

# Modular Panels



Cleanrooms – Cold Rooms



**LABORATORY CONTAINERS**

**QUALITY &  
AFFORDABILITY**



Tailor made quality process and packing solutions for  
Pharmaceutical & Food Industry

## Laboratory Containers

The laboratory containers are pre fabricated modular areas that counts with all the required equipment and services to perform pharmaceutical, microbiological or medical procedures under the most controlled environments.

Some of the features of these systems are:

- **Easy to move.**
- **Ready to use.**
- **Energy efficient units.**
- **Built with equipment able to be used everywhere.**
- **Possible to be provided with standby generators.**
- **Pre-tested and pre-commissioned.**
- **Designed for easy cleaning and decontamination.**



## Laboratory Containers

The design of each laboratory container will depend specifically on the use of it, therefore for this case we will illustrate two options we have designed for pharmaceutical industry.



## Laboratory Containers



## Laboratory Containers



## Laboratory Containers





## Laboratory Containers

### Option 1

#### Features:

- Mixed of HPL, Stainless Steel and PCGI cleanroom sandwich panels.
- Aluminum Profiles
- HPL Door
- HPL & Stainless Steel air tight doors
- Double layer tempered glass windows
- LED lights
- PVC Flooring





## Laboratory Containers

### Option 1

#### Equipped with:

- Sterility test isolator
- VPH Sterilization pass box
- Dispensing booth with pass box
- Dynamic pass box



## Laboratory Containers (Option 1)

No.	Product	Type	Unit	Qty.
1	PCGI Panel		m <sup>2</sup>	50
2	Aluminum Profile		m <sup>2</sup>	50
3	PCGI Door	900 * 2100 * 50	Set	1
4	Alu. Frame Door	800 * 2100 * 50	Set	1
5	Double Tempered Window	985 * 2000 * 50	m <sup>2</sup>	2
6	Sealing Materials		Item	1
7	LED Lighting		Set	2
8	PVC Flooring		Item	1



## Laboratory Containers (Option 1)

No.	Product	Type	Unit	Qty.
1	Sterility Test Isolator		Set	1
	Documentation		Item	1
2	VHP Sterilization Pass Box		Set	1
	Documentation		Item	1
3	Dispensing Booth with Pass Box		Set	1
	Documentation		Item	1
4	Dynamic Pass Box		Set	1
	Documentation		Item	1



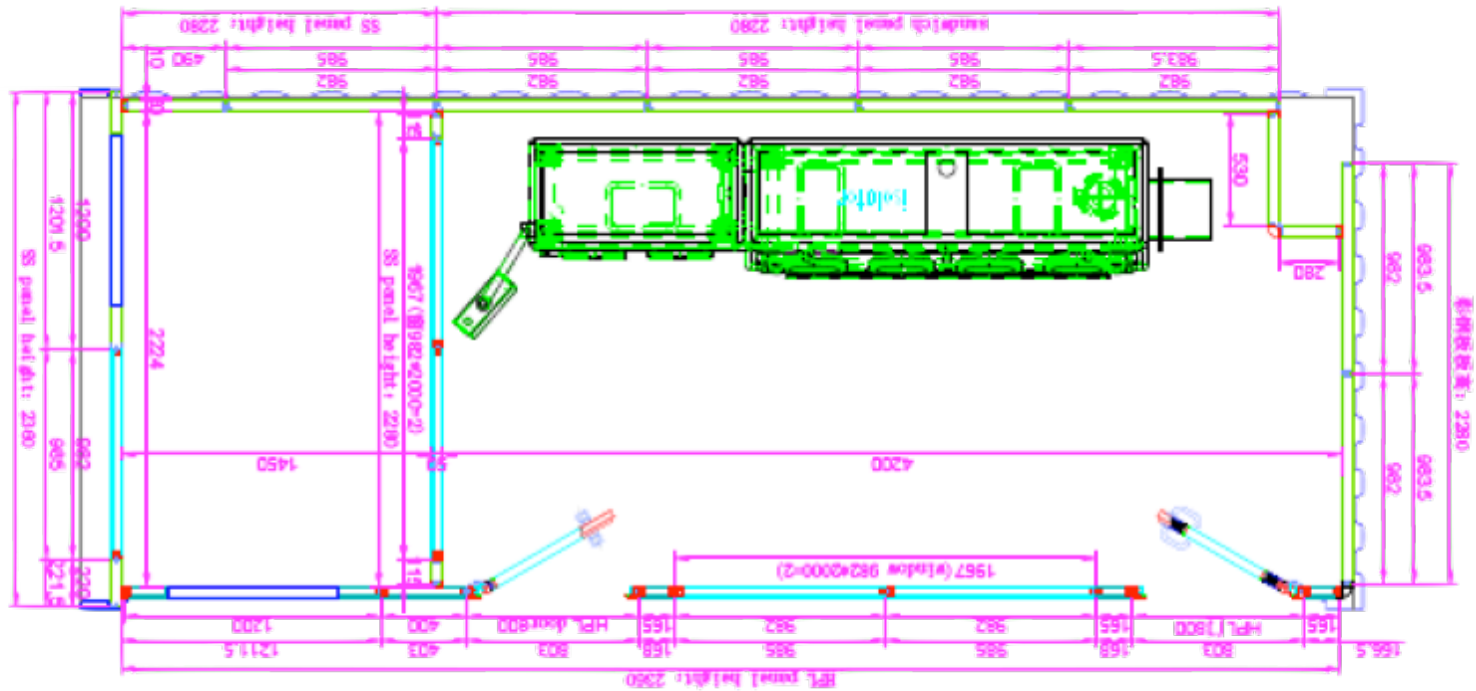
## Laboratory Containers (Option 1)

