

**Guangzhou Icesource CO., Ltd.**

### Plate Ice Machine

Be engaged in general equipment applications in low temperature technology and developing of exhaust heat utilization technology in refrigeration system.



**Guangzhou Icesource CO., Ltd.**

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Fresh Live Fish Store In Clean And Cold Plate Ice, Sales To All Over The World.



### Plate Ice

Transparent, Dry, Hard, And Irregular Ice

### Size Of The Plate Ice

We Can Product Plate Ice With The Thickness From 2mm To 20 Mm, And We Are The First One Who Can Do This. By Adjusting The Time Of Ice Making, We Can Choose The Thickness Of The Ice Freely.

### Features

The Plate Ice Has High Cleanliness, Large Density, And Good Air Permeability. Its Surface Area Is Small So The Cooling Effect Is Even. With The Features Of Large Cool Thermal Storage Capacity, No Powder, Constant Cold Storage Temperature And Adjustable Ice Size, Plate Ice Takes A More And More Important Role In The Industry, Agriculture And Fisheries

### Application

Fisheries, Aquatic Processing, Ocean Fishing, Ice For Transportation Service, Meat Processing, Supermarket Fresh-Keeping Display, Food Processing, Medicine, Chemical Dyes, Fermentation Engineering, Concrete Cooling In Construction Industry, Mine Cooling, Ice Storage Cooling System, Papermaking Industry.



# History Of Plate Ice Machine

## History Of Plate Ice In China

In October 2001, the founder of CBFI Mr. Yang Hongbo and Mr. Zhang Shaozhi establish Vista Refrigeration Research Lab. They put forward the idea of energy saving and environment protecting refrigeration. They have cooperation with the Germany company BUCCO and have communication about the technology. And they have initiated China's first energy saving and environment protecting ice making machine project, that's the technology research of the large plate ice machine.

## 1000 Times Of Ice Making Experiment.

In November 2002, we revised the model machine according to the research data, carry out the experiment of multi loop refrigeration single loop heat gas ice making, and carry out the experiment for 1000 times with non-stop.

## Obtain An Invention Patent For Plate Ice Machine

2007, obtain the patent certificate. This means the plate liquid film heat exchange technology and the multi loop refrigeration single loop heat gas ice making technology is synchronized with the world's leading level. Patent number: 200710030591.7.

## Flexible Application Of Plate Ice Machine

The water source of plate ice machine can be fresh water or seawater and no part need to be replaced. Therefore, our product can both meet the demand of food processing and ocean transportation and ocean fishery.

1976

## Emergence Of The Plate Ice

In October 1976, a Japanese company ICEMAN developed the first plate ice machine in accordance with the market demand.

2001

2002

## Plate Liquid Film Heat Exchange Technology

In April 2002, the first experimental plate ice making machine was manufactured, and the research of plate liquid film heat exchange technology was begin.

2002

2003

## The First Daily Output 10 Tons Plate Ice Machine In China

In March 2003, China's first daily output 10 tons plate ice machine was born. In the same year, the machine was sent to the national technical testing center for performance testing. Under the standard of the nation, the equipment cost the power of 55 kw to produce 1 ton of ice, the energy saving targets reach the world's advanced level.

