



# COMPREHENSIVE PRODUCT CATALOG



Manufacturer of one-stop cold  
chain logistics solutions



博朗  
BOLANG

MANUFACTURER OF ONE-STOP COLD CHAIN LOGISTICS SOLUTIONS

**南通博朗冷冻设备有限公司(工厂)**  
Nantong BOLANG Refrigeration Equipment Co.,Ltd (Factory)

**南通博朗节能科技有限公司(国际贸易子公司)**  
Nantong BOLANG Energy Saving Technology Co.,Ltd (International Trade Subsidiary)

工厂地址: 南通市高新区碧华路1199号东久(南通)智造园A6  
电话: +86 18862802935  
电子邮件: [market@ntboltech.com](mailto:market@ntboltech.com)  
网站: [www.ntboltech.com](http://www.ntboltech.com)

Factory Address: A6, Dongjiu (Nantong) Smart Park, No. 1199, Bihua Road,  
Nantong Hi-Tech Zone, Nantong, China

Tel (WA) : +86 18862802935  
E-mail: [market@ntboltech.com](mailto:market@ntboltech.com)  
Website: [www.ntboltech.com](http://www.ntboltech.com)



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FREEZE AND REFRIGERATE

INDUSTRIAL REFRIGERATION

BIOMEDICINE

**COLD CHAIN LOGISTICS**

Industrial chiller

FOOD PROCESSING

**IQF FREEZING**

LIVESTOCK AND POULTRY SLAUGHTERING AND PROCESSING

LOW TEMPERATURE TEST

**CENTRAL KITCHEN**

## COMPANY PROFILE

南通博朗冷冻设备有限公司成立于2012年，是一家集设计、研发、生产、销售、服务于一体的综合性公司，专业生产冷冻冷藏设备；食品速冻加工设备及热回收设备；化工冷水机组、尾气回收装置设备，以及一站式冷链物流的解决方案。

博朗主营：螺杆式冷凝机组，工业冷水机组，活塞、涡旋式冷凝机组，DL、DD、DJ三种系列冷风机，冷凝器，制冰机，隧道速冻设备，冻干机等，广泛用于食品的加工及储藏、化工、生物制药、电子、船舶、制冰、石化等领域。公司产品不仅遍布全中国，同时还远销到美国、日本以及东南亚等多个国家，先后为1000多家大型企业、高校实验室提供产品和服务。

公司致力于制冷行业多年，坚持以“技术开拓市场，品质树立形象”为企业发展理念，不断学习尖端的制冷技术，同时结合实际应用经验，从产品的性能、能效、操控等多方面改进产品的质量，产品获得了CE、ISO9001质量管理体系认证，并得到了用户的高度评价。

博朗将会不遗余力地投身于制冷行业，为人类的美好生活环境，提供更加环保、安全、节能、优质的产品。

Established in 2012, Nantong BOLANG Refrigeration Equipment Co., Ltd. is a comprehensive company integrating design, research and development, production, sales and service, specializing in the production of freezing and refrigerating equipment; food quick-freezing processing equipment and heat recovery equipment; chemical chiller unit, exhaust gas recovery device equipment, and one-stop cold chain logistics solutions.

BOLANG's main business: screw condensing units, industrial chiller units, piston and scroll condensing units, DL, DD, DJ three series of chillers, condensers, ice machines, tunnel freezing equipment, freeze dryers, etc., which are widely used in food processing and storage, foodstuff processing, food stuff processing and heat recovery equipment, chemical chiller and exhaust gas recovery device equipment, as well as one-stop cold chain logistics solutions. They are widely used in the fields of food processing and storage, chemical industry, biopharmaceuticals, electronics, shipbuilding, ice-making, petrochemicals and so on. The company's products are not only distributed throughout China, but also exported to the United States, Japan and Southeast Asia and other countries, and have been used for more than 1,000 large enterprises, colleges and universities. We have provided products and services for more than 1,000 large-scale enterprises and laboratories in universities and colleges.

The company is committed to the refrigeration industry for many years, adhere to the "technology to develop the market, the quality of the establishment of the image" for the development of the enterprise philosophy, and constantly learn the cutting-edge refrigeration technology, while combining the practical application of experience, from the product performance, energy efficiency, At the same time, with the practical application experience, we improve the quality of our products from the aspects of performance, energy efficiency, control, etc. Our products have obtained the CE、ISO9001 quality management system certification and have been highly evaluated by the users.

BOLANG will spare no effort to devote itself to the refrigeration industry and provide more environmentally friendly, safe, energy-saving and high-quality products for the better living environment of human beings.

# COURSE

## 历程篇

### MILESTONES



**2008**

In 2008, Nantong Guangzhengtong Cooling and Heating Equipment Co., Ltd. was established, the main business is the installation of refrigeration equipment, and then the business was expanded to the production of equipment, namely Bolang.

