

METAL FACADE METAL ROOF CLEANROOM SYSTEM COLD STORAGE SYSTEM STEEL STRUCTURE



# CLEANROOM SYSTEM

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**WISKIND**

DEDICATED TO  
PUSHING THE LIMITS



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## WISKIND CLEANROOM SYSTEM



Cleanroom technology effectively controls particulates, harmful air, bacteria and other pollutants according to client requirements, while meeting the needs for precision, miniaturization, high purity, high quality and high reliability in product processing and experimental research, so it is widely applied in the biomedical, fine chemical, aerospace, food processing and other industries. Wiskind has been leading the industry in cleanroom enclosure system design, material technology and manufacturing processes, and provides professional clients with unique total cleanroom solutions.

### Certification and Honor

- National High-Tech Enterprise
- Advanced Private Enterprise in Shandong Province
- Shandong Provincial Certified Enterprise Technology Center
- Member Unit of China Pharmaceutical Association of Engineering Design
- Member of China Pharmaceutical Association of Plant Engineering
- Member Unit of China Association for Pharmaceutical Equipment
- Member Unit of Chinese Contamination Control Society
- Enterprise of China Center Kitchen Industry Technology Innovation Strategic Alliance
- American IEST Member Enterprise
- Dual ISO9001 Quality Management System Certified Company
- ISO4001 Environmental Management System Certified Company
- OHSAS 18001 China Occupational Health and Safety Management System Certified Enterprise



### ABOUT WISKIND

Founded in 1978, Wiskind Group is mainly specialized in such businesses as manufacturing of steel building products and cold-rolled steel, as well as the trade of coated steel sheets. As a company of the Group and a national hi-tech enterprise, Shandong Wiskind Steel Building Co., Ltd., which was listed on the new OTC market in 2014, is a specialized manufacturer and service provider of metal cladding system and steel structure products. The production lines that have been put into operation, including sandwich panel, curtain wall, cold storage panel, cleanroom panel, cleanroom doors and windows, all employ state-of-the-art equipment, technologies and production management systems.



## CUSTOMER BENEFITS



### Best-in-class Product Design

First based on a deep understanding and accurate grasp of client needs, an excellent product is created through scientific and innovative design. In view of this, Wiskind's cleanroom enclosure products attach great importance to the optimized design of main and auxiliary materials, as well as panel and system structures, with a number of patented technologies. The high standard design scheme ensures the excellent functional characteristics and appearance quality of the product, fully reflects the product concept of standardization, modular construction and integrated solution, which better satisfies the personalized needs of the client and meets the challenges of harsh cleanroom engineering.



### Original Manufacturing Process

The world's first fully automated production line for cleanroom panel, which is different from the traditional manual production, is independently designed and developed by Wiskind who possesses full intellectual property rights. Compared with the traditional manual production, the automated production line improves production efficiency by 6-8 times, and at the same time, the automated non-standard panel production line developed by Wiskind solves the problems of unstable quality and insufficient flexibility of production capacity associated with the traditional manual production. The processes of steel sheet forming, gluing, core material filling, composite pressing and finished product palletizing are realized through precise measurement and intelligent control, making the accuracy, strength, flatness and aesthetics of cleanroom panels extremely greatly improved, and product quality more stable. "Technology allows every cleanroom panel the same quality."



## TO BE THE MOST TRUSTWORTHY ENTERPRISE IN THE CLEANROOM SYSTEM FIELD



### Rich Industry Experience

For more than 40 years, Wiskind Group has been committed to the application of metal enclosure products, providing more than 150 million square meters of various construction enclosure products for thousands of engineering projects. In the field of cleanroom engineering, Wiskind focuses on semiconductor, optoelectronics, biomedical, food processing and other industries. It has participated in the construction of hundreds of cleanroom engineering projects of well-known domestic and foreign enterprises, and has thus accumulated rich product application technologies and project operation experience. A highly qualified professional technical and management team is the strongest guarantee for Wiskind to create customer value and deliver on quality commitments.

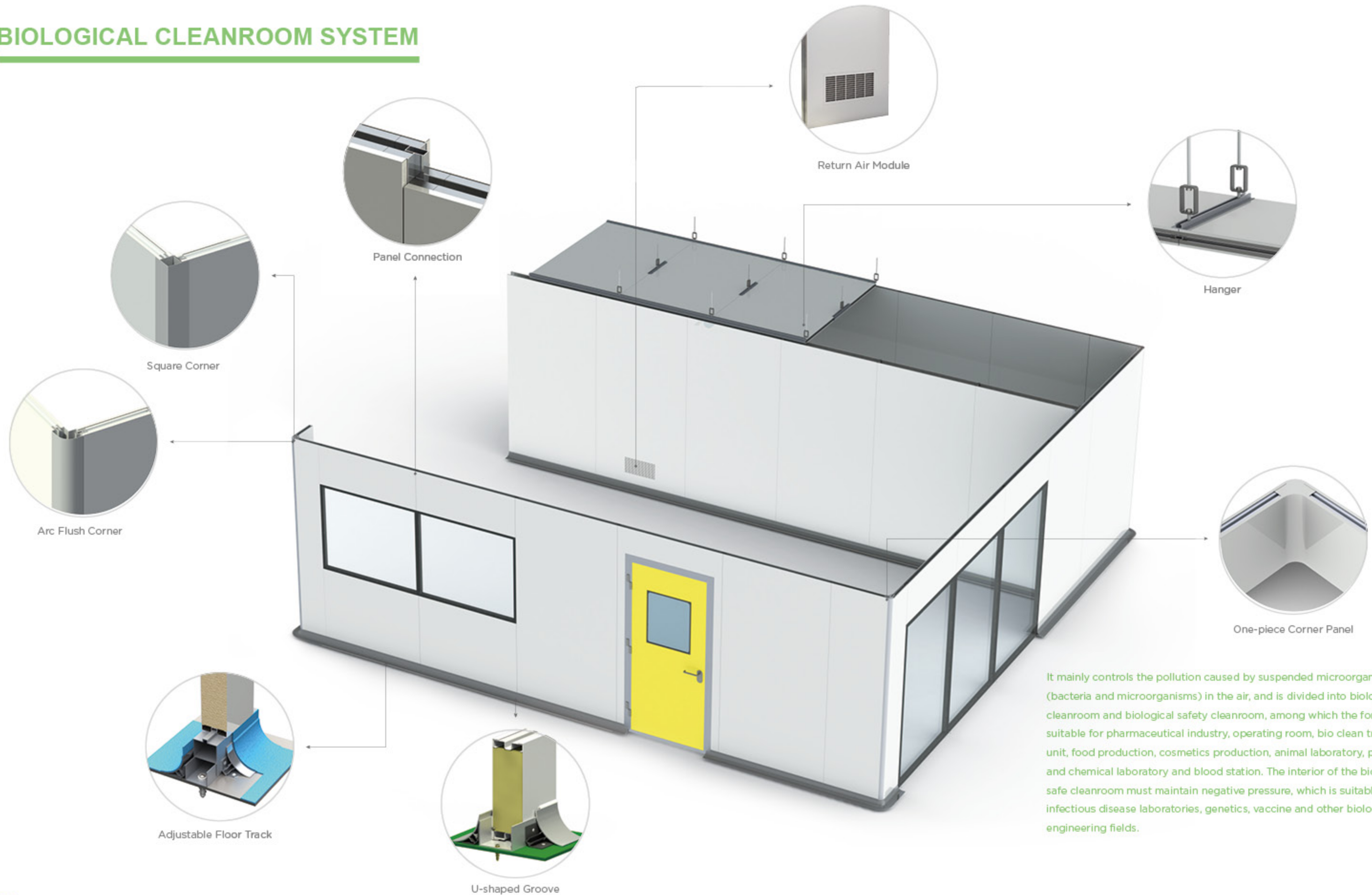


### Efficient Service System

Wiskind develops an intelligent delivery system to provide the client with total solutions for specialized cleanroom enclosures, as well as comprehensive and integrated services, including intelligent design, needs analysis, solution construction, quotation, production order, delivery, construction guidance, and routine maintenance services. With 4 subsidiaries, 13 offices and more than 100 business and technical personnel across the country, it is able to provide the client with timely and face-to-face services. An information management system covering the entire business process helps the client realize automation and intelligent development, and allows customer service to be more standardized and efficient. It's Wiskind's commitment that "tell us what you want, and leave the rest to us!"