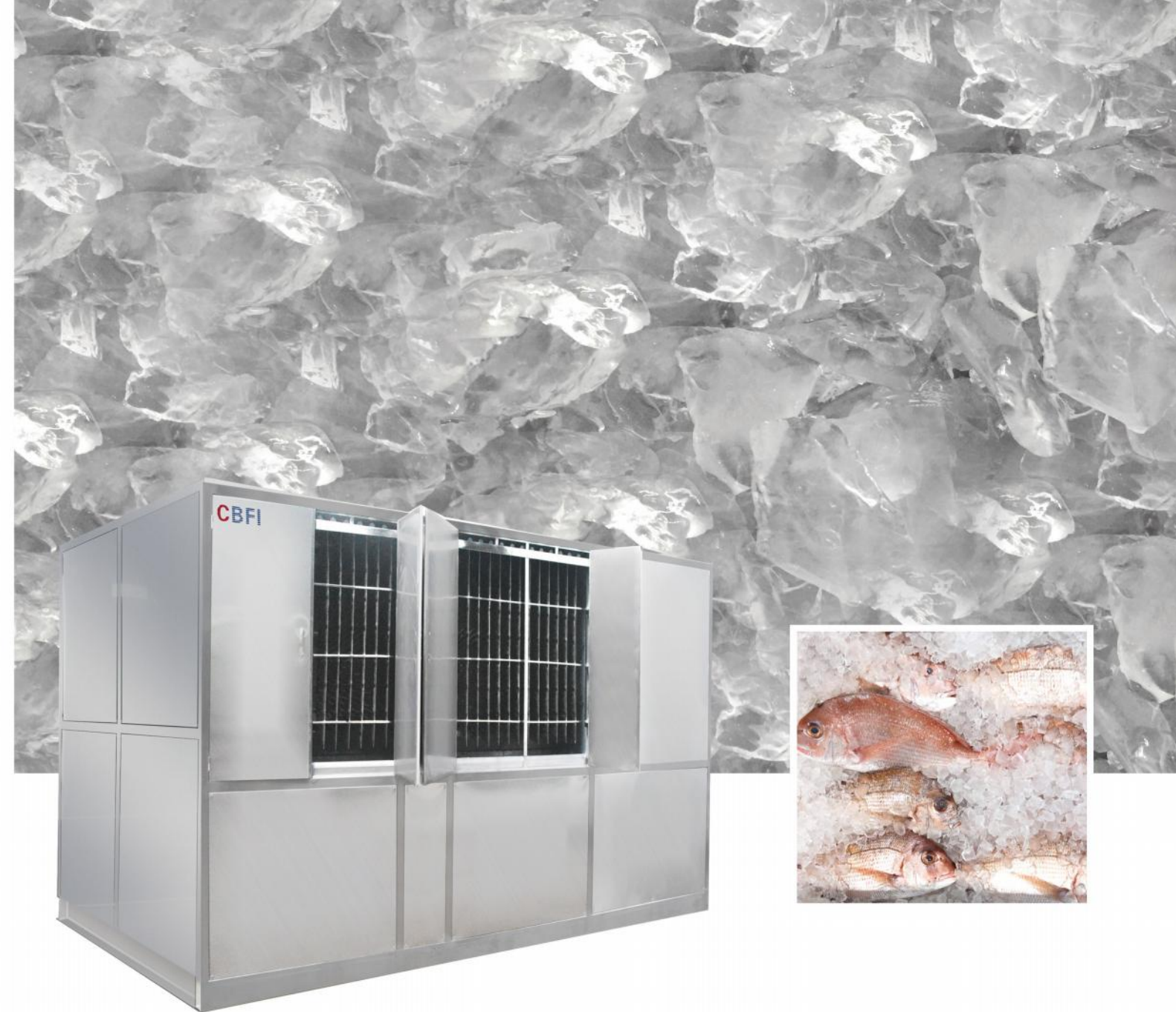
2007

2017

## The First Daily Output 20 Tons Plate Ice Machine In China

In 2017, with the rapid development of the society, the demand of the market was expanding; it is in great urgency to increase the capacity of the plate ice machine to meet customers' increasing demand. Therefore, China's first daily output 20 tons plate ice machine was born.

Flexible Application



The capacity of one single plate ice machine manufactured by CBFI varied from 1 ton to 20 tons. CBFI's plate ice making machine with rapid ice making is our new product. Its R&D is combined with micro freeze preservation technology. Through PLC, we can control the operation of ice making machine centrally, and monitoring the running state of ice making machine timely. The machine has text display screen and it is easy to operate, no special care is needed. The ice making workstation can adopt three forms: water cooling, air cooling and evaporative cooling.

## Plate Ice Machine

The equipment of plate ice machine adopt integral design

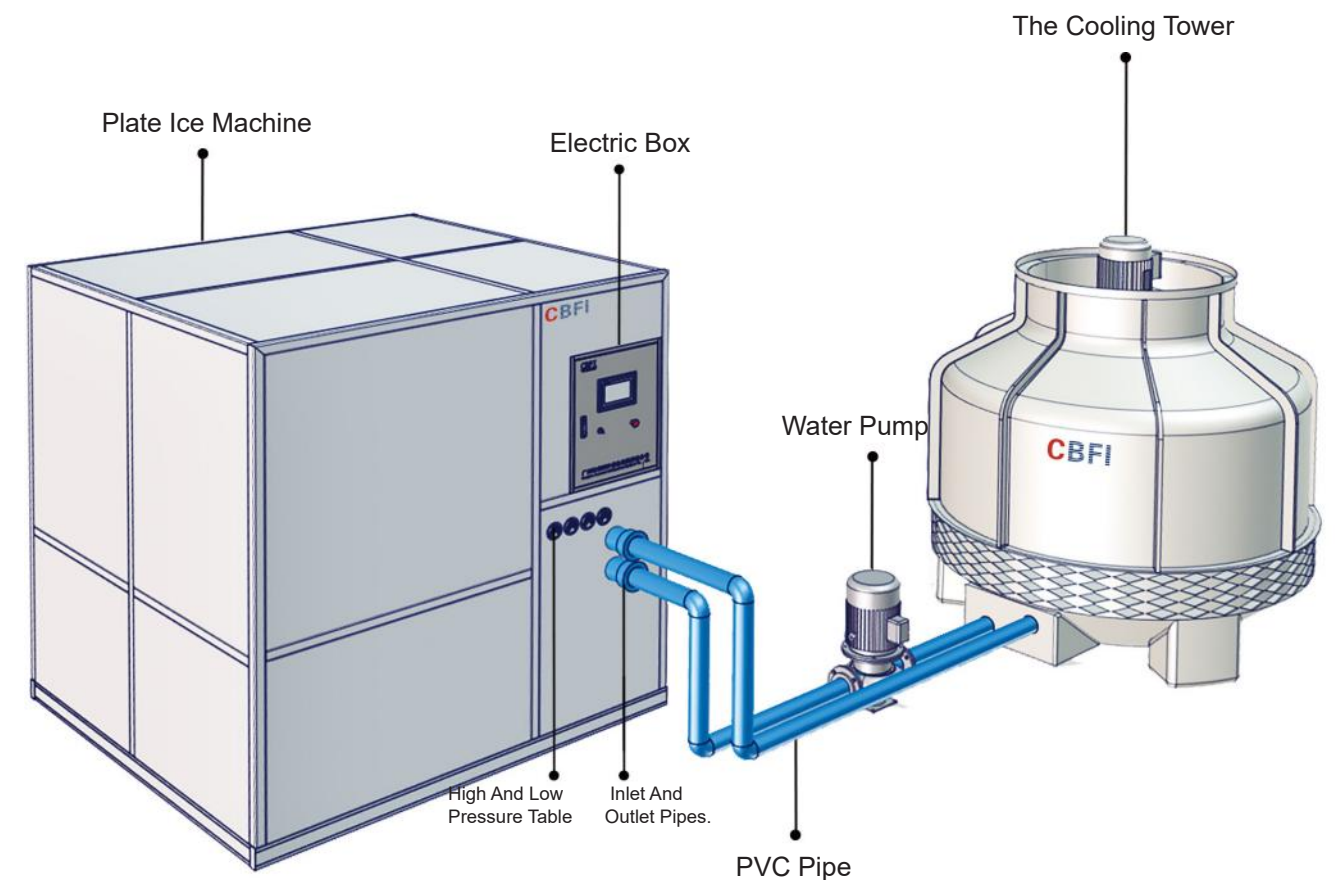
Advantage:

- The evaporator automatically laser butt welding with no leakage. The damage pressure is 45 times that of the operating pressure, and the evaporator does not have the possibility of replacement.
- Making ice through surface liquid film heat transfer technology, which has obvious ice-making saving effect to over 30%.
- Ice is collected through hot gas without any mechanical wear and venting on the pressure surface. The time of ice collecting is adaptive to improve the time of ice-making.
- The ice-making system is a multiple systems independent ice-making and de-icing function, which can shorten the ice-making cycle and the energy saving rate is up to 30%.



