



# Containment Isolator

# Containment Isolator

## Isolator for Weighing & Sampling



Used in the laboratory for weighing and sampling

### Configurations

- 8Y one-piece gloves
- LED lighting
- H14 PUSH-PUSH HEPA
- Continuous liner system
- 316L waste liquid container
- EBM blower
- Waterproof socket
- Electronic scale
- Siemens touch screen + PLC

### Features

- Meet OEB5 personal protection requirements and pass the third-party test, OEL<0.05 $\mu$ g/m<sup>3</sup>
- Installed in a general background, ensuring a static Class C environment internally
- Weighing accuracy of 1/10,000, 1/100,000 and 1/1,000,000
- The materials are transferred through the continuous liner system and RTP
- Equipped with SS316L mobile liquid waste container for easily handling the high potent

Fresh Air Volume: $\geq 200\text{m}^3/\text{h}$	Net Weight: $\approx 700\text{kg}$
Public Utilities: Clean compressed air $0.6\text{Mpa} \leq P \leq 0.8\text{Mpa}$	Power: 220V, 2.0kw (isolator only)
Operation Chamber Space (mm): $1800 \times 750 \times 800 (\text{L} \times \text{W} \times \text{H})$	Transfer Chamber Space (mm): $800 \times 750 \times 800 (\text{L} \times \text{W} \times \text{H})$
Doors: All doors are equipped with inflatable seal, the observation window is made of 15mm thickness tempered glass.	
It is equipped with an exhaust port on the isolator top, and the piping is connected to the outdoor.	

## Isolator for Freeze-drying, Weighing & Capping



Used in the laboratory for freeze-drying, weighing and dispensing

### Configurations

- 8Y one-piece gloves
- Explosion-proof socket
- Explosion-proof computer
- Explosion-proof LED lighting
- Continuous liner system
- H14 PUSH-PUSH HEPA
- Explosion-proof blower

### Features

- Meet OEB5 design requirements, OEL<0.1 $\mu$ g/m<sup>3</sup>
- Fully explosion proof design which meets the EXd II BT4 and ATEX requirements
- Integrated freeze dryer chamber, manifold shelf, rotary evaporator, electronic scale and capping machine
- Installed in laboratory room and fresh air supply from the room
- Customised designs can be made according to the site layout and room space

Fresh Air Supply Volume: $\geq 400\text{m}^3/\text{h}$	Weighing and Capping Space (mm): 1550x750x2400(L*W*H)	
Public Utilities: Clean compressed air $0.6\text{Mpa} \leq P \leq 0.8\text{Mpa}$	Rotary Evaporator Space (mm): 1800x850x2400(L*W*H)	
Overall Size (mm): 4000x2705x2400(L*W*H)	Transfer Chamber Space (mm): 500x850x2400(L*W*H)	
Freeze Dryer Space (mm): 1700x850x2400(L*W*H)	Net Weight: 1400kg	Power: 380V, 7.5kw (isolator)
Lifting Doors: Made of 3mm metal panel with Inflatable seal		
Doors: All doors adopt mechanical press sealing; the observation window is made of 12mm thickness tempered glass.		

# Containment Isolator

## ■ Multifunctional Negative Pressure Isolator



Used in the laboratory for multifunctional chemical synthesis

### Configurations

- 8Y one-piece gloves
- Explosion-proof socket
- Continuous liner system
- Explosion-proof LED lighting
- Explosion-proof blower
- H14 PUSH-PUSH HEPA
- Explosion-proof computer

### Features

- Meet OEB5 design requirements, OEL<0.01 $\mu$ g/m<sup>3</sup>
- Integrated weighing, dispensing, capping, stirring, ultrasonic equipment, feeding, extraction, rotary evaporation, column chromatography, centrifugation, etc
- Installed in laboratory room and fresh air supply from the room
- Customised designs can be made according to the site layout and room space.

Air Supply and Exhaust Volume : $\geq 1000\text{m}^3/\text{h}$	Net Weight: 3000kg
Public Utilities: Clean compressed air $0.6\text{Mpa} \leq P \leq 0.8\text{Mpa}$	Power: 380V, 9.0kw (isolator)
Overall Size (mm): 5000x4000x2800(L*W*H)	
Doors: All doors adopt mechanical press sealing, the observation window is made of 12mm thickness tempered glass.	
It is equipped with an exhaust port on the isolator top, and the piping is connected to the outdoor.	

