

## SAFE CHANGE HOUSING - BIBO (USCH)

The Safe Change Filter Housing (USCH) is engineered to filter particles and aerosols, providing robust protection for service staff and the environment from potentially toxic and unsanitary conditions. The USCH guarantees contamination-free filter changes through its fully sealed Bag-In Bag-Out (BIBO) system, which prevents hazardous materials from escaping during filter replacement, ensuring the safety of personnel and the integrity of the process.

Each USCH unit accommodates a wide range of particulate and chemical filters, and can be customized to meet specific filtration stages and air volume requirements. The housing includes a test groove for leak testing of the gasket seal between the main filter and the housing, ensuring a secure and leak-proof operation.

To enhance operational efficiency, each USCH is equipped with a dedicated filter changing table, enabling a single person to perform filter changes easily and safely. This design minimizes downtime and simplifies the maintenance process.



Ulpatek's R&D department is dedicated to developing safe, reliable, and user-friendly configurations. Our approach provides significant advantages to customers, including reduced total costs, enhanced system performance, and improved health and safety outcomes. By integrating advanced technologies and ergonomic designs, Ulpatek ensures that our solutions meet the highest standards of safety and efficiency.



- Pharmaceutical Plants
- Radioactive Isotope Laboratories
- Hospital installation in nuclear medicine



- Nuclear Power Plants
- Epidemic and Isolation Products
- Biotechnical Facilities