## 3D Ice Making Map Of Plate Ice Machine

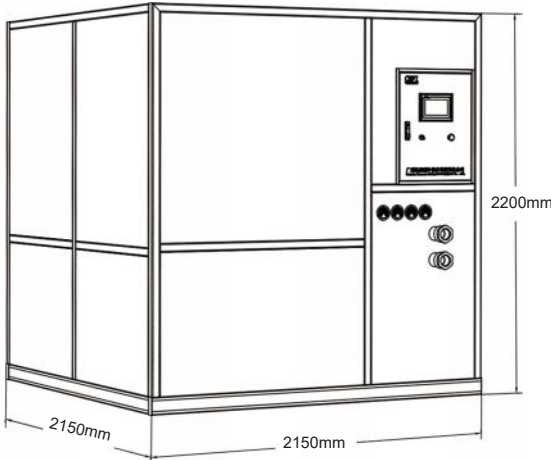
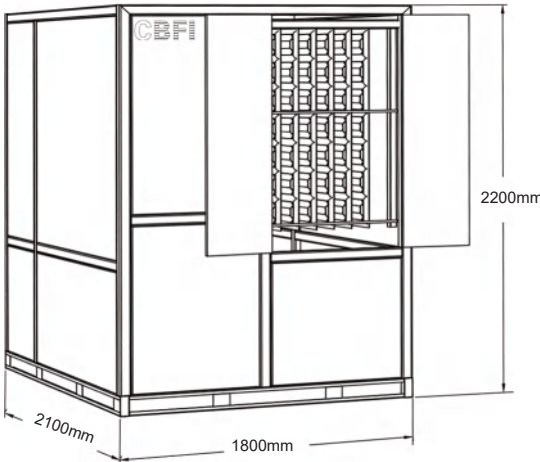
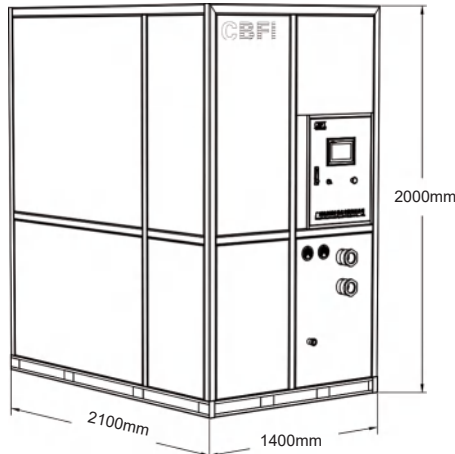
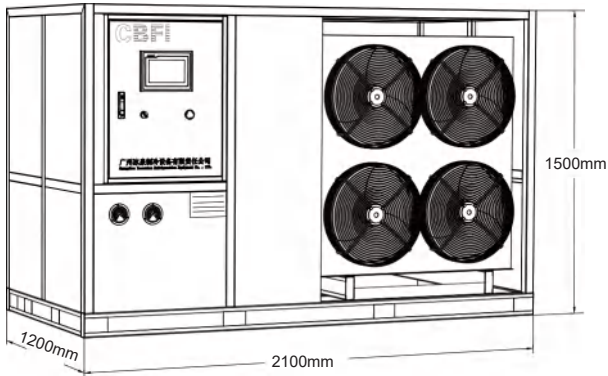
Guangzhou Icesource plate ice machine is a new generation of energy-saving products. We use multi-s-type heat exchange tube, which is designed according to the heat flow path and the two sides ice forming technology. The whole equipment has good performance in corrosion resistance, seismic and pressure resistance with stable ice production, is energy efficient and environmentally friendly. The ice making time use time control that you can set a time to adjust the thickness of the ice, which may much thicker than any other kinds of ice, thus have good time resistance so that the ice will not melted quickly, making the plate ice machine has incomparable advantage over other ice machines.





# Plate Ice Machine

Plate ice machine include one ton, two tons, three tons, five tons, ten tons, fifteen tons and twenty tons. If customers have special requirements, they can be customized.



**HYF10 1Ton Plate Ice Machine**

Ice-Making Capacity: 1Ton/24H  
 Compressor Power: 4.34KW  
 Circulating Pump Power: 0.37KW  
 Air Cooling Heat Transfer Area: 88 m<sup>2</sup>  
 Air Cooling Power: 0.48KW  
 Size Of Ice Machine: 1200x2100x1500(MM)  
 Weight: 860KG

**HYF30 3Ton Plate Ice Machine**

Ice-Making Capacity: 3Ton/24H  
 Compressor Power: 10.58KW  
 Circulating Pump Power: 1.1KW  
 Cooling Tower Power: 0.56KW  
 Cooling tower heat exchange: 90.5KW  
 Size Of Ice Machine: 2100x1330x2200(MM)  
 Weight: 1350KG