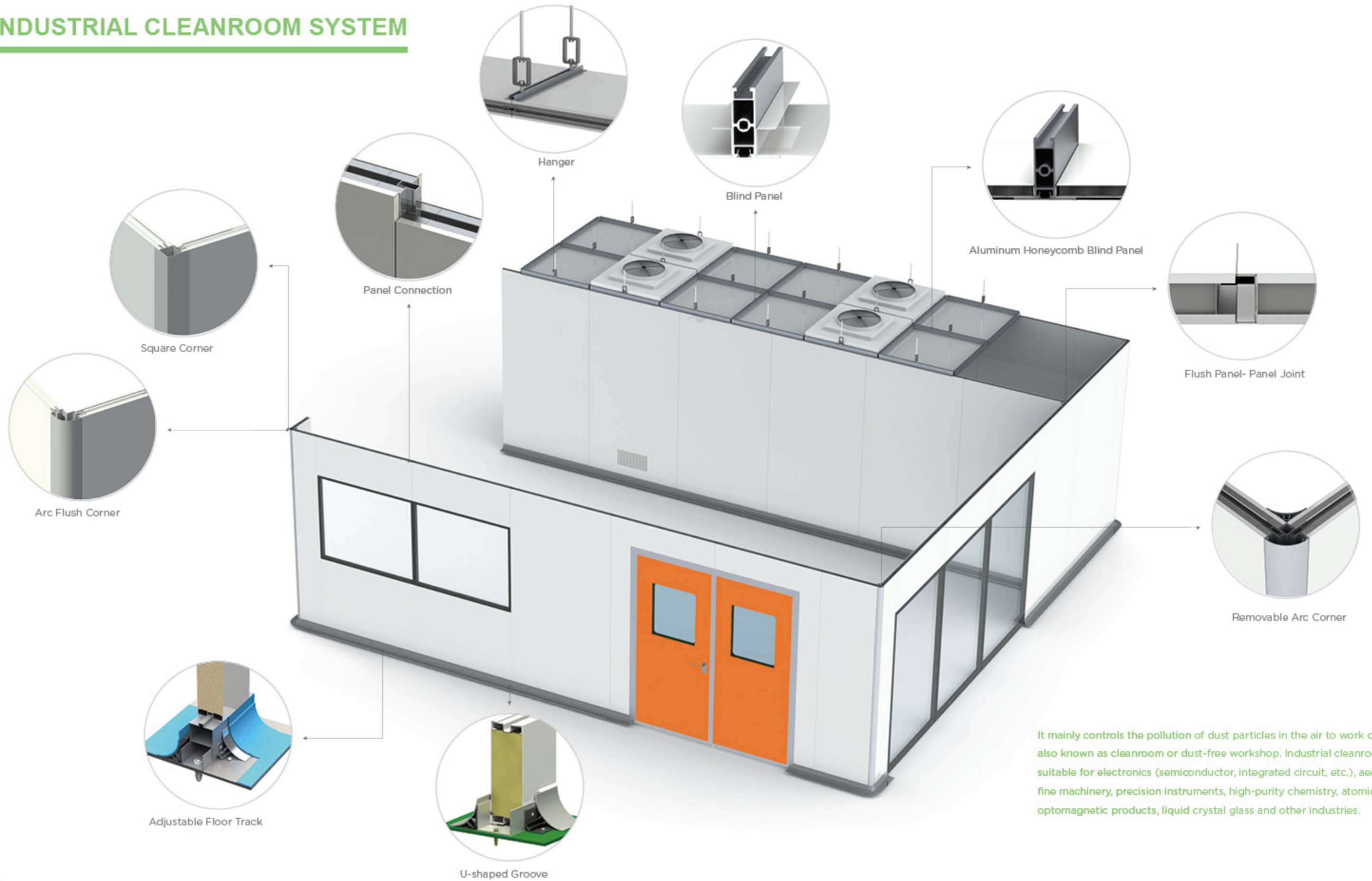
## BIOLOGICAL CLEANROOM SYSTEM



It mainly controls the pollution caused by suspended microorganisms (bacteria and microorganisms) in the air, and is divided into biological cleanroom and biological safety cleanroom, among which the former is suitable for pharmaceutical industry, operating room, bio clean treatment unit, food production, cosmetics production, animal laboratory, physical and chemical laboratory and blood station. The interior of the biologically safe cleanroom must maintain negative pressure, which is suitable for infectious disease laboratories, genetics, vaccine and other biological engineering fields.

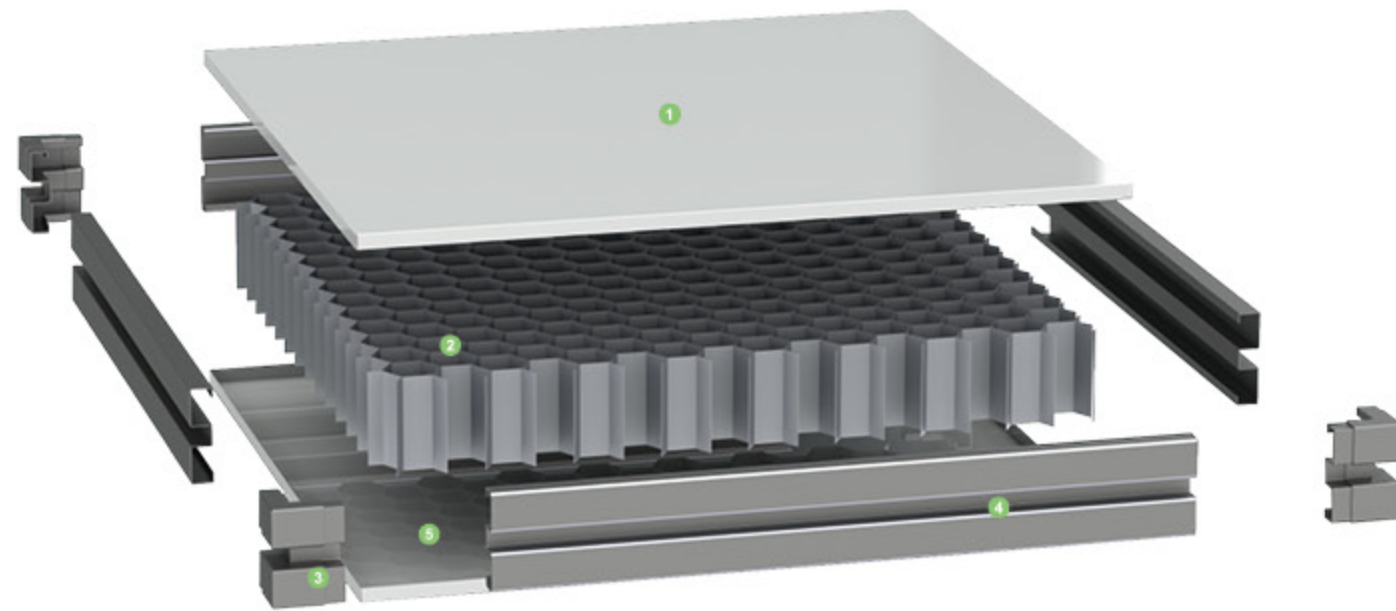


## INDUSTRIAL CLEANROOM SYSTEM



It mainly controls the pollution of dust particles in the air to work objects, also known as cleanroom or dust-free workshop. Industrial cleanroom is suitable for electronics (semiconductor, integrated circuit, etc.), aerospace, fine machinery, precision instruments, high-purity chemistry, atomic energy, optomagnetic products, liquid crystal glass and other industries.

