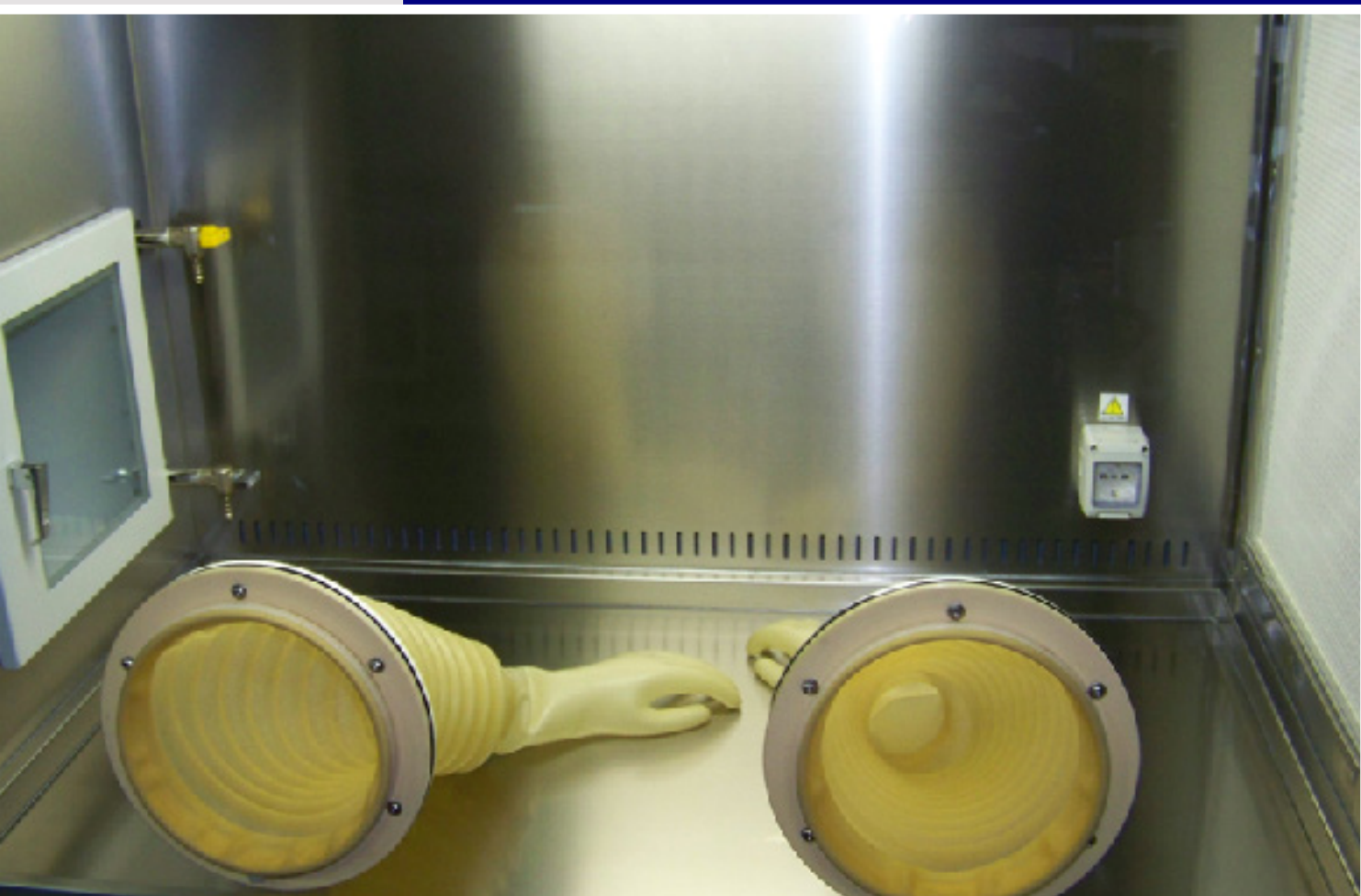


# BIOHAZARD SAFETY CABINET CLASS III

## THREE ACTIVA



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The hood has been designed and built with a hermetically sealed work area to guarantee the highest level of personal protection against biological risk.

The incoming air passes through a HEPA filter and is subsequently totally expelled through a double layer of ULPA filters placed in series.

The air flow is guaranteed by a specific suction system, which maintains a negative pressure (about 124.5 Pa) inside the hood.

Access to the work area is ensured by latex gloves positioned and fixed, through flanges, on the cabinet's front

The product, although handled in a sterile environment, is instead subject to the risk of cross-contamination due to the turbulence of the air flow inside the work area. The turbulent motions of the air therefore make them unsuitable if it is also necessary to guarantee the sterility of the product.

