

FREEZER

MAKE EACH FROZEN  
FOOD MORE VALUABLE

# QUICK FREEZING SOLUTION



**CBFI**<sup>®</sup>

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## Guangzhou Icesource Co, Ltd.

Guangzhou Icesource Co, Ltd. (trademark CBF) is a comprehensive refrigeration equipment supplier, which core technology is the research and development of refrigeration system technology and quick-frozen food freezing technology. Since its establishment in 2010, we have focused on providing enterprise customers with complete sets of solutions for ice making system, quick-freezing equipment and refrigeration equipment. As the national high-tech enterprise, the United Nations cold chain engineering equipment supplier, Guangdong Province specialized and special new enterprise and many other qualifications, we have accumulated rich experience in equipment and engineering, providing services to enterprise customers for more than 170 countries and regions in the world. The following two main businesses:

**Ice machine system:** We provide various complete sets of ice making systems, including fully automated edible ice plants, concrete ice supply stations, slaughter industry ice supply stations and chemical reactor cooling ice supply stations, etc. At the same time provide a variety of ice machine models, such as tube ice machine, flake ice machine, block ice machine and so on.

**Quick-freezing equipment:** We provide a variety of quick-freezing equipment such as screw quick-freezing, quick-freezing tunnels, fluidized quick-freezing, etc., and according to customer needs to recommend suitable refrigeration system, to provide one-stop installation, commissioning and after-sales service.

Products are widely used in food, fishery, retail, fruit and vegetable, aquatic products, chemical, medical, construction, mining and other industries for cooling, storage and preservation. Since the beginning of research and development in 2004, we have made remarkable achievements in automatic ice machine systems, quick-frozen food processing equipment, low-temperature freezing and refrigeration, etc. As the Guangdong Provincial Ice making Equipment Engineering Technology Research Center, Guangzhou Enterprise R&D Institution Enterprise Unit and Guangdong Cold Chain Association Vice President Unit, Guangzhou Icesource Co, Ltd. has always adhered to the business philosophy of "Customers Benefit from Icesource" and is committed to providing customers with high-quality products and excellent service.



### R&D DEBUT

- Our company established the technical research and development department of quick freezing project
- Master the details of quick-frozen food technology

2004  
YEAR

### IN-DEPTH SCIENTIFIC RESEARCH

- Was rated as "National High-tech Enterprise" (2015-2023 for 9 consecutive years)
- Was rated as "Guangzhou Enterprise Research and Development Organization" enterprise

2011  
2016  
YEAR

### MARKET RECOGNITION

- Become a registered supplier of the United Nations Global Market
- Was rated as "Best Employer Enterprise in Guangdong Province"
- Reached a strategic cooperation with the international compressor giant Bitzer (2019-2022 for 4 consecutive years)
- Was awarded the "Most Influential Brand Award" by Guangzhou Fishery Expo
- Elected as the "Vice President Unit of Guangdong Cold Chain Association"

2019  
2020  
YEAR

### CONSTRUCTION PHASE

- After years of precipitation in refrigeration technology, our refrigeration technology is far ahead of domestic refrigeration counterparts
- Through systematic research and development and production, we have successfully provided quick-freezing services for many food companies in Southeast Asia

2005  
2010  
YEAR

### STRENGTH RECOGNITION

- Recognized as "Guangdong Ice Making Equipment Engineering Technology Research Center" by Guangdong Provincial Department of Science and Technology
- Passed the national "Intellectual Property Management System" certification

2017  
2018  
YEAR

### CERTIFICATION BLESSING

- Obtained the European standard international certification "five-star after-sales service certification" certificate
- Obtained the MD directive certificate and the PED directive certificate (product equipment enters the EU market without hindrance)
- Obtained the "National High-tech Enterprise" certification for six consecutive years
- Passed the special equipment qualification certification of "Pressure Vessel Pipeline Manufacturing" and "Industrial Pipeline Installation (GC2)" (rarely in China)
- Obtained the "China Equipment Maintenance and Installation Enterprise Ability Level Certificate"
- Obtained the "specialized, special and new" small and medium-sized enterprise qualification certification in Guangdong Province
- Obtained the membership certificate of IPIA, EPIA, PIAA International Edible Ice Association
- Obtained the "Certificate of Evaluation of the Integration of Industrialization and Industrialization Management System"

2021  
2022  
YEAR

# COMPANY HONOR

2015-2023 YEAR

Obtained the high-efficiency technology of Guangdong Province three times in a row for 7 years Service Enterprise and Outstanding Enterprise in Guangdong Province



Pressure vessel production license



Safety production license



Five-star after-sales service certificate



Mechanical and electrical installation



Industrial piping installation license (CBFI)



Specialized special new enterprise



Vice president



Excellent company



Business license



The United Nations has established a purchaser



Member unit of china refrigeration society



The Best Employer in Guangdong Province



High-tech Enterprise (2021)



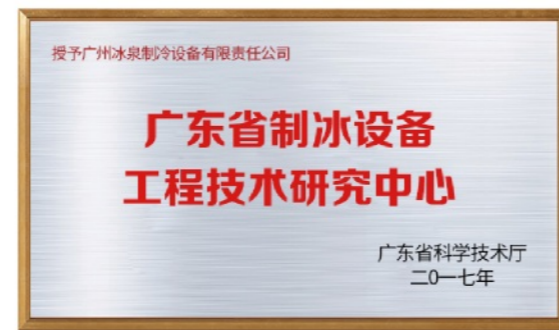
High-tech Enterprise (2018)



High-tech Enterprise (2015)