**2009-2011**

Main business: (Shanghai Maritime University) Ship Refrigeration Teaching Laboratory, (Shanghai Zhangjiang Pharmaceutical Valley) Biological specimen laboratory; electronic constant temperature and humidity carroom; pharmaceutical cold storage; industrialized mushroom raising temperature-variable storageroom; seafood, meat quick-frozen and storage warehouse; waterfruits and vegetables; brine ice-making equipment and Engineering; industrial plant refrigeration engineering

**2012**

Established BOLANG factory, passed ISO9001 quality management system certification

**2013**

Launched the double-machine mating unit. Mainly used in freezers

**2014-2017**

The product coverage is getting wider and wider, including scroll units, piston units, screw compression condensing units, low and medium-sized condensing units, piston units, screw compression condensing units, low and medium temperature screw chiller units, full-liquid-carrier chiller unit, single-unit bipolar units, cascade units, etc., and has been awarded the honorary title of "The best chiller in the world" by Germany BITZER, America Carrier, Italy Fuji BITZER (Germany), CARRIER (USA), FUJI (Italy), HANZHONG (Taiwan), etc.

**2018**

Acquisition of the National Industrial Products Production License

**2019**

National High-tech Enterprise

**2019-2023**

Domestic sales and service outlets cover more than 80% of the country's provinces and municipalities, and set up three offices (South, Southwest and Northwest China). South, Southwest, Northwest), international trade has involved in East South Asia, Japan, Russia and other regions.

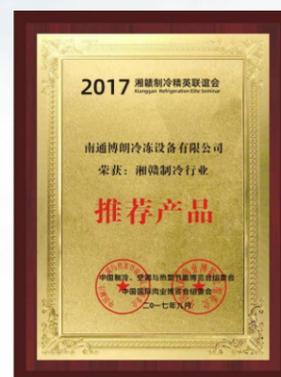
**2023**

Self-built national refrigeration laboratory, design and R&D team has refrigeration masters, doctors. The production scale is expanding, and the product line continues to extend to the application



# APTITUDE CHAPTER

## QUALIFICATION CERTIFICATE



PATENT CERTIFICATE



合作伙伴  
The Company  
Partners

 汉钟	 比泽尔	 开利
 艾默生	 丹佛斯	 富士豪
 西门子	 施耐德电气	 埃姆基
 复盛	 鸿森	 法斯克
 洪瑞	 家乐	 卡斯托

# CONTENTS

## 目录

### Refrigeration System

---

#### Cold Storage (food)

Box-type Compression Condensing Unit	01
Semi-hermetic Piston Compression Condensing Unit	02
Screw Parallel Compression Liquid Storage Unit	03
Piston Parallel Compression Liquid Storage Unit	04
Single Unit Dual-stagescrew Compressor Liquid Storage System	05
Bucket Pump Refrigeration Unit	06
Aircooler (with copper tube,aluminum tube or stainless steel)	07

#### Industrial Screw Chiller

(chemical, biopharmaceutical, electronics, Marine, ice making, etc.)

Modular Type Air Cooled Screw Chiller	09
---------------------------------------	----

Screw Industrial Refrigeration Unit	11
-------------------------------------	----

Refrigerant Cascade Units	12
---------------------------	----

### Condenser

---

Air-cooled Condenser	13
----------------------	----

### Ice Making Machine

---

Tube Ice Machine	14
------------------	----

Block Ice Machine	15
-------------------	----

Slice Ice Machine	16
-------------------	----

### Rapid Freezing Tunnel Equipment

---

Spiral Freezer	17
----------------	----

Tunnel Quick-freezing Device (plate-belt,mesh-belttype)	19
--	----

Fluidized Quick-freezing Machine	21
----------------------------------	----

### Freeze-drying Machine

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Freeze-drying Machine	23
-----------------------	----

### Project Cases

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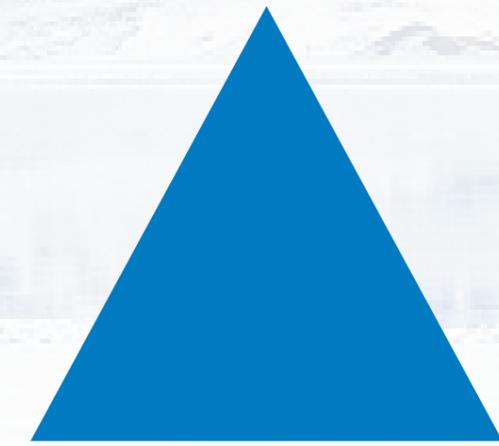
Project Cases	25
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◀ SCOPE OF APPLICATION  
适用范围

Cold Storage (Food)



## 箱式压缩冷凝机组 BOX TYPE CONDENSING UNIT



## 半封闭活塞压缩冷凝机组 SEMI-CLOSED PISTON CONDENSING UNIT



### Product Introduction

- It adopts a box-type integral structure, which is compact, and is internally lined with sound insulation cotton for super quietness.
- The compressor adopts fixed frequency and variable frequency compressors of well-known brands such as "Danfoss", "Hitachi", and "Bitzer", with good quality and reliable operation.
- Use high-efficiency copper tube and aluminum fin type heat exchanger, with high heat exchange efficiency and long service life.
- The unit adopts internal/external rotor condensing fan, with low operating noise, large air volume and fashion appearance.
- The unit is equipped with electrical control components that have functions such as phase sequence (phase loss), overload, frequent compressor start, and system high/low voltage protection. It is easy and flexible to install, with low requirements for the installation site.