**HYF50 5Ton Plate Ice Machine**

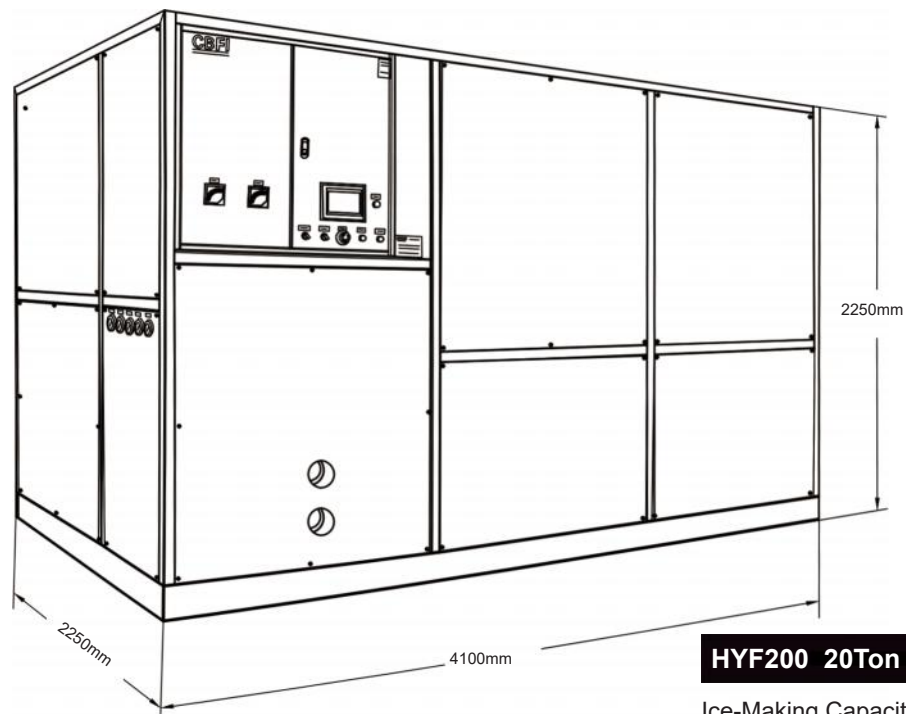
Ice-Making Capacity: 5Ton/24H  
 Compressor Power: 21KW  
 Circulating Pump Power: 1.5KW  
 Cooling Tower Power: 0.75KW  
 Cooling tower heat exchange: 135.8KW  
 Size Of Ice Machine: 2500x1700x2100(MM)  
 Weight: 1500KG

**HYF100 10Ton Plate Ice Machine**

Ice-Making Capacity: 10Ton/24H  
 Compressor Power: 29.2KW  
 Circulating Pump Power: 1.5KW  
 Cooling Tower Power: 1.5KW  
 Cooling tower heat exchange: 271KW  
 Size Of Ice Machine: 2100x2100x2200(MM)  
 Weight: 2500KG

# Plate Ice Machine

# The Refrigeration Principle Of Plate Ice Machine

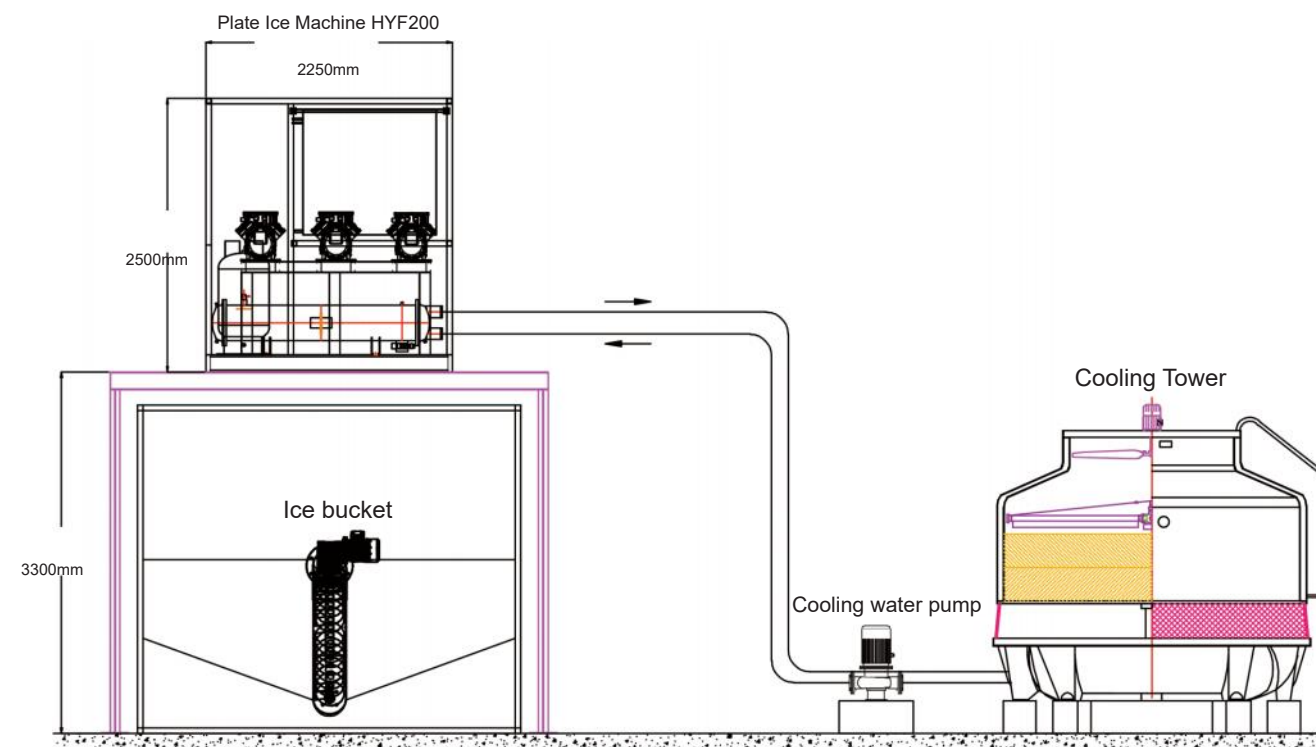


**HYF200 20Ton Plate Ice Machine**

Ice-Making Capacity: 20Ton/24H  
Compressor Power: 58.5KW  
Circulating Pump Power: 1.5KW  
Cooling Tower Power: 2.2KW  
Cooling tower heat exchange: 452KW  
Size Of Ice Machine: 4100x2250x2250(MM)  
Weight: 4650KG



When the plate ice machine making ice, the water in the cooling water pump tank will be transferred to cold water sprinkler after the normal operation of the cooling system. Through the sprinkler, the water is sprinkled evenly on the icing surface of the two-sides stainless steel evaporator, heat exchanging with refrigerant in refrigerant runner, thus reduce the temperature, some of the water become plate-like ice on the outer surface of the evaporator. The rest water will return to the cold water tank through sink for the next water cycle.