Standing director unit of Guangdong province



Ice-making Equipment Engineering Technology Research Center



ISO 19001 quality management system



ISO 18001 occupational health and safety management system

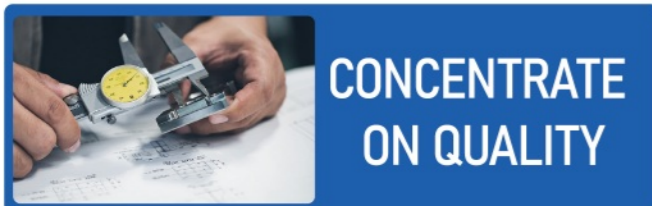
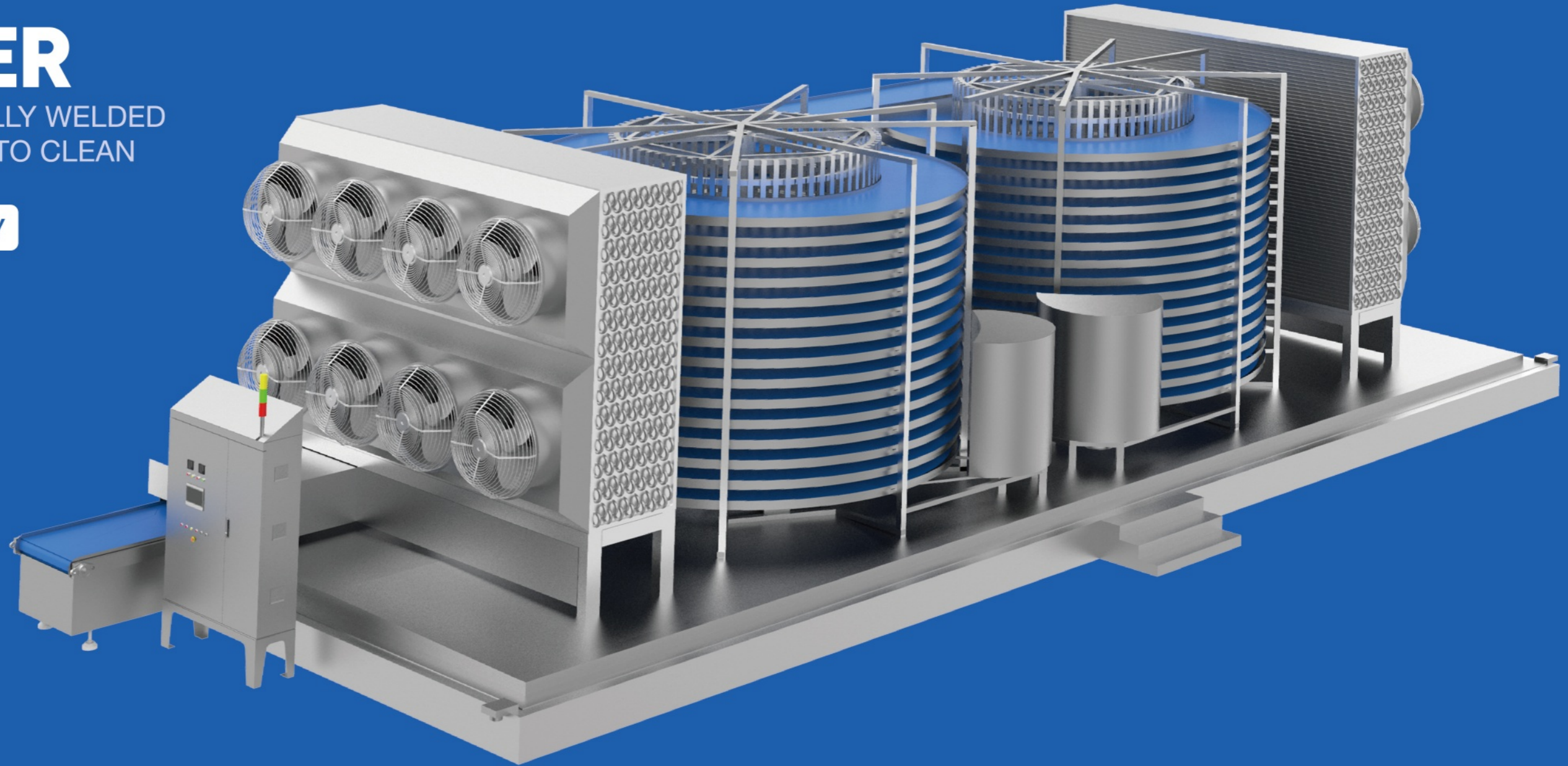