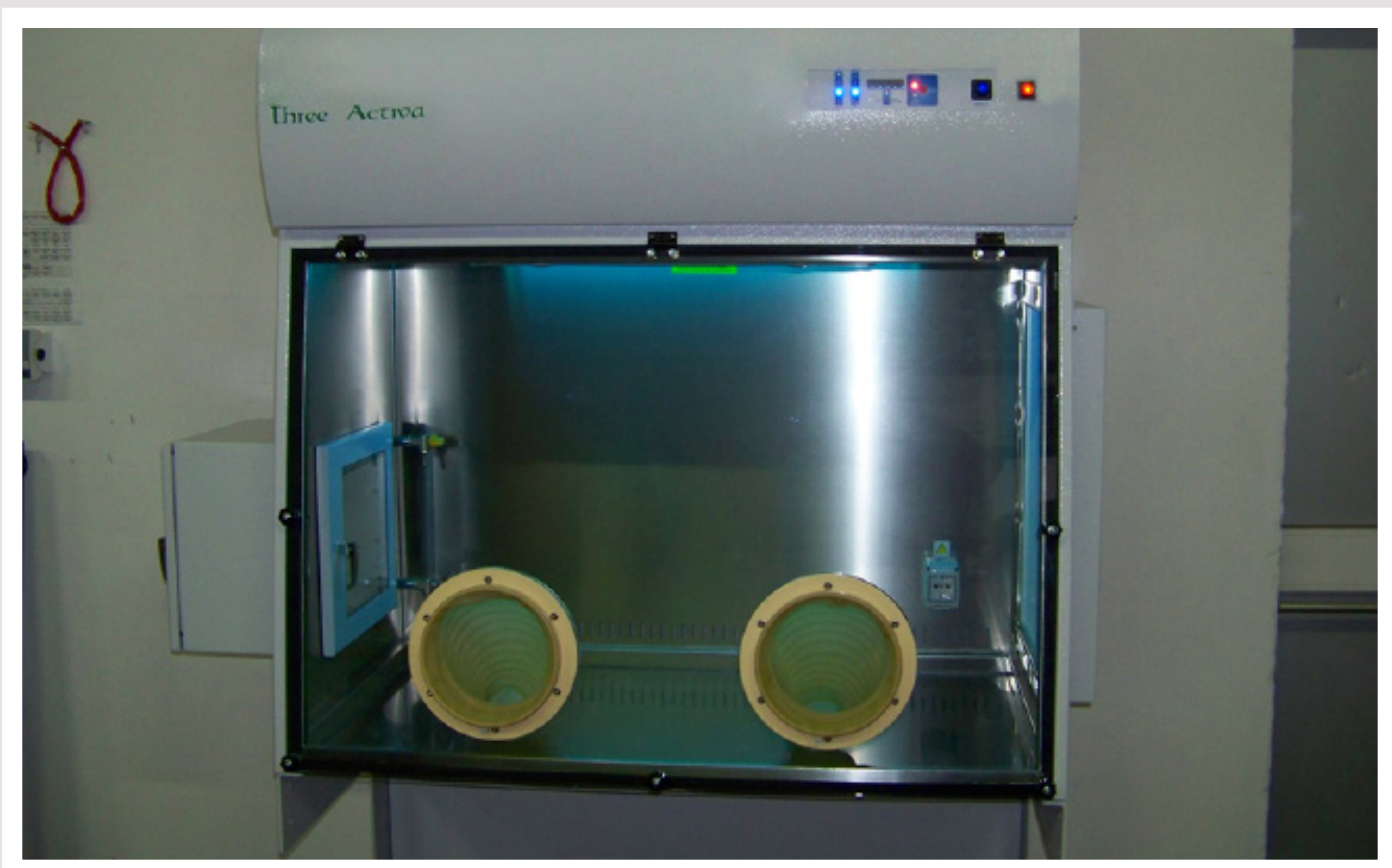
## Main features

- sheet metal external carpentry (thickness 12/10"), painted with polyepoxy powder, very light gray RAL 7035
- 304 stainless steel working chamber scotch-brite surface finish with rounded corners and edges totally surrounded by a vacuum air gap
- work area completely closed and hermetically sealed, accessible only via material pass boxes
- pass-through box made on the left side of the appliance, with double door in hermetically sealed tempered glass and equipped with a safety lock with key
- 304 stainless steel tray worktop
- transparent front safety screen in tempered glass equipped with fixing knobs in closing
- front panel for access to the work area equipped with 2 extensible rubber latex gloves (4 in the 180 model), replaceable from the outside after decontaminating the hood
- absolute filtration of the external air drawn in on the right side of the appliance by means of 1 absolute HEPA filter with efficiency 99.995% MPPS according to EN 1822
- absolute filtration of the expelled air through n°2 layers of ULPA filters in class H15 with efficiency 99.9995% MPPS according to EN 1822 (replacement by Bag IN / Bag OUT system)
- total expulsion of the air outside the building (zero recirculation) through of sealed pipes (Ø 250 mm) in PVC or galvanized steel or other appropriate material (to be paid by the customer) and a remote electric fan
- instrument connection port for DOP test on the expulsion manifold
- remote radial fan in polypropylene (technical and dimensional characteristics of the fan must be established on the basis of the type and length of the necessary ducting) or internal electric fan, where Biohazard substances are not treated (in the cost of the Three Activa machine, however, the fan motor is excluded)
- self-regulation of the pre-set flow speed according to the progressive clogging of the inlet absolute filter and of 2 exhaust absolute filters
- self-regulation of the air entering's speed the cabin (parameter that can be reset to modify the standard setting)
- real-time check of the incoming air flow (in m/sec) via digital display
- UVC lamp with activation as an alternative and interlocked with respect to the LED lighting
- electronic board with microprocessor control
- membrane keyboard with passive button controls
- automatic restart of the machine in case of black-out

