guarantees of absolute quality and durability.

- Steel and aluminium framework.
- Total surface protection with anti-acid coating.
- Phenolic resin liner with thick anti-acid coating.
- Side walls and face display in toughened glass.
- Interior LED lighting.
- Digital controllers with 3” display and multilingual interface.
- Interior lateral surfaces in solid stone.
- Condensation drip tray on upper exhaust plenum.
- Assembly without visible fixing devices (screws) or devices exposed to corrosion.

SAFETY

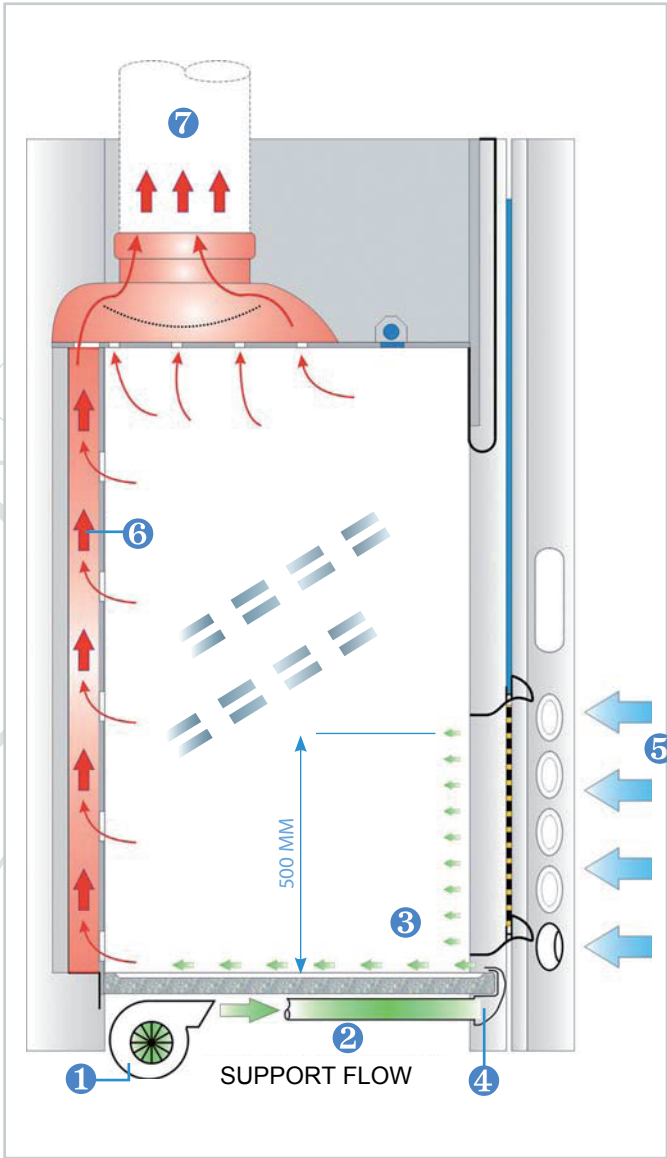
TYPHOON-TWIN is the first hood with integrated dual technology. With two suction modes, it can operate in “ECO” mode, which guarantees containment and safety parameters that are compliant with the EN 14175 quality standard as well as low power consumption or in “H.I.C.” (Hood Integrated Control) mode, the modern LABOSYSTEM controller that pushes performance way beyond flashing visual displays and the limits of the norm and guarantees adequate protection for all high risk operations. The hood’s durability is guaranteed by a thorough service plan based on the automotive sector, which displays on the screen the control and maintenance activities that are required for full efficiency over time.

PERFORMANCE

A number of smoke generator and tracer gas tests have been conducted to simulate the most extreme conditions of use and risk. This can be clearly seen from the air intakes inside the fume chamber, which are immensely different from those seen until now and guarantee faster removal of gas and vapours while completely eliminating turbulence. Thanks to the integrated TYPHOON-TWIN controller technology, the operator can now select the most suitable type of suction and apply a high level of customisation to the various functions. This level of performance provides added safety which is immediately felt by the operator on first use of the fume cupboard thanks to the ease of operation and to the full, real time information displayed on the LCD screen.

ERGONOMICS AND INNOVATION

All control buttons are ergonomically positioned on the side posts, are easy to activate and can be seen from the outside thanks to the large sash that introduces light to the work space and more importantly, allows what that is taking place on the inside to be seen even at a distance from the hood. Cable entry to the internal compartment is via large cable feed-throughs while the discharge tank is peripherally built-in to the side posts and positioned on a solid stone surface.



ECONOMY DRIVE
In “ECO” function, the system activates the back-up fan ① that circulates a back-up air-flow ② by means of aerodynamic diffusers that are built-in to the anterior posts ③ and in the airfoil profile ④ on the work surface. This type of flow and the particular layout of the plenum chamber ⑥ prevent turbulence, stabilising air pulled in from the outside ⑤. The electronic extraction fan simultaneously enters a system assisted by the minimum operating flow (0.3 m/s) which, assisted by the back-up flow, guarantees an exceptional level of containment with a significantly reduced quantity of extracted air ⑦.



The user-friendly interface and the large display make the fume cupboard easy to use.



The lateral surfaces are fitted with cable feed-throughs.



Laterally positioned external controls and dispensers with the relative functions.



Detail of the exclusive soffit with LED illumination, anti-explosion doors and air chamber.



The interior lateral surfaces with built-in tank are made of solid stone.



Detail of an EN 14175 compliant handle with safety lock.

HOOD INTEGRATED CONTROL

The graphic interface eliminates all learning barriers and training that is normally required and clearly relays all operating information.

The system incorporates a “service” calendar for scheduled maintenance, an “info” button providing clear instructions on each screen, an “emergency” button for managing accidents and a series of passwords for programming and secure use of the system. All alarms are optical alarms with flashing visual and acoustic displays with silencing button.

Hood Integrated Control allows traditional constant volume operation (variable speed depending on sash position) or variable air volume operation (constant speed with sash in any position).

CONTROL KEY

- ① Motor-driven sash opening/closure.
- ② Internal illumination system on/off.
- ③ Electronic extractor on/off.
- ④ Circular programming pad (for setting operating parameters)
- ⑤ Activation of combustible gas with extractor in operation.
- ⑥ Activation of power socket contactor with extractor in operation.
- ⑦ “EMERGENCY” button.
- ⑧ Manual/Automatic function switch.
- ⑨ 3” LCD display with local date and time displaying all parameters at the same time.
- ⑩ Internal light and temperature and information of gas, electric sockets and hours of operation.
- ⑪ “Info” button.
- ⑫ Acoustic alarm silencing button.
- ⑬ “Stand by” button.

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The end product was developed in application of European Directive 2006/42/EC on Machinery. We also prepared a “technical construction file” containing “an analysis of potential risks”. This provides the guarantee of a safe, EC-marked product, making TYPHOON-TWIN an exceptional collective protection device - a must-have for the modern laboratory that needs to guarantee the safety of its operators.