# CLEANROOM PANEL



1 Surface Panel    2 Core Material    3 Galvanized Corner    4 Carrier    5 Adhesive

Wiskind cleanroom panel adopts special color coated steel, aluminum alloy and other materials on the surface panel, while the core is composed of rock wool, glass magnesium panel and aluminum honeycomb, among other materials. The

product boasts an excellent performance and is suitable for all kinds of cleanroom projects with rigorous indoor environment requirements as an ideal product for cleanroom enclosure.



## Aesthetic Appearance

Smooth & Flat Surface  
Fine Structure



## Excellent Performance

Dust-free  
Anti-static  
Sound Absorption  
Sound Insulation  
Fire Resistance



## Factory Prefabrication

Standardized Production  
Modular Construction



## Customer Customization

System improvement  
Flexibility in application



### Handmade Panel

- The zigzag galvanized steel carrier is pre-buried on the four sides as the edge bandings in order to enhance the strength and airtightness of the panel.
- The wall panel adopts the handmade aluminum profile for connection, easy to install.
- The four sides of the ceiling panel adopt heavy, mid-set suspension beam to increase the strength.

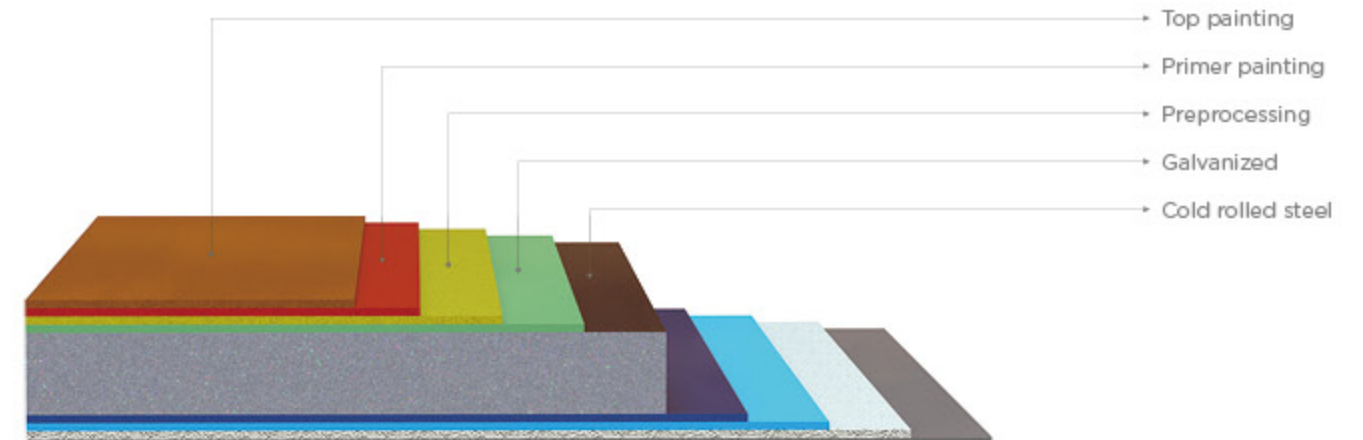


### HPL Cleanroom Panel

- Colorful and decorative
- Wear-resistant surface, durable
- Strongly fire resistant as a Class A non-combustible material

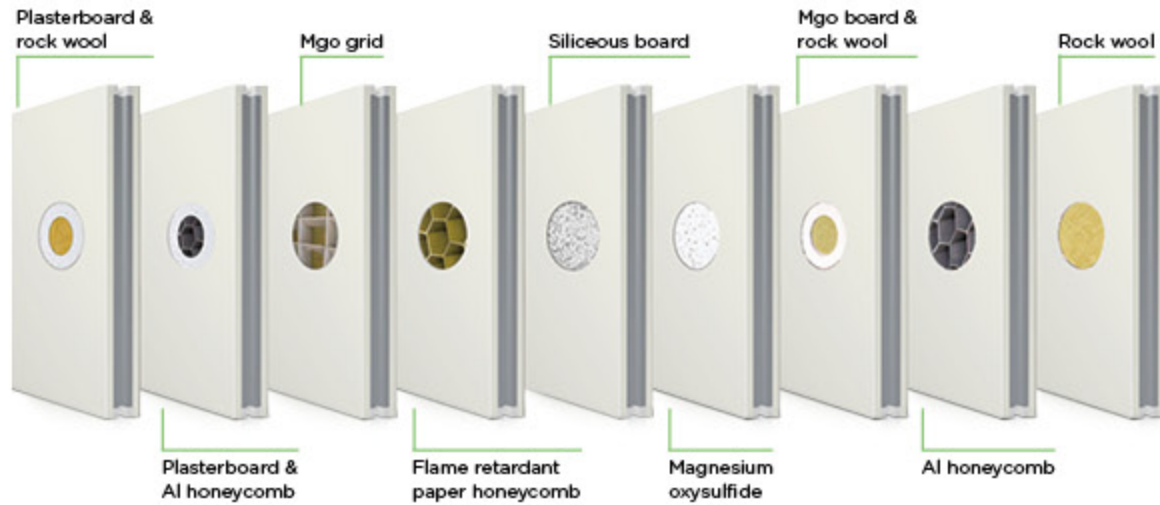
| Items           | Specifications  |
|-----------------|---|
| Width           | Handmade Panel: 980/1,180mm<br>HPL Cleanroom Panel: 1,220/1,525mm               |
| Length          | Wall Panel: 100-9,000mm, Ceiling Panel: 100-3,500mm<br>HPL Panel: 2,440/3,050mm |
| Thickness       | Wall Panel: 50/75/100/150mm<br>HPL Panel: 50mm                                  |
| Steel Thickness | Handmade Panel: 0.4-0.8mm<br>HPL Cleanroom Panel: 3/4mm                         |
| Steel           | PPGI, PPAL, SS Steel, Zinc-titanium Alloy, HPL                                  |
| Painting        | Handmade Panel: PE, PVDF, HDP   |

Note: Non-standard custom specifications are available upon request.





## CLEANROOM PANEL



| Items              | Width                  | Core density             | Soundproof | Live load             | Waterproof | Fireproof |
|--------------------|------------------------|--------------------------|------------|-----------------------|------------|-----------|
| Rockwool           | 15-16kg/m <sup>2</sup> | 100-120kg/m <sup>2</sup> | 25dB       | 1.1kN/m <sup>2</sup>  | ≥ 98%      | 30min     |
| Magnesium Rockwool | 17-23kg/m <sup>2</sup> | -                        | 30dB       | 1.25kN/m <sup>2</sup> | -          | 60min     |
| Aluminum Honeycomb | 10-15kg/m <sup>2</sup> | -                        | 18dB       | 1.0kN/m <sup>2</sup>  | -          | 41min     |

Note: The panel weight is calculated according to 50mm TCK.