## Control panel

On the control panel, which contains the electronic card controlled by a microprocessor, there are:

- Luminous main O/I bipolar switch
- Membrane keyboard (soft touch) with antistatic protection.
- Digital display with indication of the circulating air speed (in m/sec)
- Digital electronic hour meter for general operation
- UVC lamp operation timer with countdown that can be set by the customer with auto-off at the end of the cycle
- Audible and visual alarms for:
  - Operating anomaly (this may be due to clogging of the filter and/or faulty operation of the fan motor and/or insufficient air inlet speed into the work chamber)
  - Lack of vacuum in the work chamber or for both doors of the pass-through box open
  - Visual pre-alarms with indication on the display when there is a necessity for next replacement for:
    - UVC lamp end of life (appears at the end of the preset time period)
    - limit of use of installed filters reached (appears after 3900 hours of fan motor operation)



## Technical features:

· Filtration Efficiency:	Input: H14 HEPA filter In expulsion: double filter ULPA U15
· White lamp:	LED with diffuser, IP65 protection
· Light intensity:	800 lux
· UVC lamp:	with interlocked and alternative activation with respect to the led lighting
· entering air speed:	minimum 0.50 m/sec — max 1.10 m/sec (measured on the plane vertical near the side airflow inlet)
· external drain connection:	250 vert (Ø ext mm)
· passthrough box dimensions:	approx. 300x300x300mm
External dimensions:	
· Three Activate 120	1580 x 750 x 1660mm (L x W x h)
· Three Activate 150	1880 x 750 x 1660 mm (L x W x H)
· Three Activate 180	2200 x 750 x 1660mm (L x W x h)
Internal useful dimensions:	
· Three Activate 120	1140 x 630 x 800 mm (L x W x h)
· Three Activate 150	1440 x 630 x 800 mm (L x W x h)
· Three Activate 180	1740 x 630 x 800 mm (L x W x h)
· power supply:	single-phase 230V; 50Hz;
· nominal installed power:	0.6KW
· admissible additional powers:	socket 2P+E max 800 Watt
· nominal expelled air flow:	700 — 800 m <sup>3</sup> /h
Net weight:	
· Three Activate 120	200 Kgs
· Three Activate 150	240 kgs
· Three Activate 180	270 Kgs

## Compliance

It's safety cabinet against biological risks (BIOHAZARD), bench version, classified Class III with total expulsion of the treated air, suitable for handling high-risk pathogens (group III and IV)

Built in compliance with:

- European standard EN 1822
- 2006/42/EC Machine Directive
- 2014/30/EU Electromagnetic Compatibility Directive
- CEI EN 61010-1:2010 Safety requirements for electrical equipment for measurement, control and laboratory use

## Models available

Hood Three Activa 120

Hood Three Activa 150

Hood Three Activa 180

Equipped with:

- n°1 AISI 304 stainless steel worktop
- n°1 inlet HEPA H14 filter (lateral)
- n°4 ULPA U15 filters in expulsion (two for each filtration stage)
- n°1 IP 65 white LED lamp
- n°1 UVC germicidal lamp
- n°2 rubber latex gloves (n° 4 in the 180 model)
- n°1 internal electrical outlet 230 V / 50 Hz
- n°1 power supply cable 230 V - 50 Hz equipped with UNEL-schuko type plug





## Optional accessories

Floor stands

Cabinets and chests of drawers

Taps and electrical outlets

Additional ball valve for vacuum

Ball cock for combustible or technical gas

Solenoid valve on gas cock

Sockets and switchboards

1 Additional internal socket 2P+T, 230V, UNEL / Schuko type,

Q.EE standard type with 2 UNEL Schuko sockets (on request CEE or Italian bypass 10/16 A) -2P+E-16A/250V and with 1 M/Thermal modular automatic switch 10A 250V- mounted on IP65 panel under the worktop (necessarily requires the panel holder frame)

Q.EE standard type with n°3 UNEL Schuko sockets (on request CEE or Italian bypass 10/16 A) -2P+T-

16A/250V and with n°1 M/Thermic modular automatic switch of 10A 250V - mounted on IP65 panel under the worktop (it necessarily requires the panel holder frame)

Q.EE standard type with n°4 sockets (n°2 UNEL Schuko + n°2 Italian bypass 10/16 A) 2P+E-16A/250V and with n°1 M/Thermal modular automatic switch 10A 250V - assembled on IP65 panel under the worktop (necessarily requires the panel holder frame)

Total standard services panel-holder frame to support the electric "sockets" panel and/or water and gas remote controls

Accessories for external discharge

Centrifugal fan motor kit for outdoors with PVC seat type VSB25 4 poles MF 230V adjustable by electronic board

Centrifugal fan motor kit for outdoors with PVC seat type VSB20 4 poles MF 230V adjustable by electronic board

PVC pipes for channeling the treated air outside