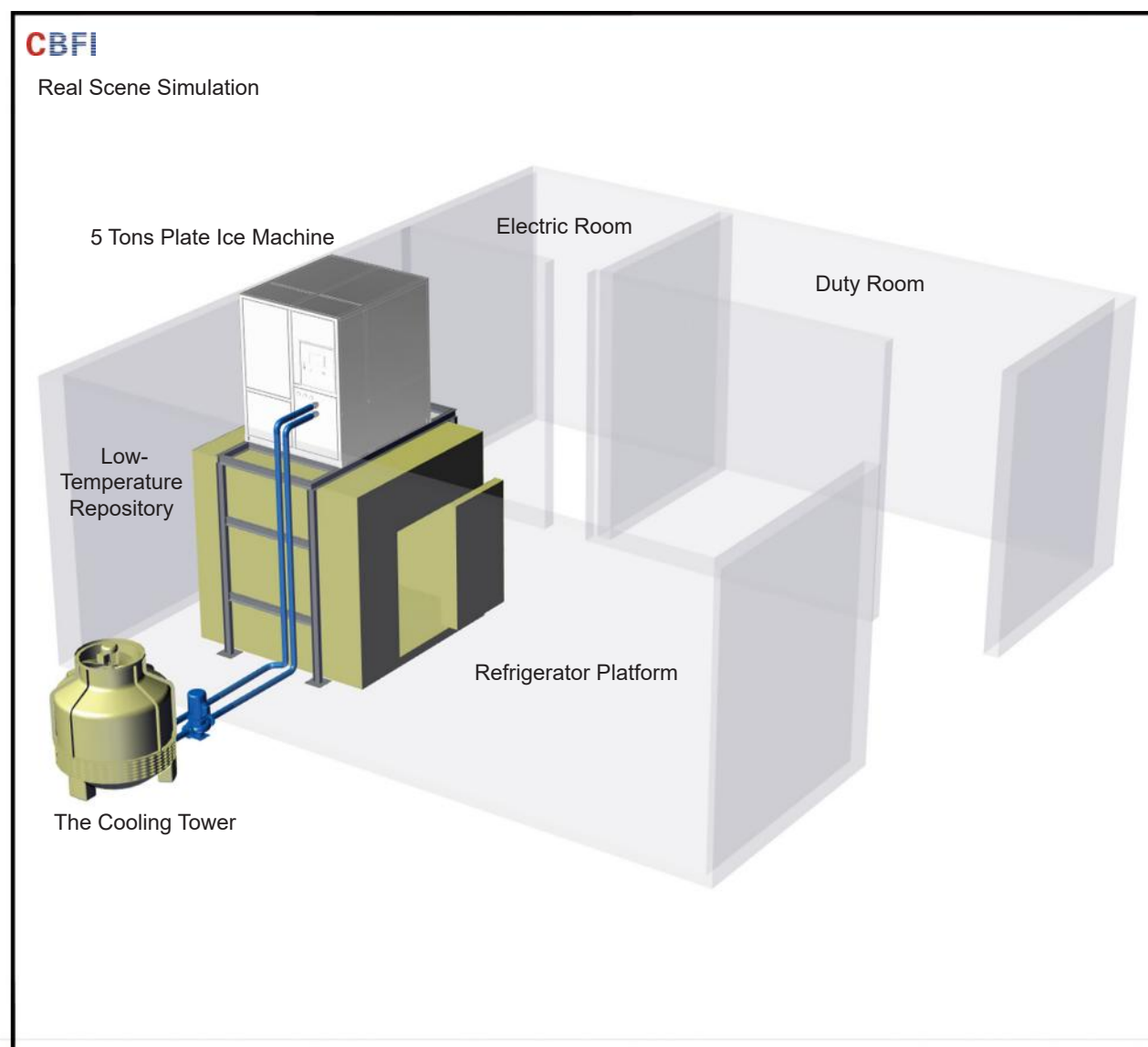
# Edible Ice Plate Ice Machine Program

## The Solution Of Chengdu Edible Ice Plate Ice Machine

A company in chengdu, which is the manufacture and supplier of local edible ice, is looking for manufactures of ice equipment to meet growing market demand. Guangzhou icesource refrigeration equipment co., ltd. Provides solutions for chengdu company to expand new business of the edible ice machine.

Customer demand: daily output 5 tons plate ice machine, plate ice falls to the low temperature storage automatically.