SGS



### Cleanroom Panel Production Line

Wiskind's self-developed continuous production system for cleanroom panel is on a par with the international advanced level, which includes roll forming system, automated cotton renewal system, automated glue spray system, dual track setting and temperature control system, robot palletizing system, control system, etc. The system features a high degree of automation, fast processing efficiency, and stable product quality. With a maximum production capacity of up to 2 million square meters per year, it can produce cleanroom panels of varied cores. As a 2016 major R&D project of Shandong Province the continuous cleanroom panel production system was successfully inspected and accepted in 2018 by the expert panel that recognized it as the achievement on international advanced level.





## REMOVABLE PANEL

Partial damage inevitably occurs and needs to be replaced or repaired during the construction and application of the cleanroom panel. And, because of processing equipment changes or cleanroom layout adjustment, it is necessary to remove part of the walls. However, traditional cleanroom panels are difficult to be partially disassembled, the constructor and the end user are often bothered by these problems. With the successful development of Wiskind's rapid removable technology, which won the national patent in 2015, this problem is readily solved.



## ANTI-COLD BRIDGE CARRIER

The four sides of the cleanroom panel are composed of steel carriers and corners. In low temperature clean processing workshops or cold seasons, condensation is prone to occur at the edge. To this end, the broken bridge and thermal insulation carriers invented by Wiskind provide a perfect solution to this problem, improve the overall thermal insulation performance of the cleanroom, extend the service life of the panel, and reduce the cost of panel replacement.



## ONE-PIECE CORNER PANEL

The one-piece corner panel is a patented product of Wiskind. Different from the traditional corner splicing approach, the one-piece corner panel is an integrated one that makes the corner zones flat and smooth, without transition joints, the joint is tighter, air leakage and seam dust accumulation are eliminated, and it is convenient for cleaning and disinfection. The one-piece corner panel is specially insulated to effectively avoid the thermal bridge effect common for traditional corners. Combined with Wiskind's patented removable technology, the one-piece corner panel can be removed individually, which is convenient and flexible for routine maintenance.





## RETURN AIR WALL

When the traditional return air column is applied, it takes up a lot of space and is unaesthetic. To solve these problems, Wiskind has invented the 100mm hollow return air wall panel, which can replace the return air column and 100mm hollow dome walls in the buffer room for dressing and shoe changing. The average return air volume reaches up to 500m<sup>3</sup>/h, which greatly improves the application scope of cleanroom spaces. The return air module is prefabricated in the factory, allowing for direct onsite installation, which is more convenient and faster.

## ENDURE® CLEANROOM PANEL

Endure® is mainly applicable to cleanroom enclosure structures in the Class B cleanroom areas, such as those of biological products and blood products, where VHP sterilization, panel sterilization and bromogeramine wiping are performed. As a special steel panel for the pharmaceutical industry, its unique features include excellent weather resistance, excellent mechanical properties, ductility, corrosion resistance to many chemicals, solvents and colorants, stain resistance, easy cleaning and excellent fire resistance, not only safe, but also environmentally friendly.

### Endure® Scratch & VHP Resistant Steel Sheet



### 30% H<sub>2</sub>O<sub>2</sub> Resistance Testing

The sample was immersed in the 30% H<sub>2</sub>O<sub>2</sub> solution with the mouth of the beaker sealed, and the surface state was observed.



#### Test Results:

1. Soaked in 30% H<sub>2</sub>O<sub>2</sub> solution at room temperature for 432h, there is no obvious change on the surface.
2. Among them, in the H<sub>2</sub>O<sub>2</sub> titration experiment, the resistance of Endure® is 7.2 times that of PVDF.

### 10% HCl and 10% NaOH Resistance Testing

The samples were immersed in 10% HCl and 10% NaOH solution, and their surface conditions were observed.



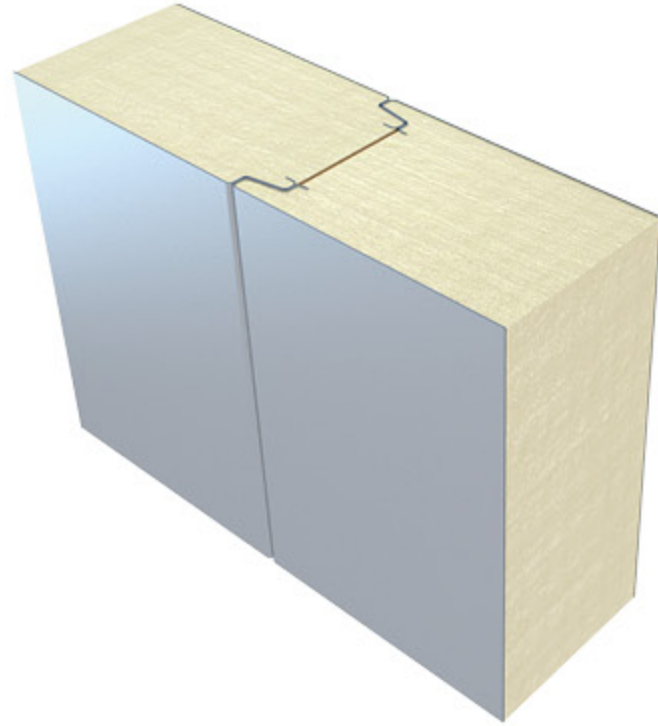
#### Test Results:

1. Soaked in 10% HCl solution at room temperature for 1208h, Endure® shows no evident change on the surface.
2. There was no evident change in the surface of Endure® when soaked in 10% NaOH for 1208h at room temperature.

This data was provided by the Wiskind Lab.



## COLD STORAGE PANEL



| Items                | Specifications       |   |
|----------------------|----------------------|---|
| PU Specifications    | Width                | 930mm                                       |
|                      | Thickness            | PU/PIR: 40-300mm    Rockwool + PU: 40-200mm |
|                      | Length               | ≤ 26m                                       |
| Steel Specifications | Material             | Color Coated Steel Plate, 304/316 SS        |
|                      | Thickness            | 0.4-0.8mm                                   |
|                      | Coating              | PE, PVDF, HDP, SMP                          |
| PU                   | Fireproof            | B1 (Oxygen Index ≥ 30%)                     |
|                      | Closed Cell Ratio    | ≥ 90%                                       |
|                      | Water Absorption     | ≤ 3%  |
|                      | Thermal Conductivity | 0.018-0.024w/(m*k)                          |
|                      | Heat Resistant Range | -185°C --+110°C                             |

Note: The adhesive we choose is SGS certified and totally meets the environmental standard specified by EN71 Part 3.

## Cold Storage Panel Production Line

The cutting-edge equipment and technologies introduced from OMS, Italy feature dual ultra-long tracks of up to 42 meters, the longest in the country, which offer sufficient curing time for PU foaming, and considerably improve the bonding and forming properties of the panels. The equipment is able to turn out ultra-thick (as thick as 300mm) cold storage panels, so as to meet the client's special needs for low temperature environment. The advanced PU foaming process avoids the original F11 and 141B foaming agents, which not only ensures better foaming quality, but also truly realizes zero emissions of fluoride during the production process.





## CLEANROOM DOOR



Cleanroom door is divided into four product series according to material: steel door, stainless steel door, color steel door, and melamine resin door. The core is generally made of high-quality flame-retardant paper honeycomb or aluminum honeycomb in order to ensure the strength and flatness of the cleanroom door.