### Unit Configuration Instructions

Compressor, Liquid supply solenoid valve, High efficiency air cooled condenser unit shell, High and low pressure controller filter dryer, Liquid reservoir, Supply Liquid/air return valve, Oil separator (part), Frequency conversion control cabinet,

#### Can be customized according to your requirements

##### Evaporating Temperature:

High(+15°C~0°C) ,Medium(-5°C~-30°C) ,Low(-25~-40°C),Ultra Low(<-50°C) .

### Product Introduction

- Box-type overall structure, compact structure, small product size, beautiful appearance;
- The main engine adopts "Bitzer", "Frascold" and other semi-closed piston compressors, which have good quality and reliable operation;
- The use of copper tube and aluminum sheet heat exchanger, high heat exchange efficiency, long service life;
- The unit adopts external rotor condensing fan, which has low running noise, large air volume and beautiful appearance;
- The unit is equipped with electrical control elements, with phase sequence (lack of phase, overload, system high and low pressure protection, photoelectric oil pressure differential protection and other functions);
- The installation is convenient and flexible, and the requirements for the site are not high.

### Unit Configuration Instructions

Piston compressor, High efficiency air cooled condenser, Unit shell, Liquid reservoir, Liquid supply/return valve, High and low pressure controller, Filter dryer, Oil separator, Solenoid valve for liquid supply.

##### Evaporating Temperature:

-5~-30°C Condensation temperature : +45°~+50 °C Unit capacity :15-50HP

**Scope of application: small and medium low temperature cold storage, fresh storage, acid discharging room, etc**

## 螺杆并联压缩储液机组

SCREW PARALLEL COMPRESSION LIQUID STORAGE UNIT



## 活塞并联压缩储液机组

PARALLEL PISTON COMPRESSION LIQUID STORAGE UNIT



### Product Introduction

- Multi-head parallel structure, compact structure, smooth operation;
- The host adopts "Bitzer", "Hanbell", "Carrier" and other semi-closed screw compressors, which have good quality and reliable operation;
- The screw machine has stable performance, large cooling capacity and long service life; Match ad-vanced and highly reliable intelligent control system and control technology;
- The unit adopts electronic oil level controller to ensure the stability of each compressor oil level; The unit adopts parallel unit controller as a whole control, with phase sequence, overload, system high and low pressure protection, electronic oil level regulation protection and other functions; Automatically match the load change, adjust the number of boot, convenient, energy saving;

### Unit Configuration Instructions

Rod compressor, Oil reservoir, Oil level controller, Oil separator, High and low pressure controller, Filter dryer, Reservoir, Liquid supply/return Gas/exhaust valve, Unit control cabinet.

#### Can be Customized according to your requirements

##### Evaporating Temperature:

High(+15°C~0°C), Medium(5°C~-30°C), Low(-25~-40°C), Ultra Low(<60°C).

### Product Introduction

- Multi-head parallel structure, compact structure, small size, good appearance;
- The main machine adopts "Bitzer" and other semi-closed scroll compressor, which has good quality and reliable operation;
- The use of high efficiency oil separator, high oil separation efficiency;
- The unit adopts electronic oil level controller to ensure the stability of each compressor oil level.
- The unit adopts PLC overall control, with phase sequence, overload, system high and low pressure protection, photoelectric oil level adjustment protection and other functions;
- Automatically match the load change, adjust the number of boot, convenient, energy saving.

### Unit Configuration Instructions

Piston compressor, Oil level controller, Oil separator, High and low pressure controller, Filter dryer, liquid supply/return/exhaust valve Liquid reservoir, Unit control cabinet, Oil reservoir.

Evaporation temperature : -5~-30°C Condensation temperature : +45°C

Unit capacity: 40-200HP -5 ~-30°C Condensing temperature : +45°C Unit capacity :40-200HP

**Scope of application: small and medium low temperature cold storage, fresh storage, acid discharge room, etc**

## 单机双级螺杆压缩储液机组

SINGLE DOUBLE STAGE SCREW COMPRESSION LIQUID STORAGE UNIT



## 桶泵机组

BARREL PUMP UNIT



## Product Introduction

- Reduce the compression ratio of single-stage compressor and improve the energy efficiency ratio of the system;
- The parallel unit provides multi-level energy regulation, and the cooling output dynamically matches the actual load.
- Each compressor in the unit is alternate to each other to ensure the reliable operation of the system. The host adopts "Fusheng", "Hanzhong" and other semi-closed twin-screw compressors, which have good quality and reliable operation;
- Use high efficiency centrifugal + filter type high efficiency oil separator to minimize oil entry into the system;
- The unit adopts differential pressure oil supply or pump forced oil supply mode to ensure that each compressor can get sufficient lubricating oil supply under any working condition;
- The unit adopts PLC whole system intelligent control, with phase sequence, overload, high and low pressure, oil level, oil flow, oil pressure difference and other protection functions; Compact structure, highly integrated design concept, greatly save the room area.