Standard equipment: 5 tons plate ice machine, low temperature storage

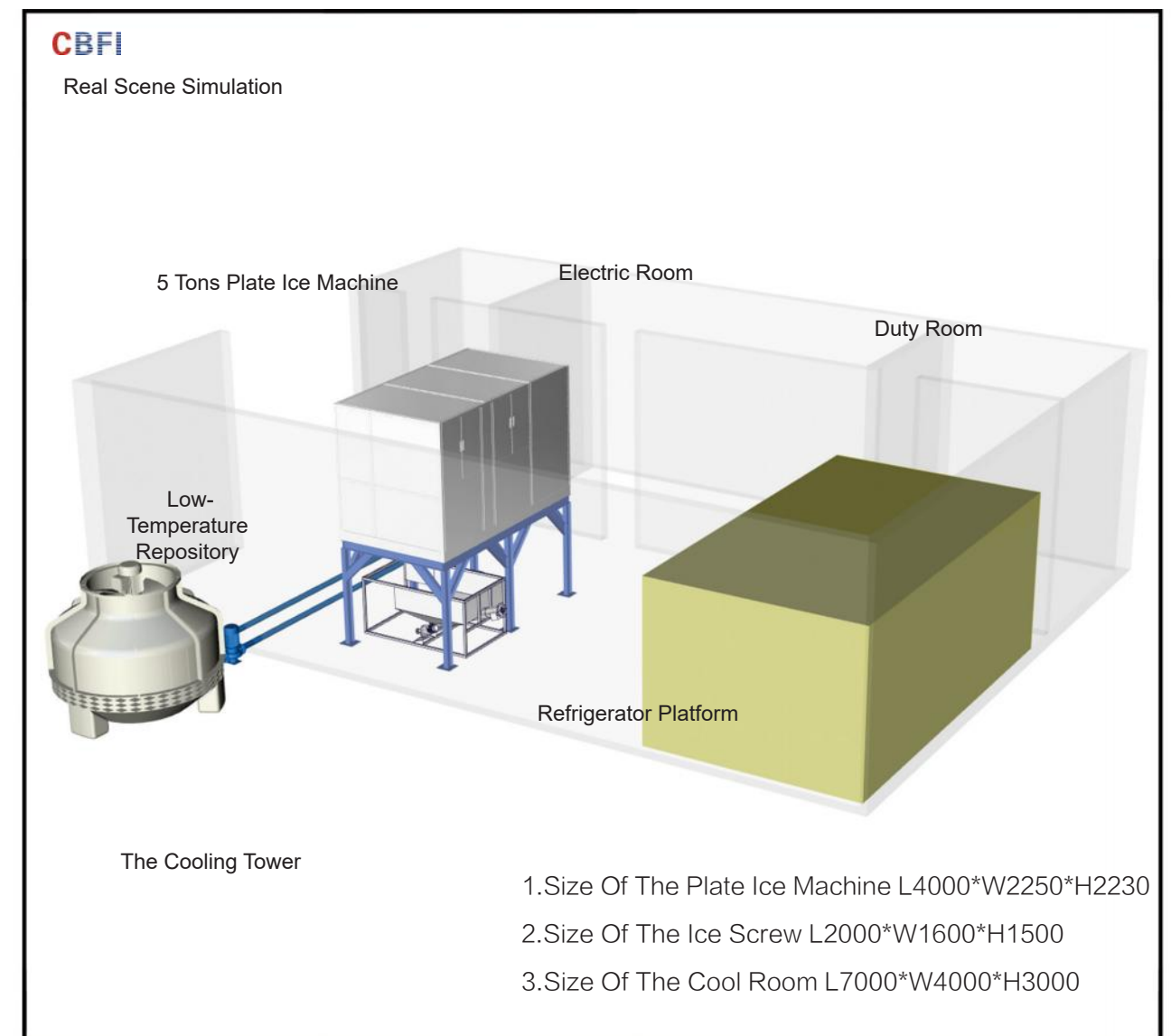


## Solution To The Suzhou Edible Ice Plate Machine

A company of suzhou is the manufacturer and supplier of the local edible ice and it starts to find ice-making equipment machine manufacturer to satisfy the increasing market demand. Guangzhou icesource co., ltd provides a solution to this company on their wish to expand a new edible ice- making machine.

Customer requirement: japan-made 20 tons ice plate machine, convey ice to the low- temperature cold room by screw ice conveyor.

Standard equipment: 20 tons ice plate machine, low- temperature cold room



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# The Design Of Wuhan Ice Factory Of Edible Ice Plate Machine

With the booming of the social economy, the living standard of people has improved, which lead to their increasingly high use requirement for food. The working mode of many ice factory in the market is a set of machine, a worker and a small cold room. Many ice cube they produce can not reach the state-specified demand for food. Our company has producing experience in the edible ice equipment market for many years and adequate market survey research, so we design specially the latest ice factory model, which is corresponding with the qc ice factory model as well as the manufacturing technique criteria and sb/t 10017-2008 requirement for edible ice. Through this design, it can enhance security in the usage of edible ice and prevent pollution from the source so as to normalize the ice factory of customer, abandon workshop-style in producing. Under such condition, we can ensure that users can eat at ease and safely, thus making contribution to the normalization of the edible ice factory .