- Hinge: resistant to acid and alkali disinfection, long-term high-frequency use, door leaf does not sag, convenient field installation and adjustment.
- Lock: the entire lock service life reaches up to 200,000 times, and the overall appearance parts have passed the 96-hour neutral salt spray test.
- Window on the door: double-layer ultra-white tempered glass, three-layer sealing, patented carrier design, built-in 3A molecular sieve to prevent internal fogging.
- Door seal: the door body adopts German production technology on three sides, and imported polyurethane adhesive is foamed on site, which boasts an excellent sealing performance.

| Items          | Configuration               |  |
|----------------|-----------------------------|--|
| Specifications | 900*2,100mm/1,100*2,100mm   |  |
|                | 1,200*2,100mm/1,500*2,100mm |  |
| Thickness      | 50/75/100mm                 |  |
| Material       | Color Steel Door            | Aluminum door frame, painted steel door panel                                    |
|                | Steel Door                  | Painted steel door frame, painted steel door panel                               |
|                | HPL Cleanroom Door          | Aluminum Alloy, HPL  |
|                | Stainless Steel Door        | 304 Stainless steel door frames and door panels                                  |
| Accessories    | Window                      | Single / double glass and right angled / round corners are available             |
|                | Door Closer                 | Open, Hidden, Specified  |
|                | Door Lock                   | Handle lock, electromagnetic lock, electric plug lock, passage lock, push handle |
|                | Hinge                       | 304 stainless steel hinge, aluminum alloy hinge                                  |
|                | Floor Brush Seal            | Hidden lifting floor brush seal  |

Note: Non-standard custom specifications are available upon client request.



### Aluminum Cleanroom Door

- The door frame and door leaf are made of aluminum alloy through cutting and stitching.
- The door leaf surface material is composed of color steel plate or HPL, nonporous, dust-free and easy to clean.
- HPL is resistant to bacteria and abrasion, and can withstand frequent disinfection treatment in pharmaceutical factories.

### Steel Cleanroom Door

- High-quality galvanized steel is made by bending and connected welding.
- Surface electrostatic resin powder coating, flat and smooth.
- The core material adopts flame-retardant paper honeycomb or aluminum honeycomb, which is light and structurally strong.



## MASTER SERIES CLEANROOM DOOR

### • Rugged construction and durability

The Master door first adopts special reinforced hinge and lock body fasteners, changes the traditional point connection to multi-contact and surface connection, allowing the door body connection to be more uniform and stronger. Second, it adopts a special reinforcement structure around the door leaf. Hinge reinforcement fixings and lock body fixings, etc. form an entirety that bears stress as a whole.



### Rugged construction and durability

Over 300,000 door opening and closing fatigue tests.

### • Double seal, more reliable

The door leaf and frame are separately provided with a sealing strip, forming a double-layer seal that is more reliable. According to testing by the National Center for Quality Supervision and Test of Engineering Building, the positive and negative wind pressure ratings reach level 6, thus more suitable for some doors with stricter sealing requirements.



### Double seal, more reliable

The positive and negative wind pressure ratings reach level 6 (GB/T 20909-2017).

### • Full life-cycle services

The quality of the door hardware has a direct effect on the use of the door. The Master door lock uses custom German GEZE locks, which have undergone 500,000 opening and closing experiments. The door comes with a 2-year warranty and free lifetime maintenance.



### Full life-cycle services

The Master door lock uses custom German GEZE locks, which have undergone 500,000 opening and closing experiments.

## HIDDEN FRAME DOOR

The screws at the uppermost fixing point of the hinge side door frame loosen after opening and closing for a period of time. After analysis, it is found that the self-tapping screws are liable to cause wire slip under reciprocating dynamic loads, which is also a common phenomenon in construction, and it cannot be handled at all once the slip wire occurs. The problem is perfectly solved by the clean and hidden frame door developed by Wiskind. The hidden frame door is embedded in the panel during production to form an integral connection, so there is not any issue with door frame fixing. With the use of the Master door, while the overall strength is enhanced, the passage size can be larger with a more aesthetic look.



## MEDICAL DOOR

With Wiskind medical environment steel door solution, the surface of the door body is treated with a special antibacterial coating, which is more suitable for use in the medical system environment. A variety of psychological color schemes for the door body are available to respond to each dept., not only beautiful and elegant, but also improving the overall comfort of the medical environment.



## STEEL SWING DOOR FOR WARD

### Product Features

- Optional motor and induction device to achieve automatic opening and closing.
- The door frame adopts a unique single or double slot integrated airtight door frame structure to meet the different needs of various environments.
- The steel door is made of environmentally friendly galvanized steel, with a polyester coating on the surface, which is resistant to pollution and green, and features heat preservation, sound insulation, moisture resistance, microorganism resistance and easy cleaning.
- Single stitching on the edge of the door leaf to reduce the breeding of bacteria. There are a variety of materials to choose from, such as galvanized steel, stainless steel, and glass windows of different sizes can be added to meet different medical needs.

| Items                      | Specifications  |
|----------------------------|---|
| Open Method                | Swing   |
| Door Frame Steel Thickness | 1.2-1.5mm   |
| Door Leaf Steel Thickness  | 0.8/1.0mm   |
| Door Leaf Glass Thickness  | 6.0/8.0mm   |
| Door Leaf Thickness        | 40mm  |
| Core                       | Flame-retardant Paper Honeycomb, Aluminum Honeycomb                             |
| Window                     | Right-angled and rounded corners are available                                  |
| Accessories                | Aluminum vents, electronic door operator, shutters, double glass shutters, etc. |

Note: Non-standard custom specifications are available upon request.





## CLINIC DOORS / OFFICE DOORS / TOILET DOORS



| Items                      | Specifications  |
|----------------------------|---|
| Open Method                | Swing   |
| Door Frame Steel Thickness | Clinic Doors / Office Doors: 1.2-1.5mm<br>Toilet Doors: 1.2-2mm                 |
| Door Leaf Steel Thickness  | 0.8/1.0mm   |
| Door Leaf Glass Thickness  | 6.0/8.0mm   |
| Door Leaf Thickness        | 40mm  |
| Core                       | Flame-retardant Paper Honeycomb, Aluminum Honeycomb                             |
| Window                     | Right-angled and rounded corners are available                                  |
| Accessories                | Aluminum vents, electronic door operator, shutters, double glass shutters, etc. |

### Product Features

- Optional motor and induction device can be used to realize automatic opening and closing. The door frame adopts a unique single or double slot integrated airtight door frame structure to meet the different needs of various environments.
- The steel door is made of ECO friendly galvanized steel, with a polyester coating or wood grain finish. It is anti-fouling, green and environmentally friendly.

- It features heat insulation, sound insulation, moisture resistance, microorganism resistance, and easy cleaning.
- The edge of the door leaf is tightly stitched to reduce the breeding of bacteria. There are a variety of materials to choose from, such as galvanized steel, stainless steel, and glass windows of different sizes can be added to meet different medical needs.



### Cleanroom Door & Window Production Line

Wiskind has introduced more than 20 sets of professional equipment for doors and windows from both home and abroad, including a sheet metal production line fully imported from Italy's Prima Power, automatically controlled front feed positioning shears, CNC bending machines, multiple automated robotic welding from Japanese Yaskawa and internationally leading aluminum door and window equipment. From blanking to final molding, the level of production automation is way ahead of the industry.