ISO 14001 environmental management system

# FREEZER

FULLY WELDED, FULLY WELDED  
STRUCTURE, EASY TO CLEAN

HEALTH AND SAFETY



CONCENTRATE  
ON QUALITY



FOCUS ON  
INNOVATION



DEDICATED  
SERVICE



LEAD  
FRESH LIFE



HIGH  
PRODUCTIVITY



HIGH  
EFFICIENCY

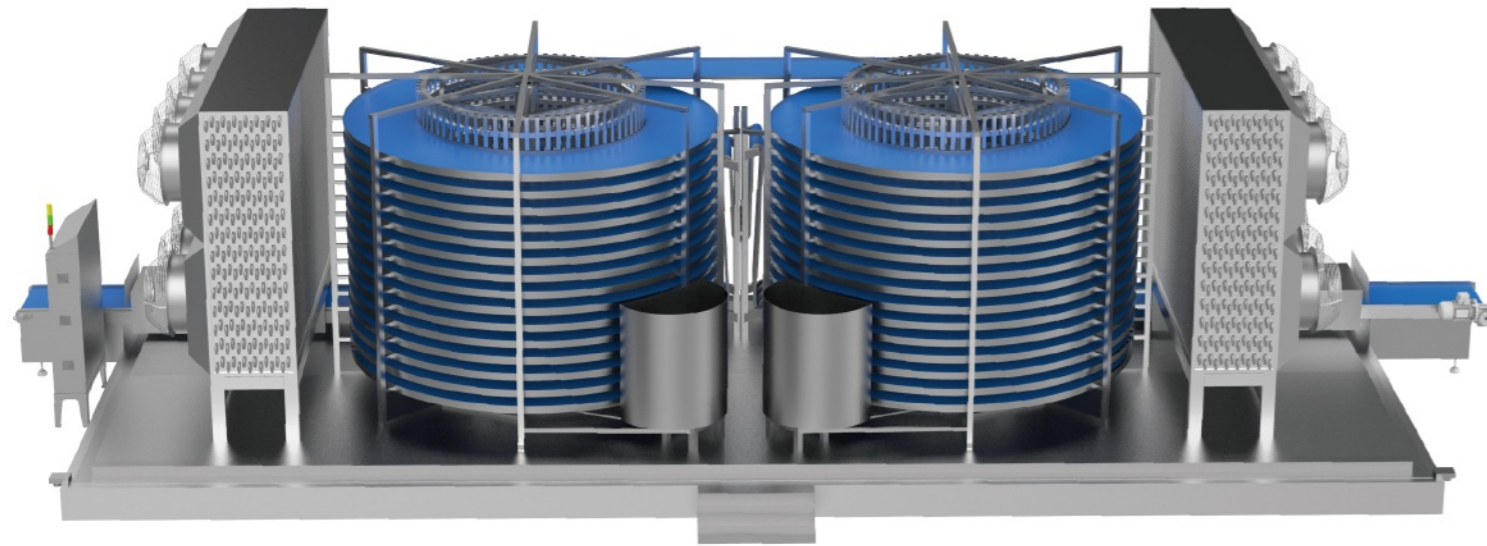


STABLE  
OPERATION



WIDE  
APPLICATION

# MODERN SOLUTIONS WITH SUFFICIENT CAPACITY



## MODERN ROTATING CAGE EQUIPMENT TO ACHIEVE REAL CAPACITY

Adopting modern manufacturing technology, including advanced automation equipment, high-precision machining and advanced control system, the rotating cage equipment can reach a diameter of 5 meters, a mesh belt width of more than 1 meter and a number of layers of more than 30, with real high production capacity. It not only achieves modern production, but also brings more efficient production methods and higher output.



## EFFICIENT

Optimizing the coil circuit of the evaporator and designing the air duct reasonably can ensure the high efficiency of heat exchange and improve the performance of refrigeration equipment. The rational design scheme ensures the efficient operation of the evaporator and air duct, while reducing maintenance and production costs.



## STABLE OPERATION

The storage board adopts advanced production technology and cooperates with the environmentally friendly production process to ensure that the storage body has a stable and reliable thermal insulation effect, to fully meet the customer's requirements.



## WIDE APPLICATION

Committed to providing efficient, reliable and multi-functional quick-freezing equipment to achieve the goal of "everything can be frozen", Adopting advanced condensation technology and rapid freezing technology, not only can adapt to a variety of conventional food freezing needs, but also can adapt to many new food freezing needs.



# EXCELLENT CAGE DRIVE SYSTEM DESIGN

## ONLY FREQUENCY CONVERSION

The mesh belt operation adopts frequency conversion stepless speed regulation

## STAINLESS STEEL STRUCTURE

All 304 stainless steel structure, meet the large load, long time operate , easy maintenance

## LARGE SPROCKET DRIVE

Advanced three-drive synchronous control technology



## HIGH QUALITY STAINLESS STEEL SCREW MESH BELT

The mesh belt has a high ventilation rate, which improves the freezing efficiency of the product. Customized mesh belt is available to meet the freezing needs of different products. The mesh belt is made of food-grade 304 stainless steel spring wire, which has high strength and longer service life. The mesh belt's structure is open for easy cleaning. The optional range of mesh belt' width: from 520mm to 1372 mm.

## WIDE RANGE OF APPLICATIONS

It can be customized according to needs and applied to different frozen products.



Prepared food



Bakery products



Meat and poultry processing



Fruit and vegetable processing



Ice cream processing

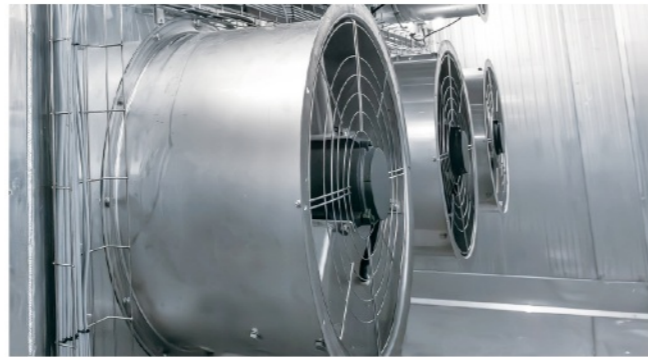


Aquatic product processing

## EFFICIENT EVAPORATOR

The evaporator adopts the world's most advanced professional heat exchanger software dynamic simulation design, which further improves the heat exchange efficiency.