No.	Product	Type	Unit	Qty.
1	Container		Set	1
2	Container Refit and Parts		Item	1



# Laboratory Containers

## Option 2



## Laboratory Containers

### Option 2

#### Features:

- PCGI cleanroom sandwich panels.
- Aluminum Profiles
- PCGI Door
- HPL & Stainless Steel air tight doors
- Double layer tempered glass windows
- LED lights
- PVC Flooring



#### Equipped with:

- Sterility test isolator



## Laboratory Containers



## Laboratory Containers (Option 2)

No.	Product	Type	Unit	Qty.
1	HPL Panel		m <sup>2</sup>	14
2	SS304 Panel		m <sup>2</sup>	18
3	PCGI Panel		m <sup>2</sup>	21
4	Aluminum Profile		m <sup>2</sup>	53
5	HPL Door	800 * 2100 * 50	Set	2
6	SS304 Air Tight Door (with frame)		Set	1
7	HPL Air Tight Door (with frame)		Set	1
8	Double Tempered Window		Set	5





## Laboratory Containers (Option 2)

No.	Product	Type	Unit	Qty.
10	Sealing Materials		Item	1
11	LED Lighting	300 * 600 * 12	Set	3
12	PVC Flooring		Item	1



## Laboratory Containers (Option 2)

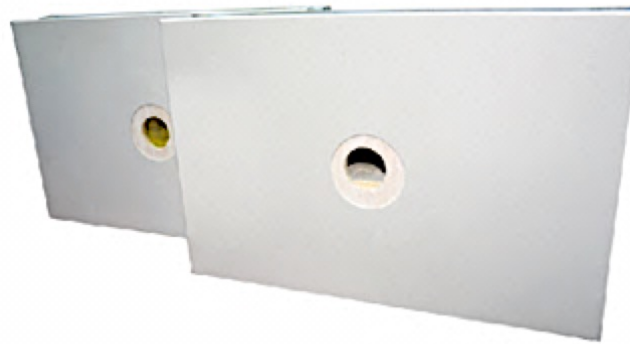
No.	Product	Type	Unit	Qty.
1	Weighing Isolator		Set	1
	Documentation		Item	1

No.	Product	Type	Unit	Qty.
1	Container		Set	1
2	Container Refit and Parts		Item	1



## Antibacterial Color Steel Clean Plate

Special antibacterial coating of patented NanoPC nano-silver and titanium dioxide is able to continuously inhibit reproduction of bacterial and overcome the defects of conventional disinfection method such as severe corrosivity, biological toxigenicity, short effectiveness period of disinfection. By this way this material greatly reduces frequency and strength of disinfection operation.



- Advanced nano technology, patented coating, safe and reliable
- 99% antibacterial ratio, fast sterilizing ability
- Mould proof, deodorization, efficient and lasting
- Decompose HCHO, TOVC, purify air





### Steel Finished Door

**Door panel:** steel plate of door panel is made of cold rolled steel plate with stoving varnish on surface. The common colors are sky blue, sea blue and pale grey. Core materials are paper honeycomb, aluminum honeycomb, PU, EPS and etc. The installation sites of door lock, door closer and hinge are reinforced with square tubes of more than 1.5mm thickness which are compression moulded by special technology. The thickness of door panels is 50 (flush with door frame) or 40.

**Door frame:** it is made of cold rolled steel plate with stoving varnish on surface. The common colors are sky blue, sea blue and pale grey. The connection types with wallboards are double-clip type and aluminum connection. The former is applied mostly to machine made wallboard and the latter hand made wallboard.

**Specification:** common sizes 800X2100, 900X2100, 1500X2100 or 1800X2100, can customize to customers' requirements.

**Features:** beautiful appearance, sturdy and durable, reasonable price, one of the first choice of finished doors for color plate partition wall projects such as clean room and laboratory.