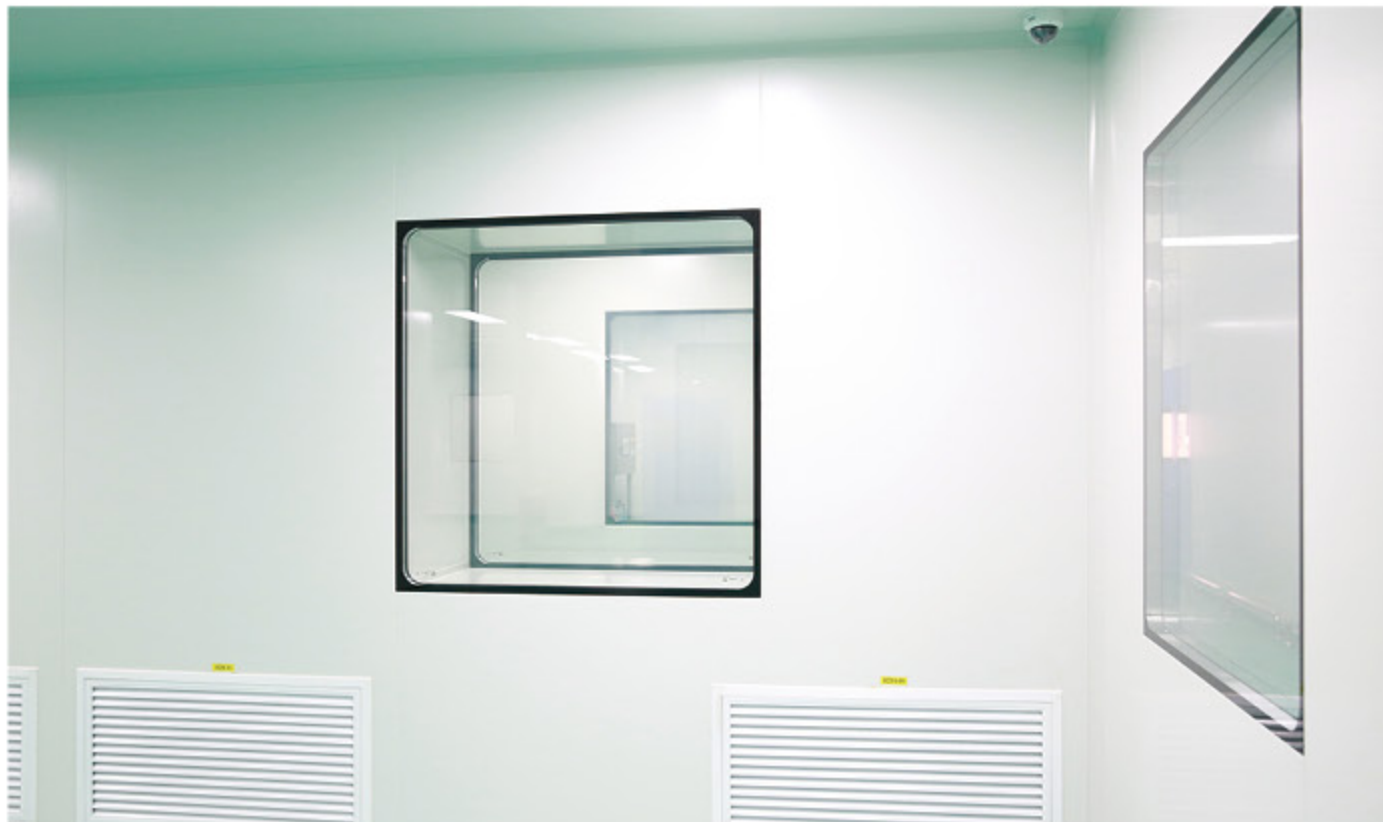


## CLEANROOM WINDOW



The cleanroom window comes in a variety of forms, with single and double glazing, with right-angled and rounded corners. The integrated design of the Wiskind cleanroom window is perfectly combined with the clean wall panel, which not only offers a good sealing performance and easy installation, but also possesses an aesthetic appearance, making it a highlight in the cleanroom space.

| Items                | Configuration   |
|----------------------|---|
| Glass                | Tempered Glass, Ultra-clear Tempered Glass, , Fire-Proof Window, Dimming Window |
| Window Frame & Cover | Aluminum Alloy  |
| Thickness            | 50/75/100mm   |
| Anti-fogging         | Built-in 3A Molecular Sieve, with Optional Inert Gases                          |



## MASTER SERIES CLEANROOM WINDOW



### • Three Seals

Professional cleanroom production environment, fully automatic control of temperature and humidity, the Master series clean windows are built with three seals and smooth transition of arc edge folds, thus ensuring the seamless sealing performance all around.

### • Molecular Sieve Technology

The patented window carrier is adopted, with vents uniformly arranged on both sides. The 3A molecular sieve reacts with the air in the cleanroom window through the gaps on both sides to ensure the anti-fogging performance of the window.

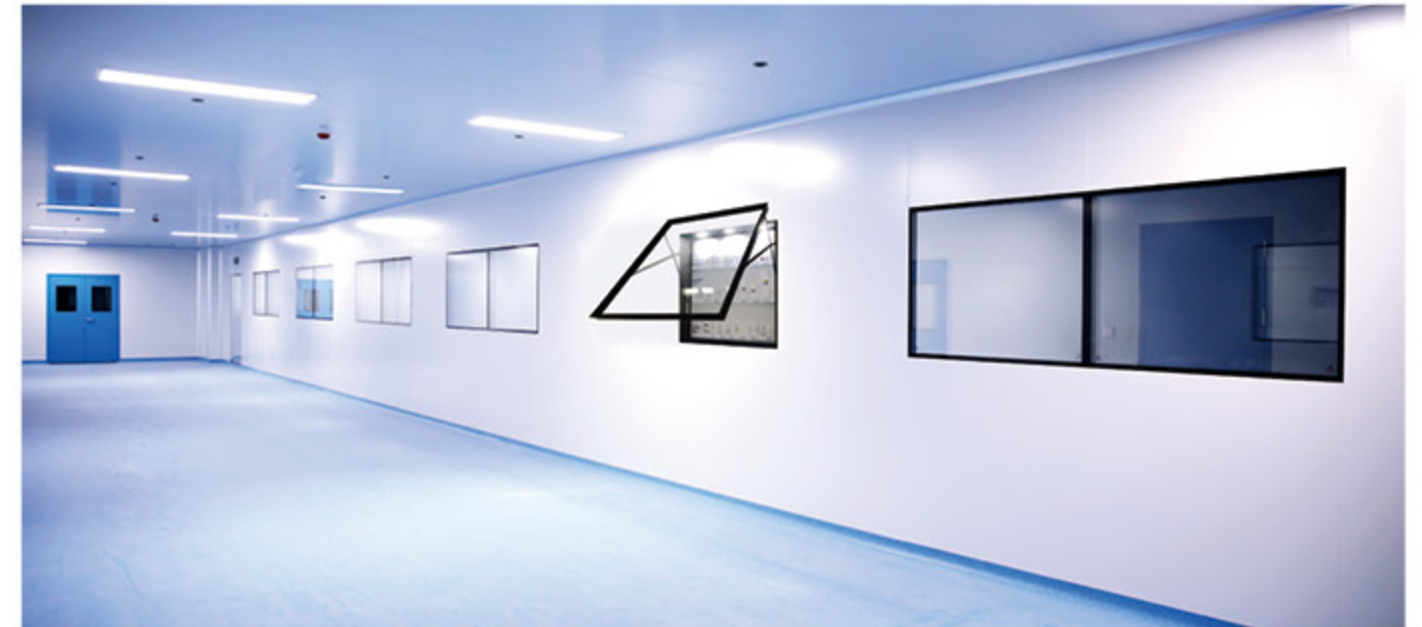
### • Patented Dome

The patented design of the dome can realize the installation solution behind the window of the cleanroom, with a long and flexible connection around the window, thereby increasing the connection strength between the window and the wall panel while reinforcing air tightness.