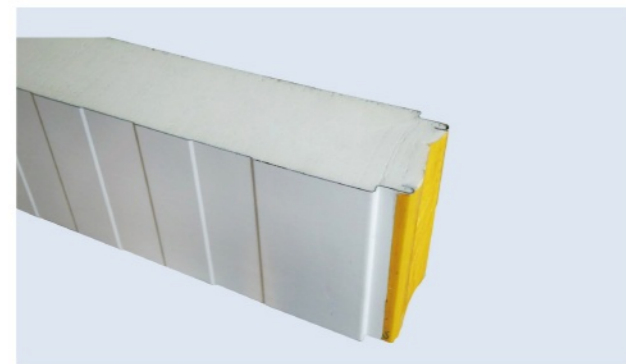
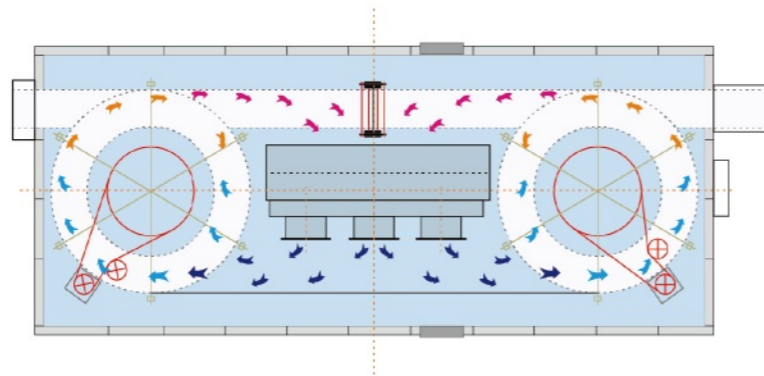
The advanced high-pressure water expansion tube technology is adopted to ensure the uniformity of the expansion tube and the fit between the fin and the tube, which improves the heat exchange efficiency.



High flanging fins, fin surface embossing technology, enhance the fin strength and not easy to lodging. The turbulence effect is generated on the surface of the fins, and the heat exchange between the airflow and the fins is more sufficient. Fin material: aluminum, aluminum-magnesium alloy.

## AIR DUCT DESIGN

Efficient heat exchange efficiency design; The inlet and outlet are equipped with air pressure balance design and related devices to avoid the loss of cooling capacity; There is a spacious maintenance channel in the storage body, which is convenient for cleaning and maintenance



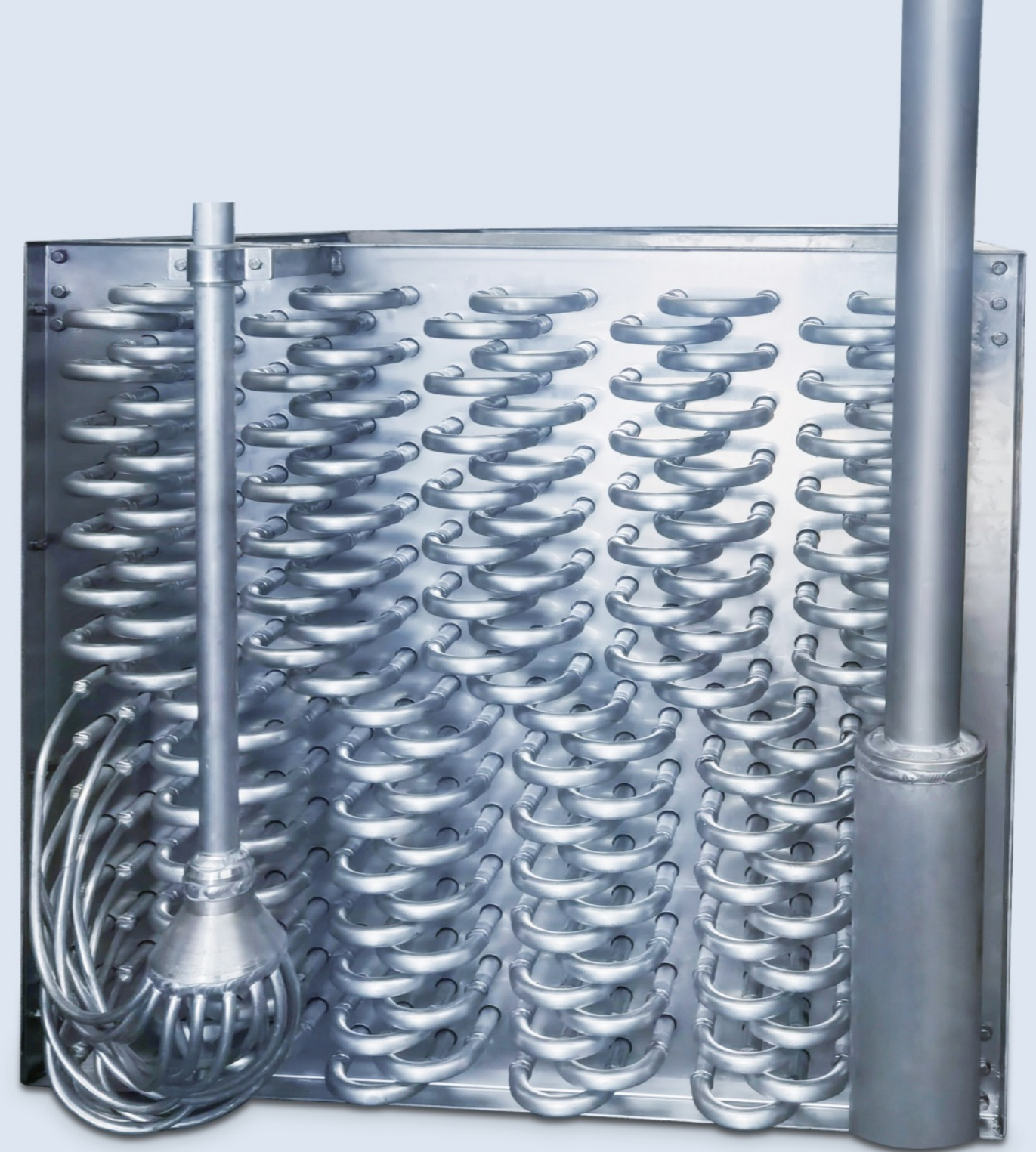
## INSULATION LIBRARY BOARD

Double-sided stainless steel panels, the middle insulation layer adopts PIR foam board, the fire resistance and mechanical properties are better than traditional PU foam board. Stainless steel fully welded storage body is optional.