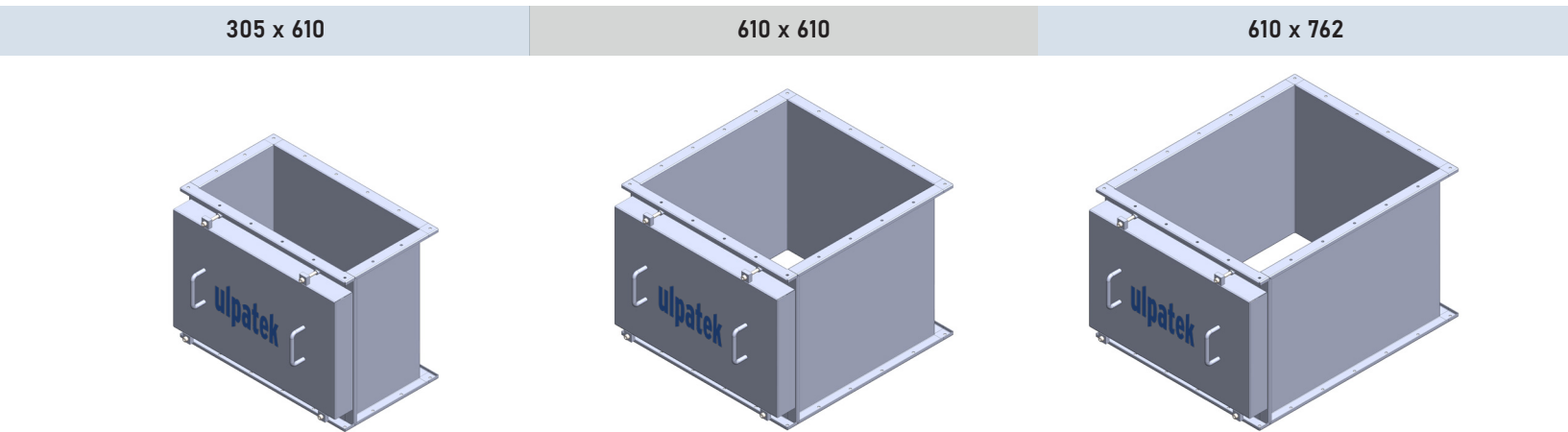


- Animal Facilities
- Chemical Industries
- Safety Laboratories

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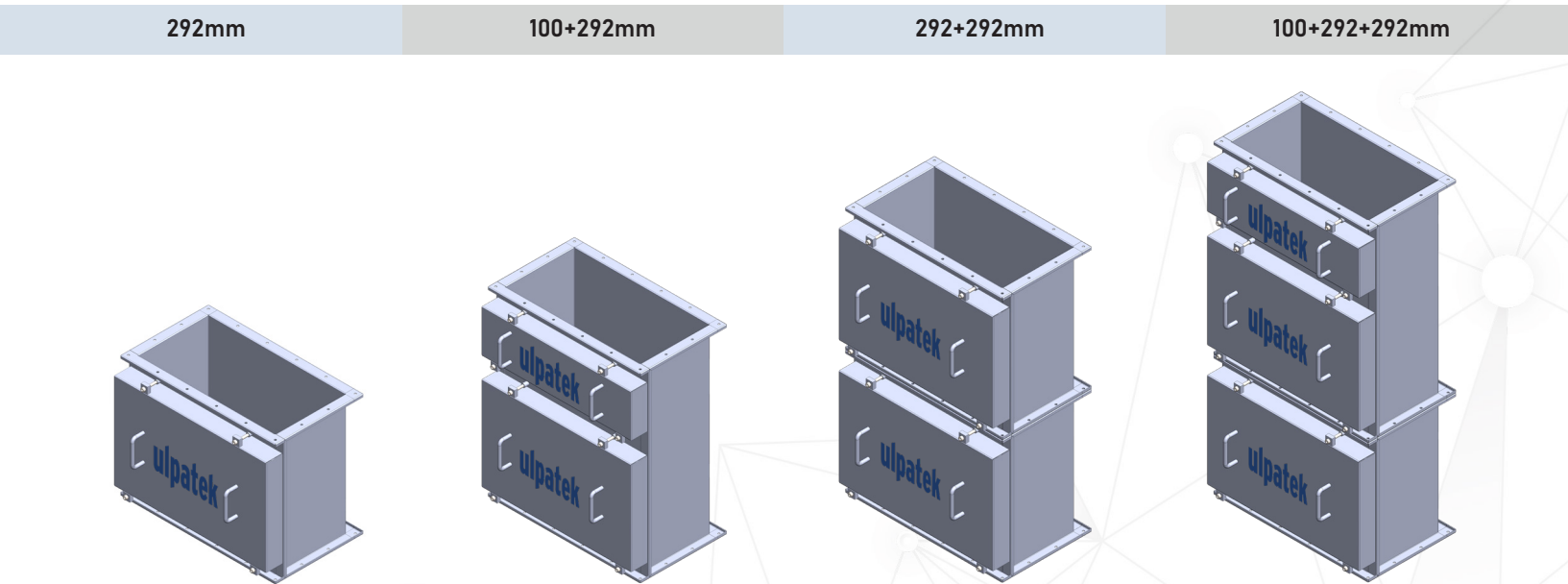
CUSTOMIZE YOUR UNIT

## HOUSING SIZES



Available in 305x610, 610x610, and 610x762 sizes. Recommended capacity values for a single column are: 305x610 for 1700m³/h, 610x610 for 3400m³/h, and 610x762 for 4250m³/h. The total capacity increases with the number of columns.

## FILTER STAGES

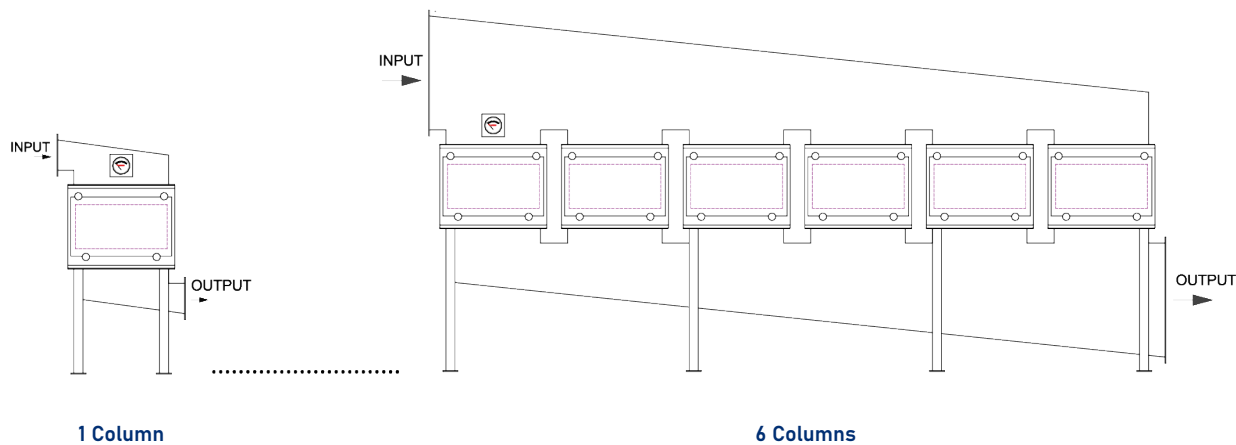


A single column can be configured with multiple filtration stages based on specific process needs. Options include a single stage with a 292mm filter, a dual stage with either a 100mm + 292mm filter or a 292mm + 292mm filter, and a triple stage with a 100mm + 292mm + 292mm filter. This allows for customized filtration efficiency to meet various requirements.