## DISPLAY WINDOW

Wiskind display window is mainly used in cleanroom exhibitions and sightseeing walkways.

- Power-assisted and motorized operations are available;
- Divided into two forms, printed bulletin and product display;
- Both styles come with top spotlight settings;
- The linkage handle is easy to operate, with convenient and safe window cleaning.





## ACCESSORY PRODUCTS



### PASS BOX

Pass Box is a kind of supporting equipment in cleanroom, which is mainly used for the transfer of small items between clean areas, as well as between the clean area and the unclean area, in order to reduce the opening frequency of cleanroom and minimize pollution. Cleanroom Pass Box is made of stainless steel panel, flat and smooth. The two doors interlock with each other, effectively preventing cross contamination. It is equipped with an electronic or mechanical interlock and an ultraviolet sterilizing lamp.

Cleanroom Pass Box is widely used in micro science and technology, biological laboratories, pharmaceutical factories, hospitals, food processing industry, LCD, electronics factories and other spaces that need air purification.



#### Product Features

- The box is made of SUS304 stainless steel, and the working area features an arc transition.
- There are interlocking devices on both sides to ensure that the doors on both sides cannot be opened simultaneously.
- Built-in double-layer tempered glass window.
- The pass box features the automatic blowing air shower, which can effectively remove the dust carried on the surface of the article during transfer.

| Product Name          | Dimensions (W*D*H)      | Internal Dimensions (W1*D1*H1) |
|-----------------------|-------------------------|--------------------------------|
| Pass Box              | 800*660*760mm           | 600*600*600mm                  |
| Laminar Flow Pass Box | 800*660*1,130mm         | 600*600*600mm                  |
| Optional Accessories  |                         |                                |
| Mechanical Lock       | All Stainless Steel Box | UV Germicidal Lamp             |
| Buzzer                | Walkie Talkie           |                                |

## LAMINAR FLOW HOOD

Laminar flow hood is an air purification equipment that provides a highly clean local environment. It is mainly composed of a box, a fan, an initial air filter, a high-efficiency air filter, a lamp, a current-sharing membrane, and a control. The product can both be hung and supported on the ground, with a compact structure that is easy to clean and disinfect.

They are widely used in precision machinery, electronics, pharmaceuticals, food, fine chemicals and other fields.

#### Product Advantages

- Pass GMP verification requirements
- Made of SUS304 stainless steel as a whole
- Use a large-capacity air blower or air conditioning system for air supply
- Liquid sealed to ensure zero leakage





## HEPA BOX

Hepa Box is an ideal terminal filtration equipment for the thousands, tens of thousands, and even the 100,000-level purifying air-conditioning systems, which can be widely used in the purifying air-conditioning systems in the pharmaceutical, healthcare, electronics and chemical industries. Hepa Box is used as a terminal filtration equipment for the renovation and construction of cleanrooms at all levels from 1,000 to 300,000, as a key equipment to meet the purification requirements. Hepa Box consists of a static pressure box, a diffuser plate and a high-efficiency filter. Its connection with the air pipe can be on the top or on the side.



### Product Features

- Replaceable structure
- 2 options of mechanical seal and liquid seal for better sealing performance
- Able to meet onsite PAO test
- Strong versatility

| Items                 | Configuration   |
|-----------------------|---|
| Box                   | Plastic sprayed cold rolled steel panel / stainless steel (SUS304) / aluminum panel   |
| Flange                | Plastic sprayed cold rolled steel panel / stainless steel (SUS304) / aluminum panel   |
| Current sharing panel | Plastic sprayed cold-rolled blank steel panel / stainless steel (SUS304) / aluminum panel   |
| Briquetting           | Galvanized steel / stainless steel (SUS304) / ABS   |
| Protective net        | Plastic sprayed aluminum orifice panel / plastic sprayed cold rolled steel panel / stainless steel (SUS304)   |
| Control valve         | Plastic sprayed cold rolled steel panel / stainless steel (SUS304)  |
| Insulation cotton     | PE  |
| Optional accessories  | PAO test port and dust outlet, air protection net, dust ring, up-regulated air volume adjustment valve, down-regulated air volume adjustment valve, insulation cotton, etc. |

## LED LIGHT



- Anti-falling rope:**  
the lamp is equipped with an anti-falling design to avoid momentary impact or other accidents that cause the lamp to fall off during high-intensity construction of the interlayer;
- DC low-voltage plug-in terminal:**  
human body safety voltage, no hidden danger of electric shock, fast and convenient installation and maintenance.

### 3 Light guide panel:

professional optical-grade light guide panel, high uniformity of light output, whole light effect exceeding 100lm/w;

### Light source:

special imported chip for clean lighting, blue light level is RGO, harmonic wave meets the national standard, and light attenuation meets the US LM80 standard;



### 5 Back panel:

high-strength galvanized steel panel to ensure the overall strength and impact resistance of the lamp;

### 4 Structure:

streamlined structure design, the installation surface is uniform and smooth, no sharp corners or seams, no dust accumulation / collection, and no impact on cleanroom laminar flow;

### Protection level:

using a unique sealing technology, regular protection can reach IP54, to meet the application in various clean environments, with convenient disinfection and cleaning;



### 7 Magnetic installation:

the lamp comes with a permanent strong magnet, allowing it to tightly attach to the metal wall panel. The gap after installation is less than 1mm, and the installation and maintenance are easy;

### 6 Frame material: 6063 aviation aluminum

### Process:

adopt the nano coating technology to ensure resistance to corrosive gases and reagents such as hydrogen peroxide / ethanol / phenol;

| Model       | Size (mm)    | Power (W) | Luminous Flux (LM) | Light Effect (LM/W) | IP Rating | Color Temperature (K) / Wavelength (nm) |
|-------------|--------------|-----------|--------------------|---------------------|-----------|---|
| YJ101-Z0-C  | 240*240*11   | 15        | 1500               | 100                 | IP54      | 4500K                                   |
| YJ102-Z0-C  | 240*600*11   | 25        | 2500               | 100                 | IP54      | 4500K                                   |
| YJ103A-Z0-C | 240*1,170*11 | 40        | 4000               | 95                  | IP54      | 4500K                                   |
| YJ103B-Z0-C | 300*1,170*11 | 60        | 6000               | 90                  | IP54      | 4500K                                   |
| YJ104A-Z0-C | 600*600*11   | 40        | 4000               | 95                  | IP54      | 4500K                                   |
| YJ104B-Z0-C | 600*600*11   | 60        | 6000               | 90                  | IP54      | 4500K                                   |
| YJ101-W0-C  | 240*240*11   | 15        | 1500               | 100                 | IP54      | 6500K                                   |
| YJ102-W0-C  | 240*600*11   | 25        | 2500               | 100                 | IP54      | 6500K                                   |
| YJ103A-W0-C | 240*1,170*11 | 40        | 4000               | 95                  | IP54      | 6500K                                   |
| YJ103B-W0-C | 300*1,170*11 | 60        | 6000               | 90                  | IP54      | 6500K                                   |
| YJ104A-W0-C | 600*600*11   | 40        | 4000               | 95                  | IP54      | 6500K                                   |
| YJ104B-W0-C | 600*600*11   | 60        | 6000               | 90                  | IP54      | 6500K                                   |



## OUR PARTNERS







- Nestle
- Qingdao Laoshan Mineral Water Co., Ltd.
- Huayu Agricultural Science and Technology Co., Ltd.
- Hormel Foods Corporation
- Fujian Sunner Food Co., Ltd.
- Jinmailang Food Co., Ltd.
- New Hope Dairy Co., Ltd.
- CJ (Qingdao) Food Co., Ltd.
- Shandong Deyi Dairy Industry Co., Ltd.
- Hebei Jinshahe Flour Industry Co., Ltd.
- Dalian Kowa Foods Co., Ltd.



