



Duct Housing



Penetration between filter and support frame ISO 14644-3 At the nominal air-flow with H14 filter at its final pressure drop the penetration is lower than the 0.01% admissible. As mentioned in ISPE Good Practice by SMEPAC Committee and independently tested. SAF ensures the particulate containment performance (CPT 1,795 µg/m3) for Pharmaceutical equipment during HEPA filter replacement.

Particulate containment capacity tested

- According to EN 689:1996

Mechanical resistance

- (EN 1886:2003), Classified: class D1

Local and global leak tests

- EUROVENT 2/2, classified class C
- EN 1886, classified class L1
- ISO 10648, classified class 3
- EN 12237, classified class D

Technocratics is more than a tight housing for contamination-free filter change, because it goes beyond the technical specifications.

<p>DESIGN</p> <p>Technocratics housings can provide a filter change free of contamination. They are available as single modules or modular systems depending on the number of filtration stages required and air volume.</p>	<p>FILTER HOUSING</p> <p>The Technocratics housing can be fitted with a wide range of particulate filter efficiencies as well as a range of molecular filters. By means of a quick clamping device the filter gasket is pressed against the gasket seat to do this, the lever must be turned 180 degrees. Failsafe mechanism ensures safety.</p>
<p>GASTIGHT CONSTRUCTION</p> <p>The housings consist of a gastight welded robust construction of sheet metal and a safety door, which is secured by 4 star grip screws. Each housing has a separate safe change ring for each filter, a PVC bag is secured onto it by means of a rubber locking ring.</p>	<p>TESTING</p> <p>The Technocratics has been tested and qualified in our laboratory. Mechanical resistance and global and local leak efficiencies have been checked under positive and negative pressure of 6000 Pa.</p>

Product

Housing Sizes



Housing size	3THH	3THH3	3THH6	6THH6	7THH6
Filter size	305*305*150	305*305*292	305*610*292	610*610*292	762*610*292

MATERIALS & FINISH:

- Carbon Steel 1.0038 – powder coated
- SS AISI 304L (1.4307) – pickled & glass blasted
- SS AISI 316L (1.4404) – pickled & glass blasted

HOUSING OPTIONS:

- DIN Filter seal testing port
- WIN Door Window
- ATEX Electrostatic certificate

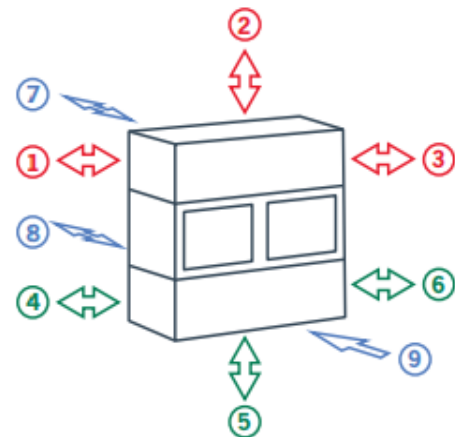
STANDARD CONFIGURATION:

Up to 6 filter columns can form a bank with common collectors.



CONNECTION DUCTS:

1. Top left
2. Top
3. Top right
4. Bottom left
5. Bottom
6. Bottom right
7. Top back
8. Bottom back
9. Bottom front



HORIZONTAL FLOW

Saving space or reducing ducting complexity has driven our range to be declined into “horizontal flow” left/right and right/left. Specific adjustments (compare to top/bottom) flow are mandatory to reach highest safety level and sustainable maintenance.



DAMPERS

A selection of adapted dampers compatible with our range of terminal and BIBO housings:

- concentric design
- Shut-off and regulating device
- Spitted shaft
- Long neck of the body according to heating system requirements
- Red epoxy painting RAL 2002 – minimal thickness of 80 µm
- Safe movement of disc ensured by squared stem/ disc connection
- ATEX certificate (Group II, Category 1/2 GD TX)
- Demountable valve design.

LEAK TEST STANDARDS

- EN 12266-1, Rate A
- ISO 5208, Rate A
- API 598, Table 5
- ANSI/FCI 70-2, Class VI
- All valves pass pressure tests to 110% of Rated pressure to ensure bubble tight shutoff
- All actuators are calibrated and cycle tested before shipment.





TECHNOCRATICS (Pvt) Ltd.

ISO 9001:2015 Certified Company

MOBILE INTEGRITY PROBE

NON INTRUSIVE FILTER INTEGRITY TEST To perform the filter integrity test, no material is removed all connection ports are airtight. During the normal service of the filter the connection ports are covered.

BETTER EFFICIENCY GUARANTEE QUALIFICATION

During the test design, we noticed that individual scan device is much more accurate related to the overall efficiency validation.

RELIABILITY WITH GOOD MIXING AEROSOL INJECTION

Aerosol is equally dispersed on the inlet surface of the HEPA filter. In case of multi cells, we all know that the airflow could be less than 15% in the first cell. This is the reason why each cell is equipped with an individual aerosol injection port. If the fan is located on the upstream side and the aerosol injected before the fan, then a Particle injection system is not required.

EASINESS, QUICKNESS, CLEANLINESS

All the protocol qualification is concentrated on the filtration equipment. No need to have access to the inlet and outlet duct area. In the case of overall intrusive test on downstream duct, if a leak is detected, it's impossible to determine which filter is damaged. This investigation is difficult and requires a lot of time.

With the individual probe test the faulty filter is immediately detected. The quantity of the aerosol used is less with the individual probe process. Moreover the entire upstream duct is not "contaminated" by the aerosol.

WALL MOUNTED VERSION

Some applications require contaminated filters to be changed through BIBO and inside the working area (clean room). Containment is not broken... Usually airflow is bottom to top in such set up.



Damper Module

Gas-tight shutoff of the filter column.
Standard DN or custom air hookup.

HEPA STAGE WITH MOBILE INTEGRITY PROBE



Particle Injection Module

Most reliable results in HEPA filter scanning.



Manometer Tunnel

for convenient gauge position between any two modules. Soft or hard piping. Optional calibration ports with ISO 75 U safety disc filters.

PREFILTRATION STAGES



Pressure Relief Valve

For equalizing pressure of the shut-off column prior to intervention. Includes ISO 75 U safety filters.