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## COLUMN NUMBER : CAPACITY

The capacity of the units increases with the number of columns, based on the housing dimensions. Up to six columns can be configured in a single row.



## Example Configurations

Housing Size (mm)	Number of Columns	Total Capacity (m³/h)
305x610 (1.700m3/h)	1	1.700
610x610 (3.400m3/h)	2	6.800
610x762 (4.250m3/h)	5	21.250

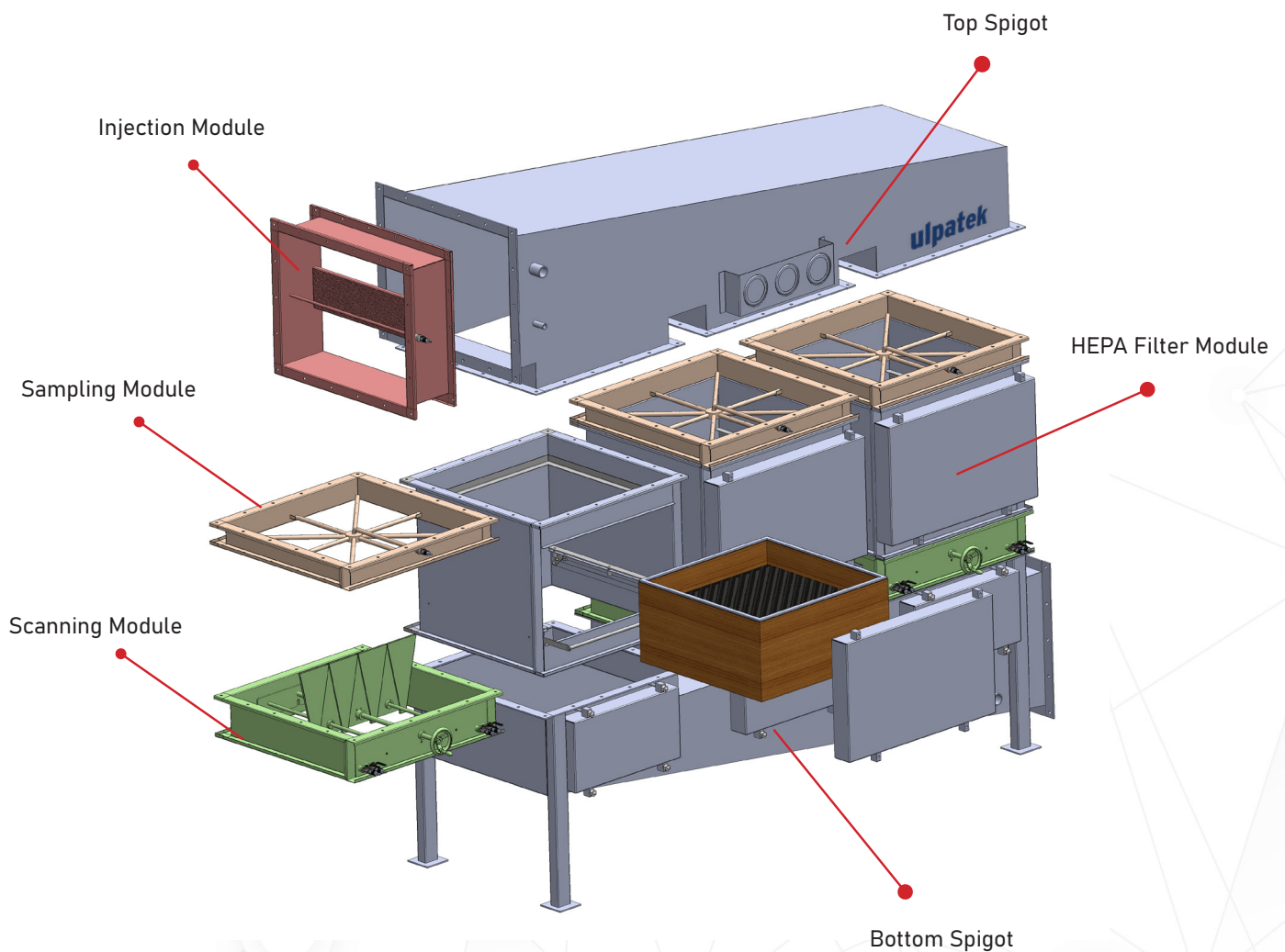
For higher capacity needs, a second row of units can be mirrored directly behind the first row, effectively doubling the capacity. Alternative designs can be created by considering physical constraints such as available space.