- Harbin Veterinary Research Institute of CAAS
- Shijiazhuang No.4 Pharmaceutical Co., Ltd.
- Beijing Laneva Pharmaceutical Co., Ltd.
- Qingdao Yebio Biological Co., Ltd.
- Juventas Cell Therapy Ltd.
- Hualan Biological Engineering, Inc
- HIGHTOP Biotech
- OBiO
- Jimon Group
- Shandong Provincial Hospital
- Yantai Yuhuangding Hospital

- CSPC Pharmaceutical Group Limited
- North China Pharmaceutical Co., Ltd.
- GuangYuYuan Chinese Herbal Medicine Co., Ltd.
- Beijing Jialin (Jarlin) Pharmaceutical Co., Ltd.
- Shandong Hongjitang Pharmaceutical Group Co., Ltd.
- Beijing Science Sun Pharmaceutical Co., Ltd.
- Shaanxi Bicon Pharmaceutical Co., Ltd.
- Nanjing Iglobe Biomedical Co., Ltd.
- Lanzhou Kaibo Pharmaceutical Co., Ltd.
- ReYoung Pharmaceutical Co., Ltd.
- Gan & Lee Pharmaceuticals Co., Ltd.



- Shandong Lukang Pharmaceutical Co., Ltd.
- Xiuzheng Pharmaceutical Group Company Limited
- Harbin Medisan Pharmaceutical Co., Ltd.
- Fuhe Group
- Disha Pharmaceutical Group
- Hubei Jianxiang Biological Pharmaceutical Co., Ltd.

- Gilu Hospital of Shandong University
- Weichai Power Co., Ltd.
- Bosch Automotive Products Suzhou Co., Ltd.
- Goertek Inc.
- Tianjin Samsung
- OPPL Lighting
- LG Display Yantai Co., Ltd.
- Qinghai Nuode New Material
- Hipower Group



## Research Institute and Central Laboratory

Wiskind has set up a first-class professional Research Institute and Central Laboratory in the country, which has been recognized as Shandong Provincial Level Enterprise Technology Center. The Research Institute established through collaboration with Shandong University is equipped with more than 40 sets of specialized equipment, and dedicated to the testing of physical, mechanical and combustion properties of raw and auxiliary materials, final products, in addition to the R&D of new products. The operation of the Central Laboratory follows the international standards, and product quality control is classified into five modules, i.e., raw and auxiliary material inspection, product testing, process audit and laboratory inspection, which truly allows a seamless quality control process from raw material purchase and production, to inspection of final products, so as to guarantee a stable product quality.

## PROFESSIONAL SERVICE



### Design

Analyze the overall design of the cleanroom project, understand the actual needs of the client, optimize the design of the cleanroom enclosure system, and calculate the product usage and cost.



### Cooperation

After Wiskind's optimized design plan and blueprints have been approved by the client or the constructor, and relevant business terms confirmed, the two sides will sign a supply agreement for Wiskind to prepare production materials.



### Manufacturing

The production order is issued according to the client's cleanroom project progress. The factory arranges production according to order specifications, quantities, technical requirements and delivery dates, to achieve seamless quality control throughout the entire process from raw material entering the factory and processing, to finished product inspection, so as to ensure the stability of product quality.



### Construction guidance

We provide each project with professional onsite engineers for installation guidance to ensure accurate construction, proper installation, and coordinate to resolve any unexpected issues at the installation site.



### Transport and delivery

Cooperation with large domestic logistics companies, with a wide range of truck models and a transportation network covering the whole country. Standardized packaging and loading procedures to ensure that products are delivered safely and efficiently.



### Maintenance

A professional aftersales problem handling center is in place to register and record the completed construction projects follow up on usage regularly, and handle the problems one-on-one in an efficient manner.

Just tell us what you want, and leave the rest to us!

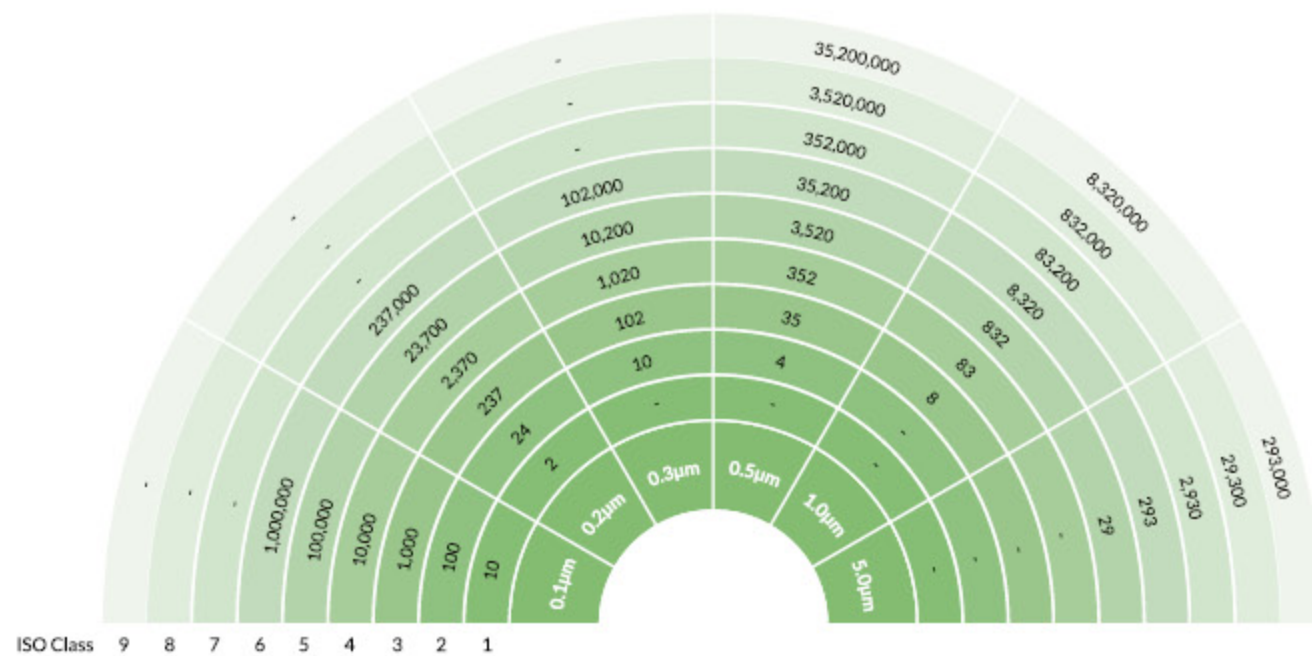


## AIR CLEANLINESS CLASS



Air cleanliness level: A level standard classified by the maximum concentration limit of particles with a size greater than or equal to the considered particle size in a unit volume of air in a clean space, tested by as-built, at-rest and operational methods.

### EN ISO 14644-1 International Standard for Air Cleanliness Classes



Maximum concentration limit of particles greater than or equal to the indicated diameter (Number of air particles/m<sup>3</sup>)

COMMITTED  
TO THE  
CONVENIENCE  
AND THE PRESTIGE OF  
OUR CLIENTS