## FULLY WELDED BASE PLATE

Modular all-stainless steel welded bottom plate, anti-leakage. Large slope drainage design, smooth drainage and sewage discharge, easy to clean, meet food processing hygiene standards.

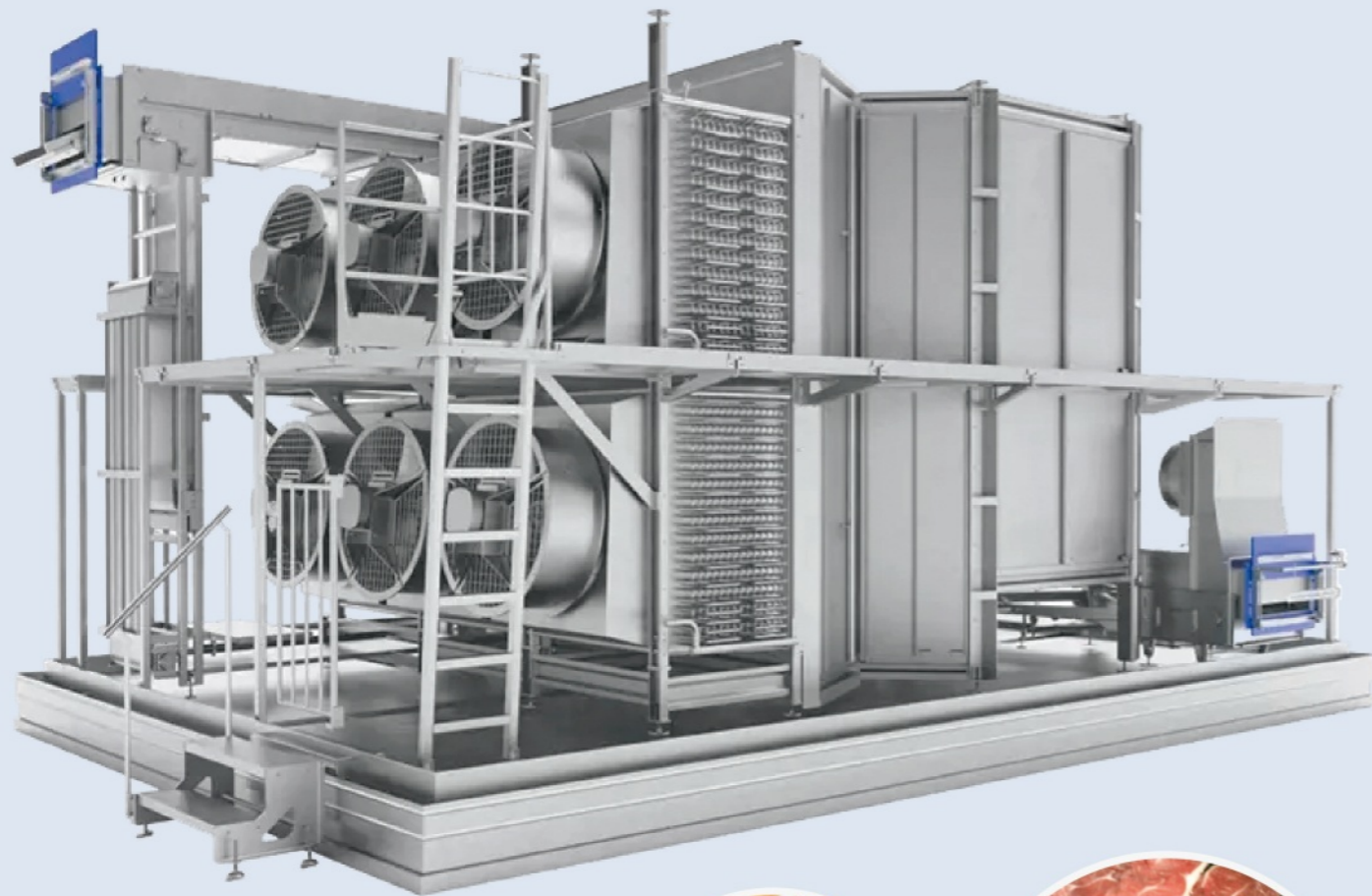


# EFFICIENT, SAFE AND HYGIENIC CAGE DRIVE SYSTEM DESIGN



# FOOD QUICK FREEZING SOLUTION

## SINGLE SPIRAL QUICK FREEZER

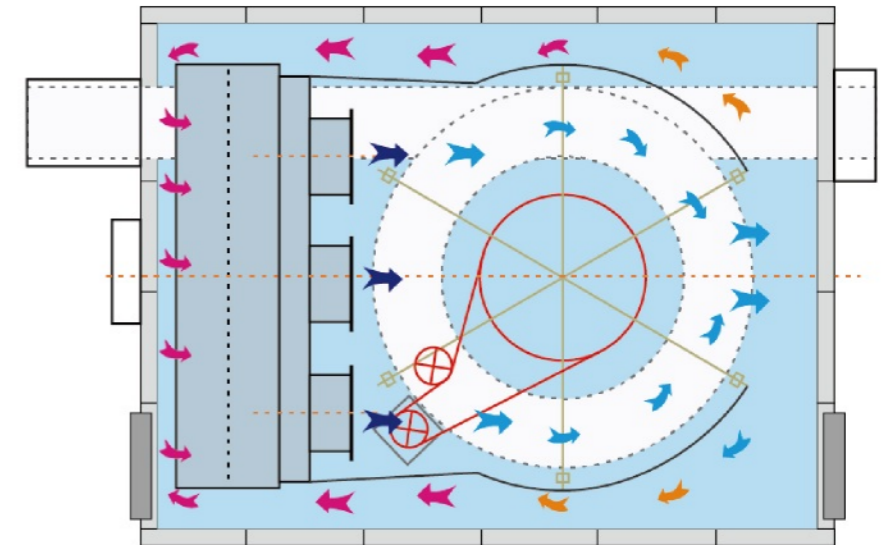


**OUTPUT**  
**300-5000**  
kg/h



### AIR DUCT DESIGN

The low-temperature and high-speed airflow from the evaporator is restricted by the windshield, concentrated in the product area, and smoothly returned to the air tunnel by the windshield to the evaporator. The wind speed loss is minimized and the heat exchange efficiency is improved. The inlet and outlet are equipped with air pressure balance design