## Unit Configuration Instructions

Screw compressor, Oil separator, Reservoir, Suction filter, Liquid pipe filter, Gas-liquid separator, Oil cooler, Sight glass, High and low pressure Controller, Oil circuit assembly, Condenser (only for water cooling unit), Economy unit assembly spray valve, Pressure gauge, PLC control cabinet.

**Can be Customized according to your requirements**

**Evaporating Temperature:**

High(+15°C~0°C), Medium(-5°C~-30°C), Low(-25~-40°C), Ultra Low(<-50°C).

## Product Introduction

- The heat transfer efficiency of the evaporator is improved, and the liquid supply efficiency of the pump is about 25-30% higher than that of the direct expansion.
- Ensure long distance liquid supply: Using the mechanical action of the pump, part of the resistance loss in the system can be overcome to achieve long distance liquid supply.
- The operation of the system is simple and reliable: in the case of no large fluctuations in the heat load of the warehouse and stable liquid level of the barrel pump, the pump can be maintained regular operation, do not need regular adjustment work.
- In the freon system, the operation of hot fluorine frost is simple: when defrosting, the remaining liquid in the evaporator is discharged to the low pressure circulation barrel, After the frost is finished, the pump can be opened to restore the liquid supply of the evaporator. Restore normal library temperature fast, easy to operate. The above defrosting method is beneficial. Using the condensing heat source of other refrigeration rooms to provide a cold source for the defrosting room is economical and energy-saving.
- Compared with the electric defrosting, the energy saving is more than 80%.

## Unit Configuration Instructions

Horizontal fluorine pump, low pressure barrel, level sensor, electric valve, oil return system, solenoid valve, magnetic flap level gauge.

**Refrigerated temperature:**  $\theta$ -10°C, freezing temperature -25°C~-30°C, quick-freezing temperature -38°C~-42°C, condensation temperature -35°C

## 冷风机 (铜管、铝管、不锈钢)

AIR COOLER



## SCOPE OF APPLICATION

### 适用范围

#### industrial chiller

(chemical, biopharmaceutical, electronics, Marine, ice making, etc.)



According to the applicable temperature, it is divided into DL, DD, DJ three series, which can be applied to different library temperatures, DL type chiller is mainly applied to about 0°C. DD type chiller is mainly suitable for -18°C cold storage, DJ type chiller is mainly suitable for -25 °C below the cold storage. Be suitable for Large cold storage.

### Product Introduction

- Designed for refrigeration, freezing and fresh-keeping, extending the storage cycle of products and ensuring product quality to the maximum extent;
- Compact shape structure, does not occupy cold storage area;
- Copper pipe, aluminum pipe, stainless steel using mechanical expansion tube, so that the fins closely fit, to ensure efficient heat transfer effect;
- The coil is tested for air tightness under 2.8MPa to ensure that the product has high air tightness quality characteristics when leaving the factory;
- Motor: conventional screen ink type, outer rotor wind cylinder type, outer rotor surface plate, inner rotor axial flow;
- The length of the stainless steel heating wire is much longer than the length of the coil core, so that the frost accumulation of the elbow at both ends is less;
- The optimum scheme of the separator component is selected through theoretical calculation and practical test to make the scoring liquid uniform to the maximum extent.
- The use of electric defrosting type cooler, with aluminum plate at the bottom, to improve the forced heat transfer effect;
- Heating wire and aluminum plate in close contact with the well heating, making the water pan defrosting more uniform;
- The shell can be made of high quality steel plate, aluminum plate, 304 stainless steel plate, food grade plastic spraying process, easy to clean;
- Defrosting method: convenient and fast electric defrosting, energy-saving and environmental protection water defrosting, efficient intelligent hot fluorine defrosting;

**Can be Customized according to your requirements**

## 风冷模块机组

MODULAR TYPE AIR COOLED SCREW CHILLER



## Free cooling dry cooler



## Product Introduction

- A. Independent refrigeration system design: The multi-head unit refrigeration system is relatively independent and does not interfere with each other.
- B. Unit energy regulation: Each refrigeration system compressor starts at the minimum load (25%) with a star-delta reduction start. The dual-unit refrigeration system compressor starts at the minimum load (12.5%) with a star-delta reduction start, effectively reducing the starting current and impact on the power grid.
- C. Waste heat recovery technology: By adding patented heat collector technology to the equipment, it can provide 40°C-60°C domestic hot water. According to different water source requirements, the highest recovery efficiency can reach more than 70%, which saves comprehensive energy.
- D. Free cooling technology: Combines traditional cooling capabilities with the ability to utilize the cool outdoor air for cooling purposes, reducing energy consumption and increasing efficiency.
- E. Reliable winter operation mode: According to the special characteristics of the operation of the medium and low temperature refrigeration host, a control mode of cooling water pump frequency conversion and fan frequency conversion is provided for winter start-up, winter operation, and transition season operation. This ensures the safe and reliable operation of the equipment and energy-saving operation, or adopts an evaporative condenser, which saves energy and solves the problem of winter operation.