### AL. frame CR-door With Large Window

AL. frame CR-door is produced by China's advanced processing equipments with good quality aluminium profile and double tempering glass. It is of high precision, beautiful appearance and thermal insulation. It is the first choice of foreign projects and advanced engineering projects.

**Door panel:** door panel applies the material of light white, powder coated or dull polished aluminium alloy Austar door. The steel plate of door panel is color plate and the common colors are sky blue, pea green and pale grey. Core materials are paper honeycomb, aluminum honeycomb, PU, EPS, rock wool and etc.

**Door frame:** apply the material of light white, powder coated or dull polished aluminium alloy Austar door. Only for hand made plate use.

**Specification:** standard sizes are 800X2100, 900X2100, 1500X2100 and 1800X2100. The size can also be made according to customers' requirements.

**Features:** high-end door for clean room is one of the most widely used doors for high-end clean rooms.





### SUS Finished Door for Cleanroom

**Door panel:** door panel is made of stainless steel 304 with no frame. Core materials are paper honeycomb, aluminum honeycomb, PU, EPS and etc. The installation sites of door lock, door closer and hinge are reinforced with square tubes of more than 1.5mm thickness which are compression moulded by special technology.

**Door frame:** it is made of completely stainless steel 304. The connection types with wallboards are double-clip type and aluminum connection. The former is applied mostly to machine made wallboard and the latter hand made wallboard. The accessories are double window and lift type sweeping bar. The lock can be famous door lock or the owners can select lock brands themselves.

**Specification:** common sizes 800X2100, 900X2100, 1500X2100 or 1800X2100, can customize to customers' requirements, the materials can be selected according to customers' requirements such as 306L or other special materials.

**Features:** the stainless steel 304 door we produced are of elegant appearance, sturdy and durable, acid and rotting resistance and thermal insulation. It is the first choice for high-end projects at home and engineering concerning foreign affairs that requires for anticorrosion and high quality such as electronics factory and food factory



### AL&SUS Frame Sliding Door

**Door panel:** door frame can be made of stainless steel, aluminium alloy or special box iron. The door panel is sandwich board. The common colors are sky blue, pea green and pale grey. Core materials are paper honeycomb, aluminum honeycomb, PU, EPS and etc. The installation sites of handle and guide rail pulley are reinforced with square tubes of more than 2mm thickness which are compression moulded by special technology.

**Guide rail:** aluminium alloy or hot-dip aluminizing.

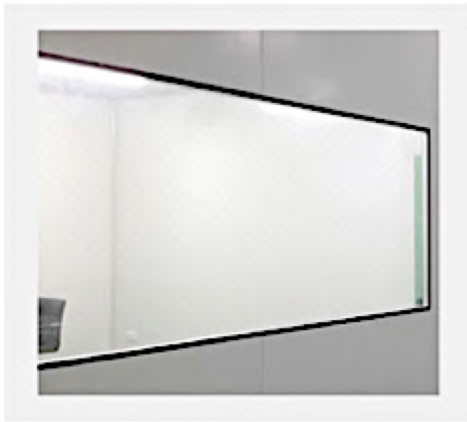
**Specification:** customize to customers' requirements.

**Features:** good looking, low price.



## Cleanroom Windows

Manufactured under controlled environment, the cleanroom windows offer the best option for make the interior of the cleanroom visible. By design allows keeping the temperature and humidity of the room and counts with measures to avoid any contamination between the double layer glasses.



### Double Glasses Window for Hand Made Plate

**Frame:** specialized aluminium alloy sections. Generally 3 types: light color, power coating and dull polish. It can also apply special folding steel pieces.

**Glass:** 5-6mmtoughened glass, black or white screen print on frame, 20~25 width

**Interlayer:** fill with nitrogen and desiccants

**Specification:** common sizes1180X1000 and 2363X1000, can customize to customers' requirements.

**Features:** beautiful appearance, no aluminium alloy frame can be seen on the surface, glass and plate on the same plane, concise, beautiful, the first choice for partition wall project of hand made plate.



- Specifically designed and produced for sterility testing of the majority of injectable products
- The system provides low-cost but high efficiency environment stability testing and operation to ensure the demand and the avoidance of bacteria by being in a control environment.
- Given the level of aseptic conditions achievable within the system, other processes such as **Aseptic Dispensing/Sampling** , and **Aseptic Product Transfer** are possible to be conducted.
- The base isolator system is composed of one **Class A**, 4 glove chamber and one **Class B** (*before sterilization, class B after sterilization*) pre chamber. This pre chamber can be used as a rapid gassing port.
- The isolator is designed with an unidirectional air flow booth, chambers with positive pressure with respect to the lab environment.