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## Leakproof Construction

Metal body of safe change filter housing has bisulcate flange connection. This structure provides a safe tightness. Filter change is carried out untouched by human hands. Service staff do not have to touch neither filter nor inner side of cabin. **ULPATEK Safe Change Filter Housing** has a pre-filter option according to request one or multiple stages. Body surface of cabin is powder coated with a colour you preferred and can be disinfected. Service covers are closed very tightly with spline sealed bolt and cross-slotted bolt. Filter monitoring can be done by magnehelic manometers with the pressure nozzles that are located on the unit.





# SAFE CHANGE HOUSING - BIBO (USCH)

## DEVICE CONSTRUCTION

Finished Safe Change Filter Housing consists of products below:

- Connecting Spigot for Air Input
- Injection Module
- Sampling Module
- Main Filter Module
- Scanning Module
- Connecting Spigot for Air Output

Safe Change Filter Housing is created as requested by put together these products. For operation and maintenance, check the units in your device first and then apply processes which are required for these units.

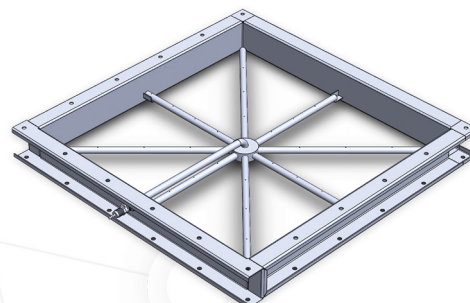
### Injection Module

This section is typically located upstream of the filter bank to be tested. It is designed to inject a test aerosol, mix the aerosol and take a reference sample of the air/aerosol mixture.



### Sampling Module

This section is typically located downstream of the HEPA filter bank. Its purpose is to sample the downstream penetration of the test particulate challenge. Sample test section is modular and aligns with the entire filter housing system. This housing includes a proprietary tubing system to sample any challenge particulate downstream of each individual filter element.

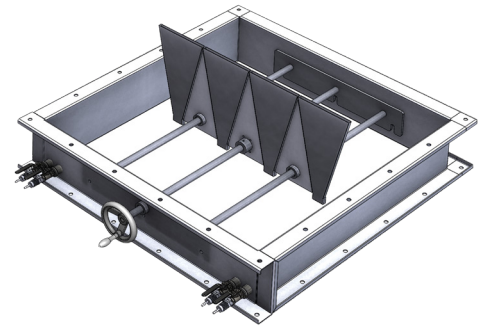


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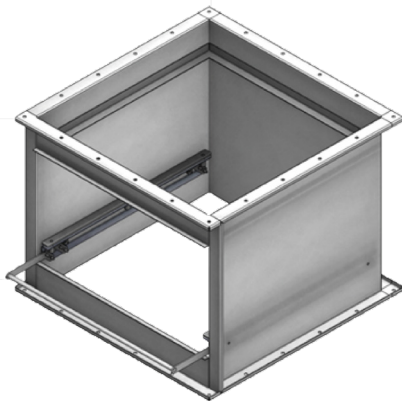
## DEVICE CONSTRUCTION

### Scanning Module

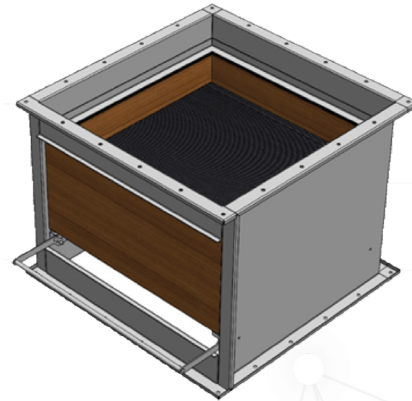
Industry's first non-intrusive manual filter scanning solution. Loss of containment due to a torn or loose scanning bag is eliminated. Accidental probe contact with the HEPA filter media is eliminated. Using a photometer or portable particle counter, the test technician can safely scan test the installed filter (even challenge the filter seal integrity).



### Main Filter Module



HEPA Filter Compression Mechanism



Main Filter Module

### Accessories

#### BIBO Bag Sealing Equipments

- Pressing Tool
- Hot Knife
- Cable Tie

#### BIBO Plastic Bags and Sealing O-Rings for USCH (292mm Modul)

- USCH-Bag-292
- BIBO Plastic Bag
- USCH-Rubber-292
- BIBO O-Rings

#### BIBO Plastic Bags and Sealing O-Rings for USCH (100mm Modul)

- USCH-Bag-100
- BIBO Plastic Bag
- USCH-Rubber-100
- BIBO O-Rings