### Configurations:

Screw compressor, air condenser, dry cooler, oil cooler, oil separator, storage tank, vapor-liquid separator, high and low pressure controller, filter dryer, PLC control cabinet, supply/return/exhaust valves

**Can be Customized according to your requirements**

## Applicable Range

Various places with demand for medium and low temperature cooling sources, such as the production processes of industries including medicine, chemical engineering, metallurgy, electronics, food, etc., can also serve as the main refrigeration unit for large cold storage and ice rinks.

### Evaporating Temperature:

H High(+15°C~0°C), M Medium(-5°C~-30°C), L Low(-25~-40°C),D Ultra Low(<-50°C).

## 螺杆工业冷冻机组

INDUSTRIAL SCREW CHILLER



## 冷媒复叠机组

REFRIGERANT CASCADE UNIT



### Product Introduction

- Independent refrigeration system design: multi-head unit refrigeration system is relatively independent, non-interference;
- Unit energy regulation: Each refrigeration system compressor under the minimum load (25%), the star triangle buck start, the double unit refrigeration system compressor in the minimum. Under the load (12.5%), the star triangle depressurized starting, effectively reducing the starting current and the impact on the power grid;
- Heat recovery technology for waste heat utilization: Through the patented heat collector technology installed on the equipment, domestic hot water can be provided at 40 °C ~60 °C, according to different water requirements, the highest recovery efficiency of more than 70%, saving comprehensive energy.
- Reliable winter operation mode: According to the particularity of medium and low temperature refrigeration host operation, cold is provided for winter start-up, winter operation and transition season operation. However, the control mode of pump frequency conversion and fan frequency conversion ensures the safe, reliable and energy-saving operation of the equipment or the use of evaporative condenser, which saves energy. And solved the winter operation problem.

### Unit Configuration Instructions

Screw compressor, Oil cooler, Oil separator, Liquid reservoir, Vapor-liquid separator, High and low pressure controller, Filter dryer, PLC control cabinet, Liquid supply/return/exhaust valve.

**Can be Customized according to your requirements**

#### Scope of application:

Medium and low temperature cold source demand places, such as medicine, chemical, metallurgy, electronics, food and other industries of the production process, can also be used as a large cold storage, ice rink cold source host.

#### Refrigerated temperature:

H high temperature (15 °C ~ + 0 °C) M medium temperature (5 °C ~ 30 °C) L cryogenic temperature (25 ~ 40 °C) D ultra low temperature (< - 50 °C)

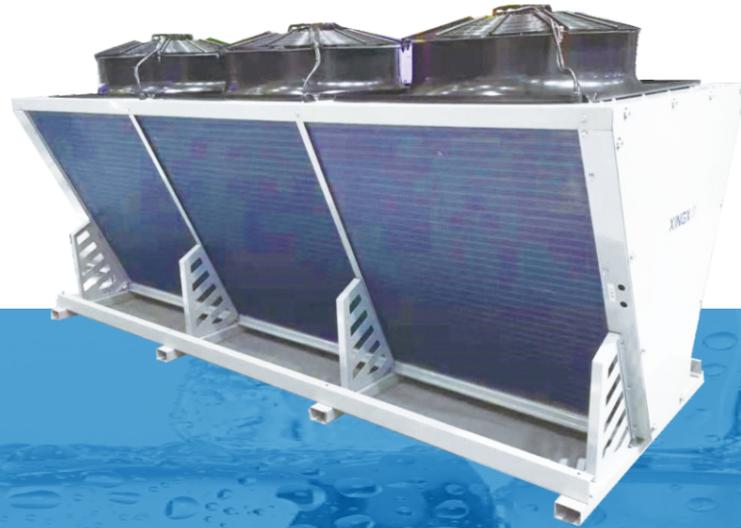
### Product Introduction

- R507/ R23 cascade refrigeration system, all natural working medium, green environmental-friendly protection;
- Refrigerant R507 is limited to the machine room, and the injection amount is very low, safe and stable;
- Screw compressor adopts stepless frequency conversion technology to easily cope with system load changes and reduce power grid impact;
- Unit height skid integrated design, easy to install on site, to avoid the uncertainty of installation on site;

**Evaporation temperature:** -45°C~-80°C, refrigerant R23;



## 风冷式冷凝器 AIR COOLED CONDENSER



## 管冰机 TUBE ICE MACHINE



Air-cooled condenser is used in freon refrigeration equipment, which is a heat dissipation equipment that uses air for forced convection cooling. It is used in unit products designed for commercial refrigeration and air conditioning equipment.