## Isolator for Feeding



Used for feeding operations in highly corrosive environments

### Configurations

- 8Y one-piece gloves
- Explosion-proof LED lighting
- H14 PUSH-PUSH HEPA
- Explosion-proof socket
- Continuous liner system
- Explosion-proof blower
- Siemens touch screen

### Features

- Fully explosion-proof design which meets the EXd II BT4 requirements
- The chamber is made of pure titanium for greater corrosion resistance
- Flexible and easy to move

Fresh Air Supply Volume : $\geq 100 \text{m}^3/\text{h}$	Net Weight: 500kg
Public Utilities: Clean compressed air $0.6 \text{Mpa} \leq P \leq 0.8 \text{Mpa}$	Power: 380V, 1.5kw
Overall Size (mm): 2105x880x2000(L*W*H)	Operation Chamber Space (mm): 1800x750x800(L*W*H)
Doors: All doors adopt mechanical press sealing, the observation window is made of 12mm thickness tempered glass.	
It is equipped with an exhaust port on the isolator top, and the piping is connected to the outdoor.	

## Isolator for Crude Peptide Dissolution



Used for the dissolution of crude peptides during the API processing

### Configurations

- 8Y one-piece gloves
- H13 Cartridge HEPA
- H14 PUSH-PUSH HEPA
- Explosion-proof LED lighting
- Explosion-proof socket
- Continuous liner system
- Explosion-proof blower
- Explosion-proof computer

### Features

- Meet OEB5 design requirements, OEL<0.1 $\mu$ g/m<sup>3</sup>
- Fully explosion-proof design which meets the EXd II BT4 requirements
- Integrated liquid dispensing container for continuous operation of weighing and feeding

Fresh Air Supply Volume: $\geq 100\text{m}^3/\text{h}$	Operation Chamber Space (mm): 1800x750x800(L*W*H)
Public Utilities: Clean compressed air $0.6\text{Mpa} \leq P \leq 0.8\text{Mpa}$	Net Weight : 500kg
Overall Size (mm) : 3600x1350x3200(L*W*H)	Power: 380V, 1.5kw
Doors: All doors are equipped with inflatable seal, the observation window is made of 15mm thickness tempered glass.	
It is equipped with an exhaust port on the isolator top, and the piping is connected to the outdoor.	

## Isolator for Weighing & Dispensing



Used in the weighing and dispensing process of HPAPI

### Configurations

- 8Y one-piece gloves
- Explosion-proof LED lighting
- H14 PUSH-PUSH HEPA
- Explosion-proof socket
- Continuous liner system
- Explosion-proof blower
- Explosion-proof computer

### Features

- Fully explosion-proof design which meets the EXd II BT4 requirements
- Dispensing quantity ranging from 1g to 11000g packed in 1-30 bags
- Meet OEB5 personal protection requirements and pass the third-party test, OEL < 0.05 µg/m<sup>3</sup>

Airflow Pattern: Turbulence	Overall Size (mm) :3200x1240x2300(L*W*H)
Fresh Air Supply Volume: ≤200m <sup>3</sup> /h	Operation Chamber Space (mm): 1800x1200x800(L*W*H)
Public Utilities: Clean compressed air 0.6Mpa≤P≤0.8Mpa	Transfer Chamber Space(mm) : 850x770x800(L*W*H)
Net Weight: 1000kg	Power: 380V, 3kw, 25A(Isolator only)
Doors: All doors are equipped with inflatable seal, the observation window is made of 15mm thickness tempered glass.	
It is equipped with an exhaust port on the isolator top, and the piping is connected to the outdoor.	

# Containment Isolator

## Isolator for Solid Dosage



Used in solid dosage production line

### Configurations

- 8Y one-piece gloves
- LED lighting
- H14 PUSH-PUSH HEPA
- Continuous liner system
- EBM blower
- Siemens touch screen

### Features

- Integrated granulation, mixing, drying and crushing,etc
- Meet OEB4 personal protection requirements

Fresh Air Supply Volume:  $\geq 100\text{m}^3/\text{h}$

Operation Chamber Space (mm):  $3175 \times 539 \times 1043 (\text{L} \times \text{W} \times \text{H})$

Public Utilities: Clean compressed air  $0.6\text{Mpa} \leq P \leq 0.8\text{Mpa}$

Net Weight : 600kg

Overall Size (mm) :  $4013 \times 794 \times 2479 (\text{L} \times \text{W} \times \text{H})$

Power: 220V, 3kw, 10A(Isolator only)

Doors: All doors are equipped with inflatable seal, the observation window is made of 15mm thickness tempered glass.