and related devices to avoid the loss of cooling capacity. There is a spacious maintenance channel in the storage body, which is convenient for equipment maintenance personnel to enter the interior of the equipment for cleaning and maintenance.



### AXIAL FAN

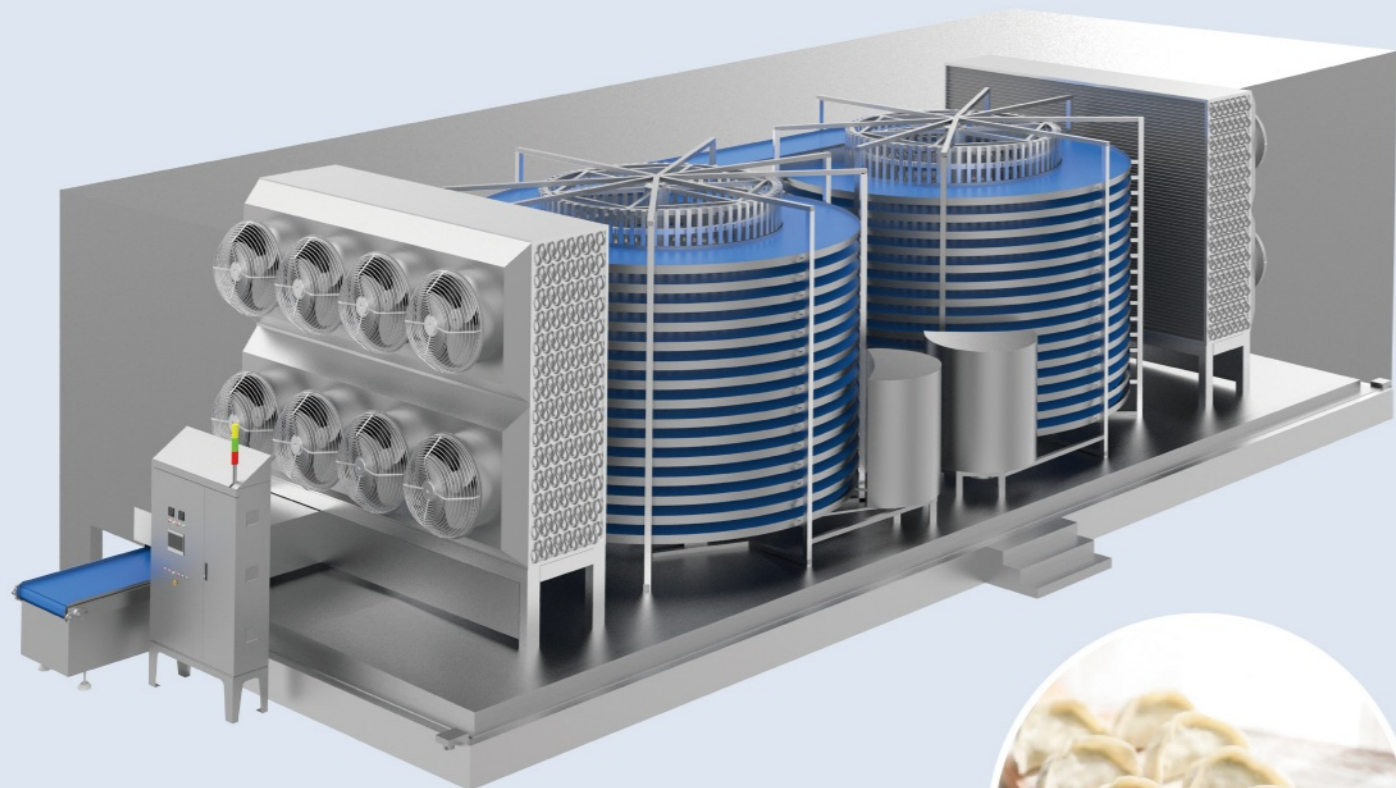


### TECHNICAL PARAMETERS

Structure	Single helix	Control Panel	PLC touch screen control, 304 stainless steel
Cage diameter	1620-5800mm	Refrigerant	Freon, ammonia, carbon dioxide
Layers of mesh belt	Level 6-40	Evaporator	Aluminum/stainless steel tubes, aluminum/aluminum-magnesium alloy fins
Mesh Belt width	520-1372mm	Defrost method	Water flushing/hot air defrosting
Mesh belt material	304/POM	Freeze/Cooldown Time	Adjustable frequency
Feed end length	500mm	Cleaning method	Mesh belt cleaning/CIP
Discharge end length	500mm		