### Product Introduction

- The shell adopts high quality steel plate, high standard spraying process, easy to clean, corrosion resistant, beautiful appearance;
- Coil copper pipe adopts staggered arrangement to optimize heat transfer design;
- Using mechanical expansion tube, the copper tube and the fin are closely fitted to ensure good heat transfer effect;
- The system has passed the 28MPa air tightness test, and the implementation of high standard technology blow down and drying treatment;
- Applicable to R22, R134a, R404A, R407C and other refrigerants;
- Can be widely used in various forms of refrigeration equipment;
- Optional low noise motor, EC motor, please consult our sales office for details.



### Product Introduction

- Large split tube ice machine: daily output of 10-30 tons, the cooling method is mainly water cooling, special needs can be customized;
- The large tube ice machine adopts modular design, which is divided into three parts: evaporator, refrigeration unit and cooling tower.
- Evaporator: Using vertical shell and tube device, stainless steel heat exchange tube through the upper and lower tube plates, top and bottom each has a water tank, Tube ice machine evaporator; Higher, the evaporator can be partially lying down during transportation, and installed after being erected on site, meeting the requirements of container transportation.

### Unit Configuration Instructions

Including compressor, Condenser, Reservoir, Oil, Gas, Electric control box and other equipment.

#### Main uses:

Daily consumption, frozen drinks, mixed drinks, iced food, vegetable preservation, chemical processes, civil engineering and other places that need ice.



## 块冰机

BLOCK ICE MACHINE



## 片冰机

FLAKE ICE MACHINE

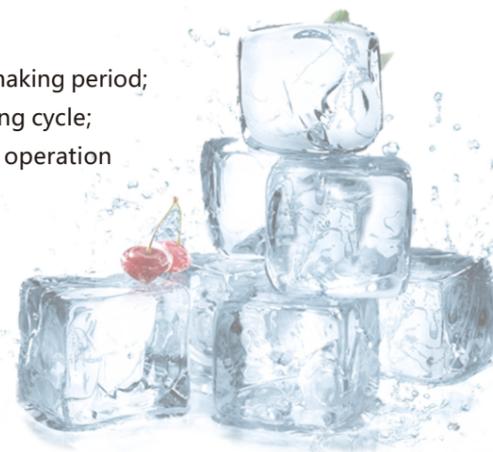


### Product Introduction

- DK100 daily output of 10 tons of direct cooling block ice machine/Bitzer compressor/water cooling (can be customized according to customer needs);
- Direct cooling block ice machine: a new type of ice machine in which the refrigerant evaporates in the evaporator and the ice is made by direct cooling water through the evaporator;
- The main components include refrigeration system, lifting device, control system ;
- The evaporator is made of aluminum plate, the refrigerant flows inside the aluminum plate, and the external heat is directly exchanged with water to make ice.

### Product Advantage

- Compact structure, small size, small footprint;
  - Small heat transfer temperature difference. More energy saving during the same ice-making period;
  - Small heat transfer temperature difference, more energy saving in the same ice-making cycle;
  - Simple operation and maintenance of production operations and equipment. Simple operation and maintenance of production operations and equipment;
- It is pollution-free to the environment and ice, and can make edible ice that is pollution-free to the environment and ice and edible ice;



### Product Introduction

- Refrigeration unit: the use of world brand compressors: Bitzer, Raifukang, valley wheel, Hanzhong, etc., ice making speed;Sheet ice: the flat sheet ice has a dry texture and smooth surface, which can protect the packaged food during the refrigerated packaging process;
- The huge surface area of the sheet ice ensures sufficient contact with the refrigerated material, rapidly reducing the temperature of the refrigerated material, and the melting water is also OKWet the surface of refrigerated items to reduce dry consumption;
- Microcomputer intelligent control: microcomputer control, one-key operation fully automatic operation. Water shortage, inversion, ice full and high and low pressure alarmInformation will be displayed on the screen;
- Effectively prevent abnormal operation and reduce the rate of machine damage;Evaporator: The use of fixed and static vertical design, that is, internal scraping ice, the evaporator does not move, the skate blade in the inner wall rotating scraping ice. This kind ofThe design reduces wear, has high sealing, and effectively prevents the leakage of refrigerant. The high quality 304 stainless steel material is usedAutomatic welding technology, improve its strength and accuracy;Rolling spiral skate blade: low resistance, low loss, no noise, uniform ice production.

**螺旋速冻设备**  
SPIRAL QUICK-FREEZING EQUIPMENT



螺旋速冻设备

SPIRAL QUICK-FREEZING EQUIPMENT

**Product Characteristics**

Spiral quick-freezing machine is mainly composed of thermal insulation structure, stainless steel mesh belt, transmission system, tightening device, evaporator, wind circulation system, cleaning and drying device, feeding device, the discharging device and the electrical control system .