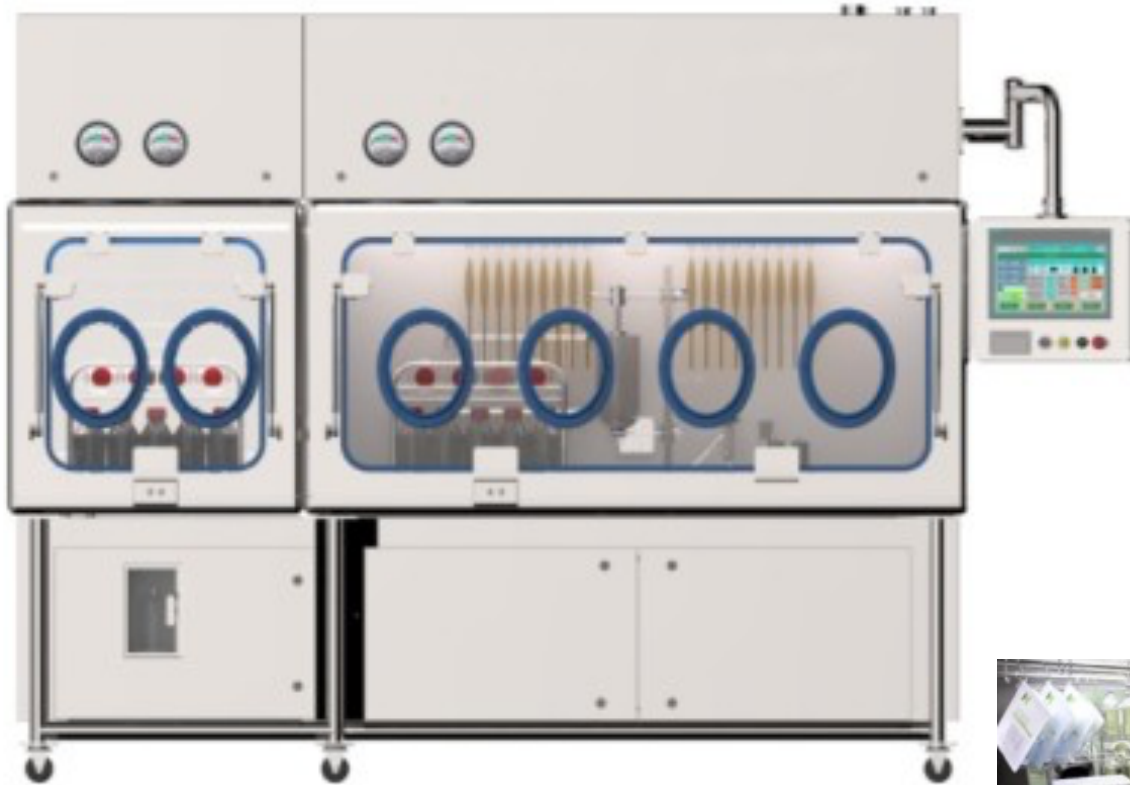


## Sterility Test Isolator

- The system is designed to take air from the Class D laboratory or from a HVAC System (H14) unidirectional down (laminar) flow filters and return filters. Inlet pre-filtration available upon request.
- Intelligent operation system can integrate VHP sterilizer, Sartorius bacteria and plankton, dust particle monitoring and related sensors.
- Dehumidification conditions, conditioning, sterilization and ventilated processes are automatically operated via HMI to avoid human error.
- The internal part sets high and low presence sensors of hydrogen peroxide to assure the sterilization and residue elimination effect. The weighing module can record every process and alarm the minimum dose of hydrogen peroxide.
- Easy transfer from transfer hatch to workstation, thanks to internal mobile cart and stainless steel baskets.









### Standard Pass Box

Stainless steel made equipment. Maintains the cleanroom or critical area at highly cleanliness leveling by eliminating personnel move in and out of the area.

### Self Purification Pass Box

Automatic equipment that additional to its main purpose of avoiding unnecessary personnel movement, also allows auto purification of the internal area.



### Clean Bench

Clean bench is classified into vertical and horizontal laminar flow type under both of which 9 categories (such as standard, medical type, novel type, separation & insertion type, desktop type, biotype, etc.) and 30 models are further formed and applied as per various function and features in the field of medical & health, electrical machinery, instrumentation, pharmaceutical products, plant tissue culture, biological engineering, animal husbandry and veterinary medicine, and in tertiary institutions and various types of laboratories.



## HVAC Systems

We are able to provide all the systems related to heat, ventilation and air conditioning for controlled areas. Chillers, heat pumps, air handler units, dehumidifiers, HEPA boxes, FFU, diffusers, air ducts, etc.

