

# Bag in Bag out (BIBO) Housing

Anti-Contamination banks with bags for HEPA and Activated Carbon filters



## Applications

For exhaust air filtration of radioactive materials, pathogenic organisms, biological particles, dangerous and toxic substances. Used in genetic research, tissue culture laboratories, biosafety and animal laboratories, hospitals, operating theatres and pharmaceutical applications.

- + Fully welded and able to withstand +/- 2500 Pa pressure test
- + 100% Safe and Fully Serviceable using puncture resistant anticontamination change bags
- + Quality dual Steel Spring Rings ensure Bags to be installed
- + Adjustable Eccentric Clamps ensure HEPA Filter leak free



## Specifications

### General characteristics

The UB and SS modular systems are suitable for the installation of different types of filters with the anti-contamination bags as physical barrier for the replacement of the filters by side access and with clamps for leak free.

### Material

Housing structure made in carbon steel welded for perfect tightness and oven-baked epoxy-coated or SS304 11gauge (3.17mm) and 14 gauge (2mm) thickness which can withstand at least negative and positive pressure of 2500Pa. Removable frontal door with perimetral gasket and door locking by fold-down tie rods with wheel clamps. The housing comes with connection flanges for duct connection.

All pressurised areas are fully welded and wire brushed and burrs removed, all weld joints and filter sealing gasketing gel surface shall be smooth and aligned.

### Filter clamping

After the installation in the housing, the filters are clamped by a lever action of eccentric cams in steel with knife edge and Gasket gel face of filter. The door can only be closed after the lever is clamped properly and the filter is in proper position.

### Test, Decon ports and Static pressure taps

The built-in static pressure taps and ports are able to connect to measure differential pressure & conduct the challenge leak test with filter & housing and use as decontamination.

### Bagging Ring & Barrier Bags

The housing shall have bagging ring on the filter access and continuous groove rib to secure the barrier bag.

The anti-contamination barrier Bags are flexible, semi translucent and puncture resistant. They are PVC Material of 8mils (0.2mm) thickness, 400mm Length which able to withstand and operate at -17 to 54degC which are placed inside the housing for future replacement which provide the isolation or physical barrier for the operator. The replacement of the filter element is carried out inside the polyethene barrier bag with glove sleeve fixed by elastic elements around the double groove of the internal housing edge.

### Duct Transitions

Transitions are provided if required for larger airflow Housings connecting to the Bubble tight Isolation dampers

### Filters

The housings can be supplied with the filter elements The following filters can be used:  
Prefilters 305x610 and 610x610 mm with depth 48  
Rigid filters 285x595 and 595x595 mm with depth 290mm  
HEPA filters 305x610,610x610mm with depth 292mm  
Activated Carbon filters 305x610,610x610mm with depth 292mm

### Options: Differential Pressure Gauges

Visual Gauge, Pressure Switch for BMS monitoring or both can be used for monitoring of system using the static pressure ports



SS304 10Hx30W BIBO Housing



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## Dimensions

Model / Type	1st Layer filter dimensions mm	Final Layer HEPA/ Carbon filter dimensions mm	A mm	B mm	C mm	D mm	E Upstream /downstream mm	F mm	H mm	Weight kg
UB06/P-H	610x610x48	610x610x292	755	820	628	628	558	558	906	105
UC06/H	-	610x610x292	755	820	628	628	558	558	574	65
UB06/H-H	610x610x292	610x610x292	755	820	628	628	558	558	1150	130
UC03/H	305x610x292	-	755	515	628	323	558	253	574	38
SS 10Hx10W	610x610x48	610x610x292	755	838	755	686	552/616	610	686	130
SS 10Hx20W	610x610x48	610x610x292	755	1448	755	1296	552/616	1219	686	130
SS 10Hx30W	610x610x48	610x610x292	755	2057	755	1905	552/616	1829	686	130

## Technical Data

### Filter

Pre-filters/ other 48mm depth  
HEPA/ Carbon filters 292mm depth

### HEPA Housing, Bubble Tight damper and BIBO system

#### Filter Leak Test Standards

IEST RP-CC001, CC034 / EN1822 / NSF49 Biosafety Cabinetry  
Aerosol Challenge DEHS/ PAO leak <0.01%  
ASME/ ANSI N510, 1989 1995 Reaffirmed to +/-10"w.g (2500Pa)

### Enclosing Frame

Oven-baked epoxy coated in carbon steel welded  
Option: Stainless Steel 304, Stainless Steel 316  
11 gauge (3.175mm) & 14 gauge (2mm) thickness  
Doors Right Hand  
Lifting Lugs

### Filter Clamping

Adjustable Lever action of eccentric Steel cams

### Pressure Connections

Static Pressure ports/ Test ports

### Optional

Differential Pressure Gauges (Visual), Pressure Switch (for BMS)  
Photohelic Gauge  
Additional Test Ports  
Transitions Upstream & Downstream  
Bubble Tight Damper Upstream & Downstream

Continuous Operating Temperature 80°C  
Optional High Temperature (SS) 250 °C  
Relative Humidity 90%  
Recommended Final Pressure Drop 500 Pa  
Maximum Final Pressure Drop 700 Pa



Multi banks BIBO housing connections for higher airflow

## Dimensions Drawings