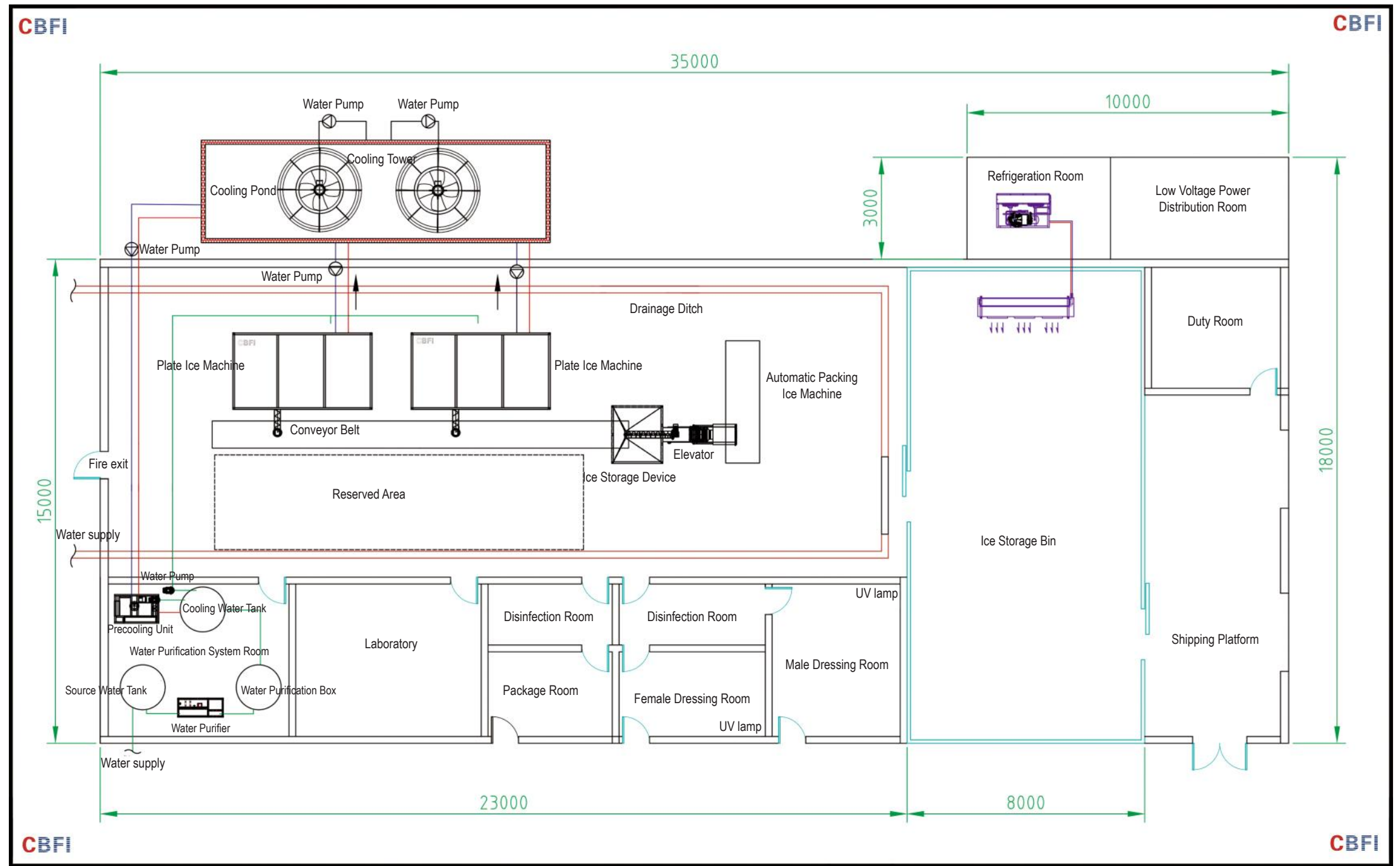
## Solution To Wuhan QC Ice Factory For Edible Ice Plate Machine

A Company Of Wuhan Is The Manufacturer And Supplier Of The Local Edible Ice And It Starts To Find Ice-Making Equipment Machine Manufacturer To Satisfy The Increasing Market Demand. Guangzhou Icesource Co., LTD Provides A Complete Solution To This Company On Their Wish To Expand A New Edible Ice Ice- Making Factory.

Standard Facility: Edible Plate Ice Machine HYF200, 2 Sets Of 20 -Ton Plate Ice Machine, Water Purification Equipment, A Set Of Ice Storage Room.

Other Ancillary Facility: Should Be Equipped With Male And Female Locker Room, Packing Room, Testing Room, Water Purification System Room, Disinfection Room, Disinfecting Equipment, Low-Voltage Electrical Distribution Room, Refrigerating Station.

To Increase Production Efficiency, The Following Equipment Can Be Chose: A Set Of Auxiliary Ice-Making System For Exclusive Precooling Unit (Can Increase 10% Production Of Ice-Making Machine), Auxiliary Ice Storage Device, Conveyor Belt And Automatic Packing Machine.