The top of the isolator is fitted with an exhaust pipe connected to an exhaust blower.

## Isolator for Coating



Used in solid dosage form coating process

### Configurations

- 8Y one-piece gloves
- Continuous liner system
- LED lighting
- EBM blower
- H14 PUSH-PUSH HEPA
- Siemens touch screen

### Features

- Meet OEB4 personal protection requirements
- Integrated coating machine

Fresh Air Supply Volume: $\geq 100\text{m}^3/\text{h}$	Operation Chamber Space (mm) : $1600 \times 700 \times 1000(\text{L} \times \text{W} \times \text{H})$
Public Utilities: Clean compressed air $0.6\text{Mpa} \leq P \leq 0.8\text{Mpa}$	Net Weight: 450kg
Overall Size (mm) : $2438 \times 960 \times 2490(\text{L} \times \text{W} \times \text{H})$	Power: 220V, 3kw(Isolator only)
Doors: All doors are equipped with inflatable seal, the observation window is made of 15mm thickness tempered glass.	
It is equipped with an exhaust port on the isolator top, and the piping is connected to the outdoor or air conditioning ducts.	
*This proposal is for reference only, final drawings need to be confirmed by DQ	

# Containment Isolator

## Isolator for Crushing & Weighing



Used for crushing and weighing of API

### Configurations

- 8Y one-piece gloves
- LED lighting
- H14 PUSH-PUSH HEPA
- Continuous liner system
- EBM blower
- Siemens touch screen

### Features

- Integrated hammer mill crusher and electronic scale
- Meet OEB4 personal protection requirements

Fresh Air Supply Volume : $\leq 200\text{m}^3/\text{h}$	Operation Chamber Space (mm) : 1914x750x800(L*W*H)	
Public Utilities: Clean compressed air $0.6\text{Mpa} \leq P \leq 0.8\text{Mpa}$	Transfer Chamber Space (mm): 785x650x800(L*W*H)	
Overall Size (mm) : 2957x770x2429(L*W*H)	Power: 220V, 2kw(Isolator only)	Net Weight: 700kg
Doors: All doors are equipped with inflatable seal, the observation window is made of 15mm thickness tempered glass.		
It is equipped with an exhaust port on the isolator top, and the piping is connected to the outdoor.		
*This proposal is for reference only, final drawings need to be confirmed by DQ		

## Isolator for Filtration & Drying



Used for filtration and drying of API

### Configurations

- 8Y one-piece gloves
- Continuous liner system
- Explosion-proof socket
- Explosion-proof LED lighting
- Explosion-proof blower
- H14 PUSH-PUSH HEPA
- Explosion-proof touch screen

### Features

- Meet OEB4 personal protection requirements
- Fully explosion-proof design which meets the EXd II BT4 requirements
- Integrated drum filter, drying oven

Fresh Air Supply Volume: $\geq 100\text{m}^3/\text{h}$	Operation Chamber Space (mm) : $1800 \times 800 \times 1000 (\text{L} \times \text{W} \times \text{H})$
Public Utilities: Clean compressed air $0.6\text{Mpa} \leq P \leq 0.8\text{Mpa}$	Net Weight: 700kg
Overall Size (mm) : $2637 \times 110 \times 2324 (\text{L} \times \text{W} \times \text{H})$	Power: 380V, 2kw(Isolator only)
Doors: All doors are equipped with inflatable seal, the observation window is made of 15mm thickness tempered glass.	
It is equipped with an exhaust port on the isolator top, and the piping is connected to the outdoor.	
*This proposal is for reference only, final drawings need to be confirmed by DQ	

# Containment Isolator

## Isolator for ADC



Used for ADC small molecule synthesis

### Configurations

➤ 8Y one-piece gloves	➤ Waterproof socket	➤ Continuous liner system	➤ Siemens touch screen+PLC
➤ Half-suit	➤ H14 PUSH-PUSH HEPA	➤ 316L waste liquid container	
➤ LED lighting	➤ Electronic scale	➤ Showa explosion-proof blower	