# FOOD QUICK FREEZING SOLUTION

## DOUBLE SPIN FREEZER

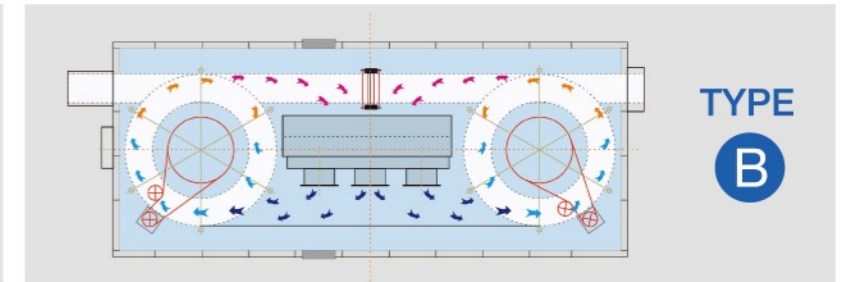
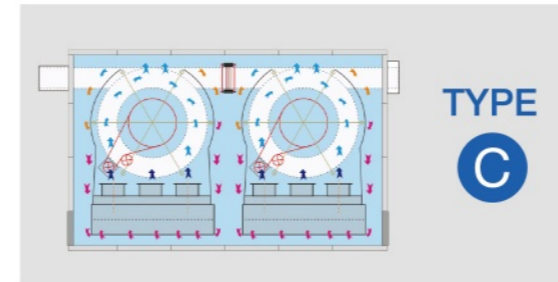
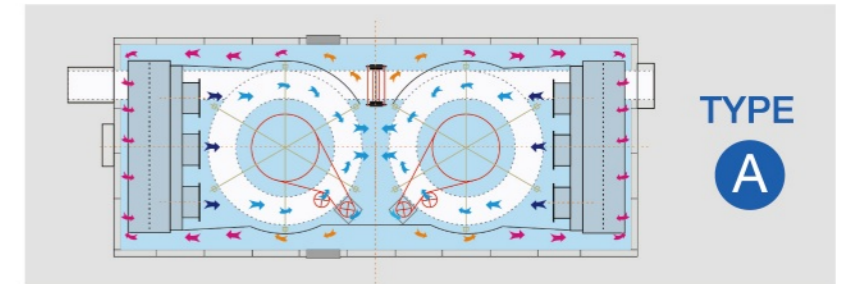


**OUTPUT**  
**800-10000**  
kg/h



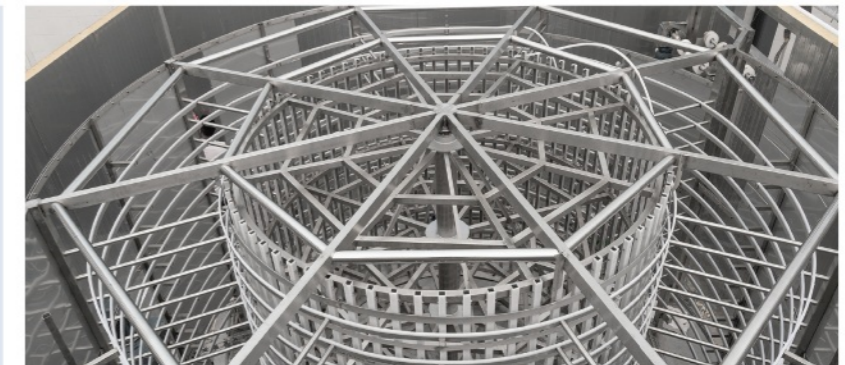
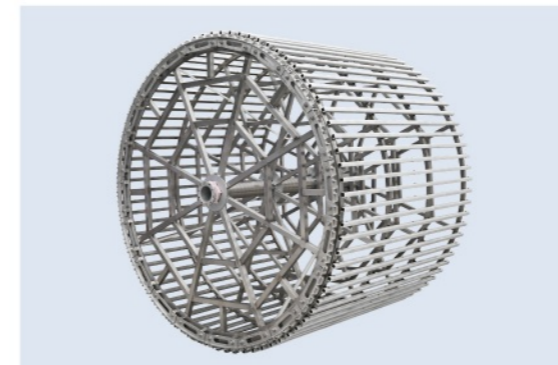
### STRUCTURE TYPE

According to the relative position of the inner cage and the evaporator, the layout of the double-screw quick-freezer can be divided into A, B, and C types.



### QUICK-FREEZING TUMBLER

The mesh belt and the rotating cage run synchronously, and the modular mesh belt is easy to replace.