**Structural Characteristics**

- The insulation structure is composed of stainless steel metal insulation board, and the inner panel of the inner polyurethane filled foam bottom plate is made of 3mm thick stainless steel plate, which does not cause steel continuous port connection. No water seepage, no settlement;
- The conveyor belt is made of SUS304 stainless steel, the use of high strength stainless steel special elastic wire, both ends of the special cap welding, the operation is more stable than hot melt forming reliable, longer service life;
- Each rotating cage of the spiral freezer is driven by a reducer, which adopts the international brand transmission and is stable and reliable, and the super sealing performance can ensure it long-term stable operation in low mixing and lake wet environment;
- Evaporator made of industrial aluminum alloy material, large diameter alloy aluminum tube, high flanging large stretch super plate, high tube density, good heat transfer performance;
- Control system : The electrical control cabinet is made of SUS304 stainless steel and can be configured with relay, PLC or touch screen control according to different requirements;
- The screw mechanism of the safety device is equipped with a number of fault monitoring points and alarm devices, which can protect the long-distance mechanism to the greatest extent and prompt customers to deal with the fault.

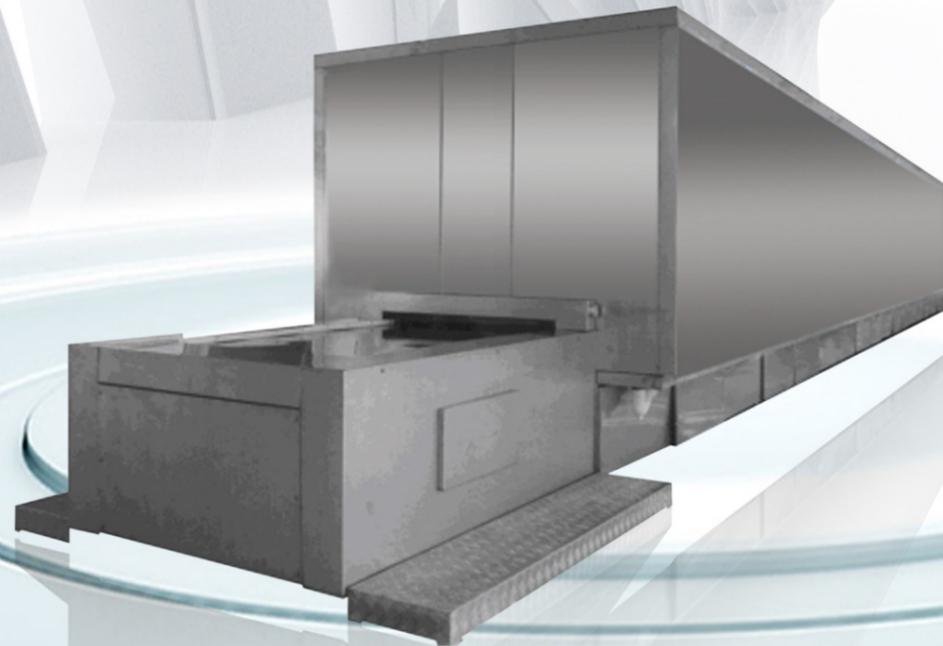
**Can be customized according to your requirements**



## 隧道速冻装置

(板带、网带式)

TUNNEL QUICK-FREEZING DEVICE



## 隧道速冻装置

TUNNEL QUICK-FREEZING DEVICE

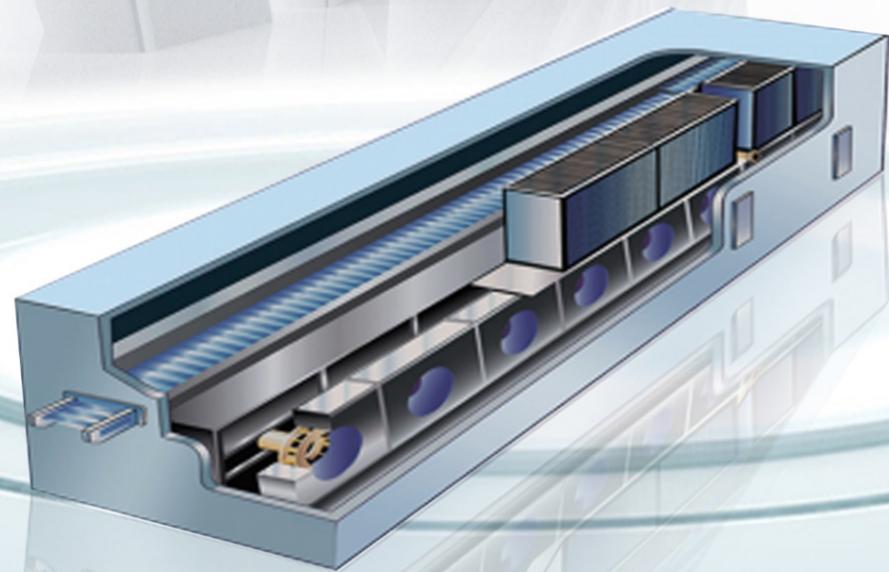
### Product Characteristics

- Rapid freezing does not produce large ice crystals, as far as possible to maintain the quality of food, fresh after thawing;
- The surface of the food quickly hardens the crust, locks in the internal water, and reduces the dry consumption of frozen products to a minimum;
- Short freezing time, not only to maintain the freshness of food, and provide a good freezing efficiency;
- The freezing efficiency is higher than that of the ordinary tunnel quick-freezing machine, so the processing cost is significantly reduced;
- Shortening the freezing time can reduce the overall device volume, so that the equipment space requirements are smaller;