### Features

- Meet OEB5 personal protection requirements and pass the third-party test, OEL<0.05 $\mu$ g/m<sup>3</sup>
- Internal explosion-proof
- Integrated rotary evaporation, filtration, drying, weighing, dispensing and capping processes
- Weighing accuracy 1/10,000
- The use of half-suits to operate in the rotary evaporation chamber meets the maximum operating radius
- Installed in a general background, ensuring a static Class C environment internally
- The materials are transferred through the continuous liner system

Fresh Air Supply Volume:  $\geq 600\text{m}^3/\text{h}$

Net Weight : 3000kg

Public Utilities: Clean compressed air 0.6Mpa< P <0.8Mpa

Power: 380V, 16.5kw(Isolator only)

Overall Size (mm) : 7122x3377x2985(L\*W\*H)

Doors: All doors are equipped with inflatable seal, the observation window is made of 15mm thickness tempered glass.

It is equipped with an exhaust port on the isolator top, and the piping is connected to the outdoor

## Isolator for High Activity Titration Analysis



Used in laboratory for high activity analysis

### Configurations

- 8Y one-piece gloves
- H14 PUSH-PUSH HEPA
- LED lighting
- Waterproof socket
- EBM blower
- Siemens touch screen
- Continuous liner system

### Features

- Meet OEB5 personal protection requirements
- Integrated moisture titrator, moisture balance

Fresh Air Supply Volume: $\geq 300\text{m}^3/\text{h}$	Operation Chamber Space (mm): $1700 \times 750 \times 800(\text{L} \times \text{W} \times \text{H})$
Overall Size (mm) : $2634 \times 750 \times 2800(\text{L} \times \text{W} \times \text{H})$	Net Weight : 500kg
Transfer Operation Chamber Space (mm): $400 \times 500 \times 500(\text{L} \times \text{W} \times \text{H})$	Power: 200V, 1.5kw(Isolator only)

Doors: All doors adopt mechanical press sealing; The observation window is made of 15mm thickness tempered glass,supported by gas springs, which are easy to open and close; the transfer chamber is separated from the main chamber by the inner transfer door.

It is equipped with an exhaust port on the isolator top, and the piping is connected to the outdoor

This proposal is for reference only, final drawings need to be confirmed by DQ

# Containment Isolator

## ■ Preparation Work

**NO.1** The installation and commissioning is completed.

Pipe connection and sealing is well, HEPA filters are in good condition.

**NO.2** Room HVAC and differential

pressure are normal.

**NO.3** Relevant accessories, tools, and consumables should be ready for use, including but not limit continuous bag, O-rings, bag bonded/cutting tools, metal clamps, tape, cable ties, etc. The bag inlet and outlet and the bagging connection should be equipped with double O-rings and a metal clamp to ensure containment performance.

**NO.4**

Operator is well trained.

**NO.5** Prepare Naproxen Sodium as surrogate. Clean the package

surface to avoid contaminating the isolator.

**NO.6**

Make sure no Naproxen Sodium using or store nearby during the containment assessment.

**NO.6**

Prepare the PPE: disposable protective clothing and shoe covers, N95 masks, nitrile or latex gloves.

Replace the PPE after each test to avoid cross-contamination and affection to the next test.

**NO.8**

Clean the background area on the day before the test. Prepare one sprayer in case of use.

**NO.9**

Take photos for report.

## ■ Main Configuration



H14 Cartridge High Efficiency Filter



H14 PUSH-PUSH High Efficiency Filter



Water and Air General Spray Gun



8Y One-piece Gloves



Precision Anti-Vibration Suspended Platform



PE Bag Clamp Tightening Tool



PE Bag Clamp and Shearing Tool



PE Bag Clamp



**Zhejiang Tailin Bioengineering Co., Ltd**

No.2930 Nanhuan Road, Binjiang, Hangzhou, Zhejiang, China.

**TEL:**0086-571-86589087

**FAX:**0086-571-86689998

**E-MAIL:** marketing@tailingood.com

**WEB:** [www.tailinscitech.com](http://www.tailinscitech.com)



@Tailin



@Tailin\_official



@TAILIN