### TECHNICAL PARAMETERS

Structure	Double helix	Control Panel	PLC touch screen control, 304 stainless steel
Cage diameter	1620-5800mm	Refrigerant	Freon, ammonia, carbon dioxide
Layers of mesh belt	Level 6-40	Evaporator	Aluminum/stainless steel tubes, aluminum/aluminum-magnesium alloy fins
Mesh Belt width	520-1220mm	Defrost method	Water flushing/hot air defrosting
Mesh belt material	304/POM	Freeze/Cooldown Time	Adjustable frequency
Feed end length	500mm	Cleaning method	Mesh belt cleaning/CIP
Discharge end length	500mm		

# FOOD QUICK FREEZING SOLUTION

## TUNNEL QUICK FREEZER

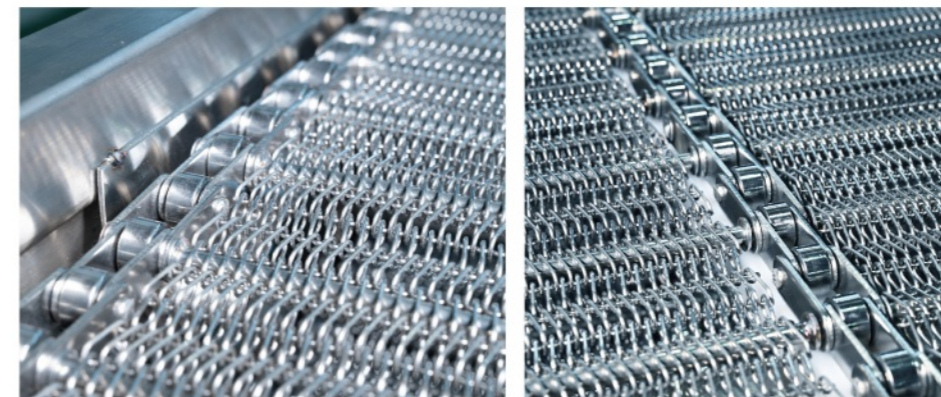


**OUTPUT**  
**300-2000**  
kg/h



### INSULATION SYSTEM

The heat-insulating storage body is made of stainless steel polyurethane sandwich panel, and the internal polyurethane is filled and foamed by imported high-pressure foaming machine under high pressure.



### TRANSMISSION SYSTEM

The transmission mesh belt is made of 304 stainless steel spring wire, with a smooth surface and long service life. The imported frequency converter is used to realize stepless speed regulation.

### TECHNICAL PARAMETERS

Structure	Tunnel quick freezer	Control Panel	PLC touch screen control, 304 stainless steel
Mesh Belt width	1500-4000mm	Refrigerant	Freon, ammonia, carbon dioxide
Mesh belt material	304/POM	Evaporator	Aluminum/stainless steel tubes, aluminum/aluminum-magnesium alloy fins
Feed end length	1500mm	Defrost method	Water flushing/hot air defrosting
Discharge end length	1000mm	Freeze/Cooldown Time	Adjustable frequency
Cleaning method	Mesh belt cleaning/CIP		

# FOOD QUICK FREEZING SOLUTION

FLUIDIZED QUICK FREEZER

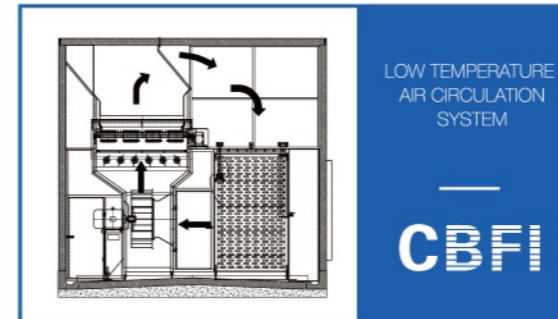


**OUTPUT**  
**1000-5000**  
kg/h



## HEAT EXCHANGE SYSTEM

A low-noise centrifugal fan is used to generate a vertically rising high-speed, high-pressure, and low-temperature airflow under the mesh belt, and the food particles are blown by the high-speed airflow to form a suspended state or a semi-suspended state.



## TRANSMISSION SYSTEM

The full-fluid quick-freezing machine adopts the "transverse vibration conveying mode". When the first section of the mesh belt is running, it vibrates horizontally under the drive of the connecting rod mechanism; on the side of the fluidized bed conveyor belt, an air pulse device is designed to adjust the side vent door according to different food particles, so that the food particles are suspended in the high-speed air flow during the quick-freezing process.

## TECHNICAL PARAMETERS

Structure	Fluidization	Control Panel	PLC touch screen control, 304 stainless steel
Mesh Belt width	1200mm	Refrigerant	Freon, ammonia, carbon dioxide
Mesh belt material	304/POM	Evaporator	Aluminum/stainless steel tubes, aluminum/aluminum-magnesium alloy fins
Feed end length	1800mm	Defrost method	Water flushing/hot air defrosting
Discharge end length	1000mm	Freeze/Cooldown Time	adjustable frequency
Cleaning method	Mesh belt cleaning/CIP		

TRANSPORTATION INDUSTRY



LOGISTICS COLD CHAIN



AQUATIC PROCESSING



MEDICAL MEDICINE



UNIVERSITY COOPERATION



MEAT POULTRY SLAUGHTER



SNOW ENTERTAINMENT



DAIRY INDUSTRY



FRESH LOGISTICS



FROZEN FOOD



COOKED FOOD PROCESSING



PREPARED DISHES



## OVERALL SUPPORTING SOLUTION

Large and medium-sized cold storage supporting equipment - intelligent cold storage source standardized fixed configuration equipment, stable quality. Avoid or reduce welding steps, easy to install. It can be connected to the Internet of Things to realize remote control.



## COLD STORAGE EQUIPMENT-OPENING COLD STORAGE UNIT

Customized cold storage unit, professionally designed by a team of refrigeration engineers. Provide overall supporting program. Imported original parts, quality assurance.



## MODERN FACTORY

<p><b>25000 m<sup>2</sup></b> Modern production base</p>	<p><b>6000 m<sup>2</sup></b> welding workshop</p>	<p><b>8000 m<sup>2</sup></b> Assembly workshop</p>
<p><b>5000 m<sup>2</sup></b> High-end ice production line</p>	<p><b>3000 m<sup>2</sup></b> R &amp; D workshop</p>	<p><b>3000 m<sup>2</sup></b> Modern production base</p>