# 流态化速冻机

FLUIDIZED QUICK-FREEZING MACHINE



# 流态化速冻机

FLUIDIZED QUICK-FREEZING MACHINE

Fluidized quick-freezing machine, using stainless steel mesh belt (plastic mesh belt), in the operation process, food particles are blown by vertical high speed air, forming a semi-suspended floating state (semi-fluid quick-freezing) or full suspension state (full fluid quick-freezing), the suspended food particles are surrounded by low temperature air field and are quickly frozen; At the same time, losing under or on the side of the conveyor belt, mechanical vibration or air pulse vibration device is designed, and the food particles are separated by vibration when the surface is frozen, and effectively avoided mutual adhesion. The rational design and configuration of the fluidized quick-freezing machine can improve the operating efficiency of the machine and reduce the production cost of the customer.

## Performance Characteristics

- Low noise centrifugal fan, efficient air deflecting, producing vertical rising high speed, high pressure, low temperature air flow under the mesh belt;
- The circulating air duct formed by evaporator, fan, fluidized bed, wind guide structure, etc., the heat of food is quickly transferred;
- Food particles are blown by high-speed air flow, forming a suspended state, or semi-suspended state;
- In the feed section, the food particles are surrounded by low temperature airflow and the surface quickly freezes, thus locking in the internal water and minimizing the dry consumption of the product.



# 冻干机 LYOPHILIZER

-  Excellent quality
-  Safe and reliable
-  Easy to install



# 冻干机 LYOPHILIZER

## System Characteristics

- Vacuum system: vacuum pump, low power, high efficiency, low energy consumption, high reliability of production and operation, low cost. Later maintenance is simple, the equipment is clean and hygienic.
- Heat medium system: The heat medium circulating pump is made of German Wille or Kaiquan products, and the operation is stable. The thermal medium uses distilled water/softened water, low operating cost, no pollution products, and achieve pressurized ultra-boiling point high temperature operation.
- Rail transportation system: The U-shaped hanger is used to fix the guide rail, and the material car is light and stable.
- All stainless steel materials and aluminum alloy materials are used. Does not corrode, No pollution, long service life.
- Control system: Intelligent PLC control and manual control combined control method. With self-monitoring fault alarm function. Instructions are delivered accurately a result.
- Freezing storage system: The storage body is designed with stainless steel plate on the inside and color steel plate on the outside. Polyurethane cool insulation thickness 150mm. According to customer requirements, design cooling area, Prepare for freezing time.
- Auxiliary refrigeration system: refrigeration unit is an important auxiliary equipment in FD freeze-drying system.
- According to customer requirements, the company does not support manufacturers, different models, different categories the method of cooling.



# CASE STUDY

## 案例篇

### Production and Processing Series >>>

#### Thailand Durian Fruit Meat Program



◀ Durian Flesh Peel Sorting  
Production 15°C-20°C

▶ Durian Fruit Meat Freezing  
Storage temperature 20°C  
Output temperature -18°C



◀ Thailand Durian Fruit Meat Storage  
Warehouse -22°C~-25°C

#### Inner Mongolia organic coloring materials frozen storage

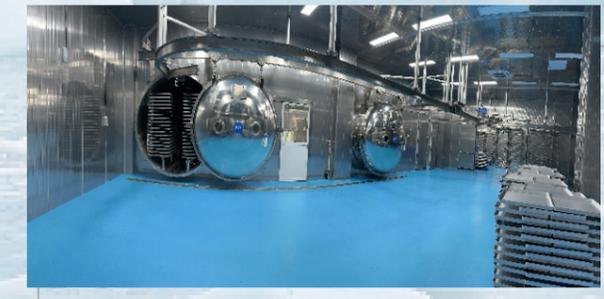


▲ Quick-freezing capacity 100 tons Quick-freezing temperature -30°C.



▲ Storage capacity 1000 tons Storage temperature -20°C

#### Strawberry Slices Freeze Dried Production Capacity 400 kilograms per day



#### Frozen dumpling production line



## Logistics Cold Chain >>>

Shanghai Shunkai Logistics Cold storage size: 11,000 m<sup>2</sup>



▲ Fruit sorting operation area 3700 m<sup>2</sup> (2°C~15°C)



▲ 6,000 square meters of low-temperature storage with a storage height of 8.7 meters (-20°C)

▶ Ice cream freezer water 500 m<sup>2</sup>  
Vault height 8.7 m (-25°C)



## Suzhong Farmers' Market



▲ 10000m<sup>3</sup> storage Storage temperature -18°C.



## Pharmaceutical projects >>>

China Resources Suzhou Project Cold storage size: 10000 m<sup>3</sup>



▲ Four cold rooms (2°C~5°C)



◀ One freezer (-18°C to -23°C)



▶ One through-house (2°C to 5°C)



## Ultra-low temperature stacking laboratory project >>>

## Chemical projects >>>



Operating Temperature -60°C-+20°C