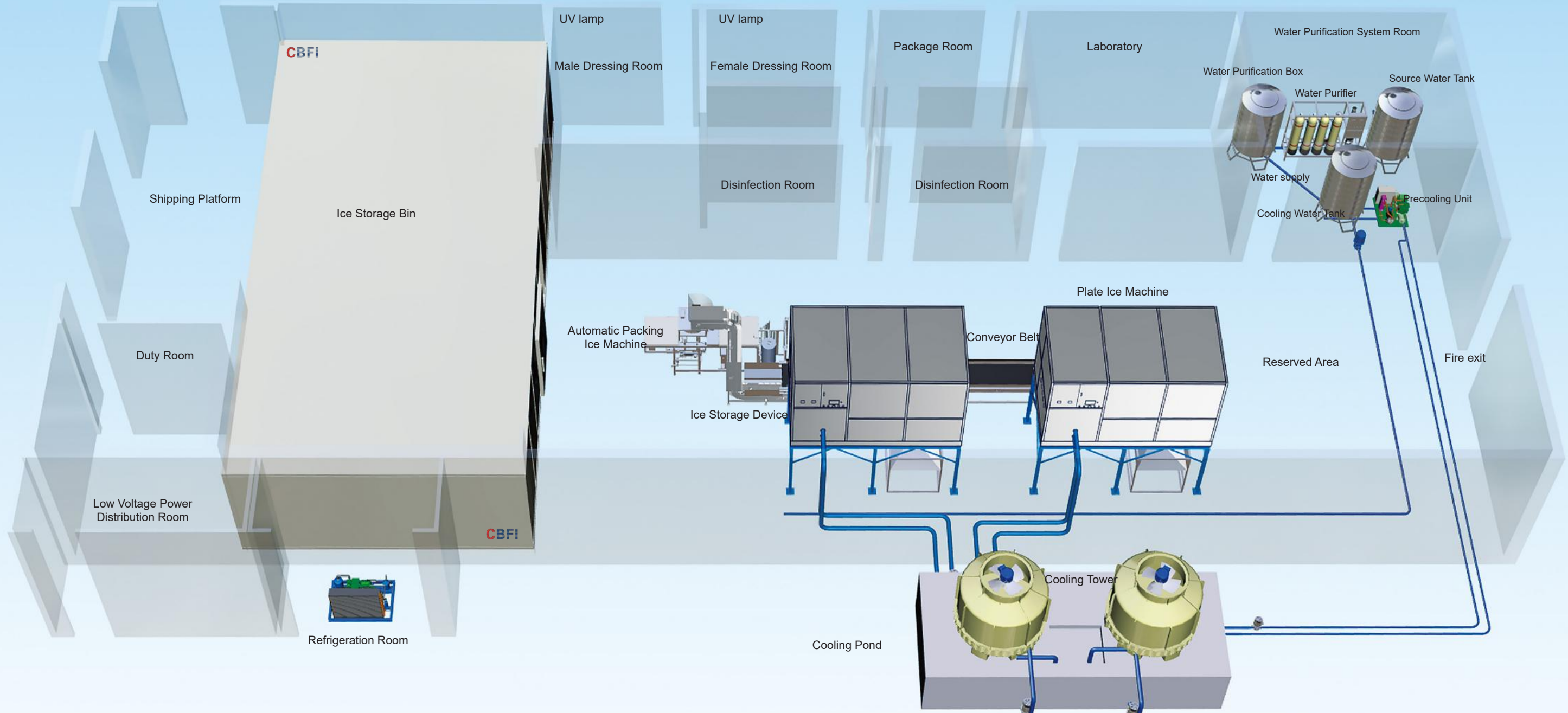


Unit: mm

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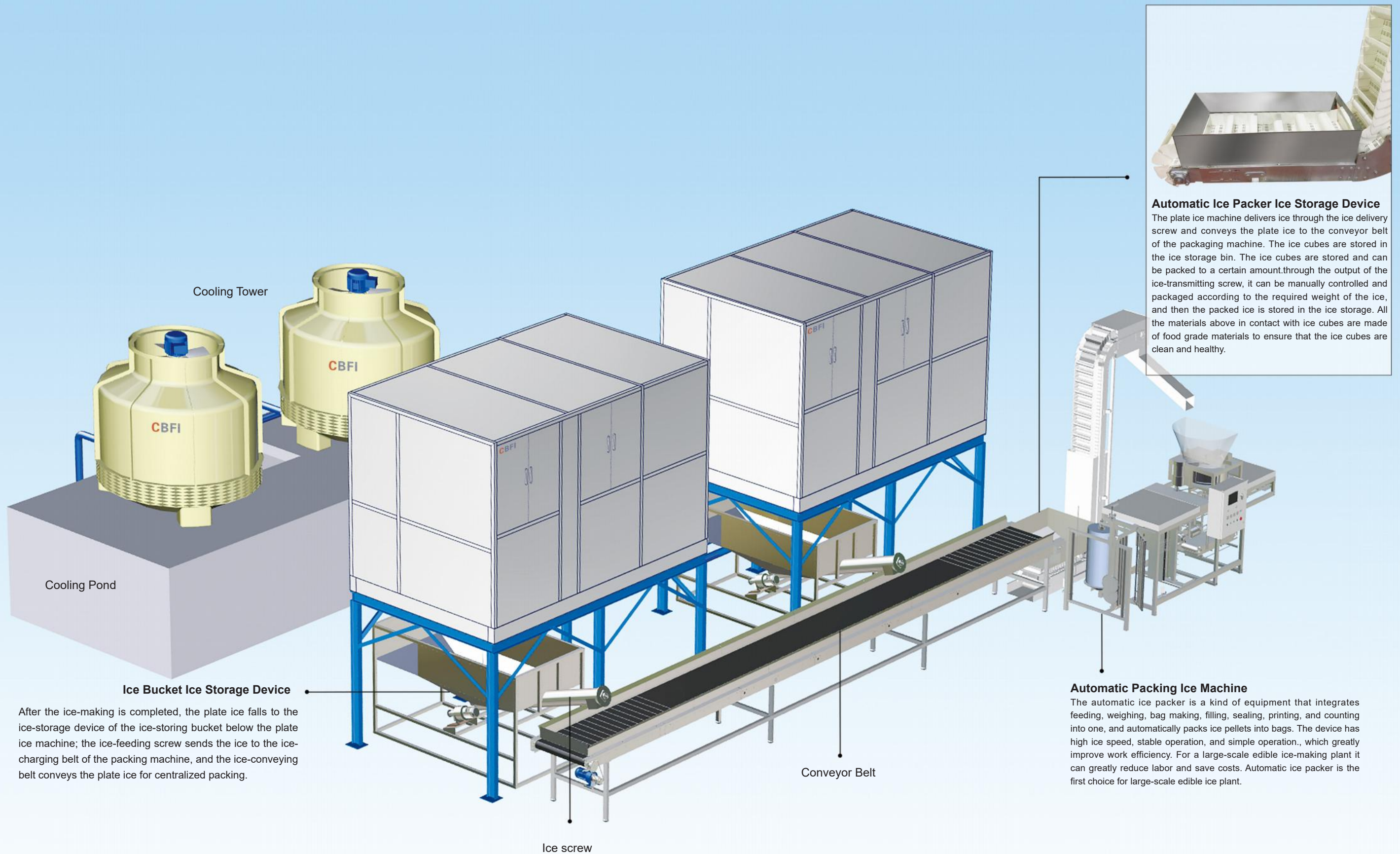
# Plate Ice Machine Ice Rink Simulation



- HYF200 X 2 Edible Plate Ice Machine HYF200 X 2
- Automatic Packing Ice Machine
- Automatic Screw Ice Storage Device
- Cooling Tower
- Water Purifier
- Special Pre-Cooling Unit For Ice-Making System
- Ice Storage Bin
- Cold Storage Host

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Cooling Tower

Cooling Pond

**Ice Bucket Ice Storage Device**

After the ice-making is completed, the plate ice falls to the ice-storage device of the ice-storing bucket below the plate ice machine; the ice-feeding screw sends the ice to the ice-charging belt of the packing machine, and the ice-conveying belt conveys the plate ice for centralized packing.

Conveyor Belt

Ice screw

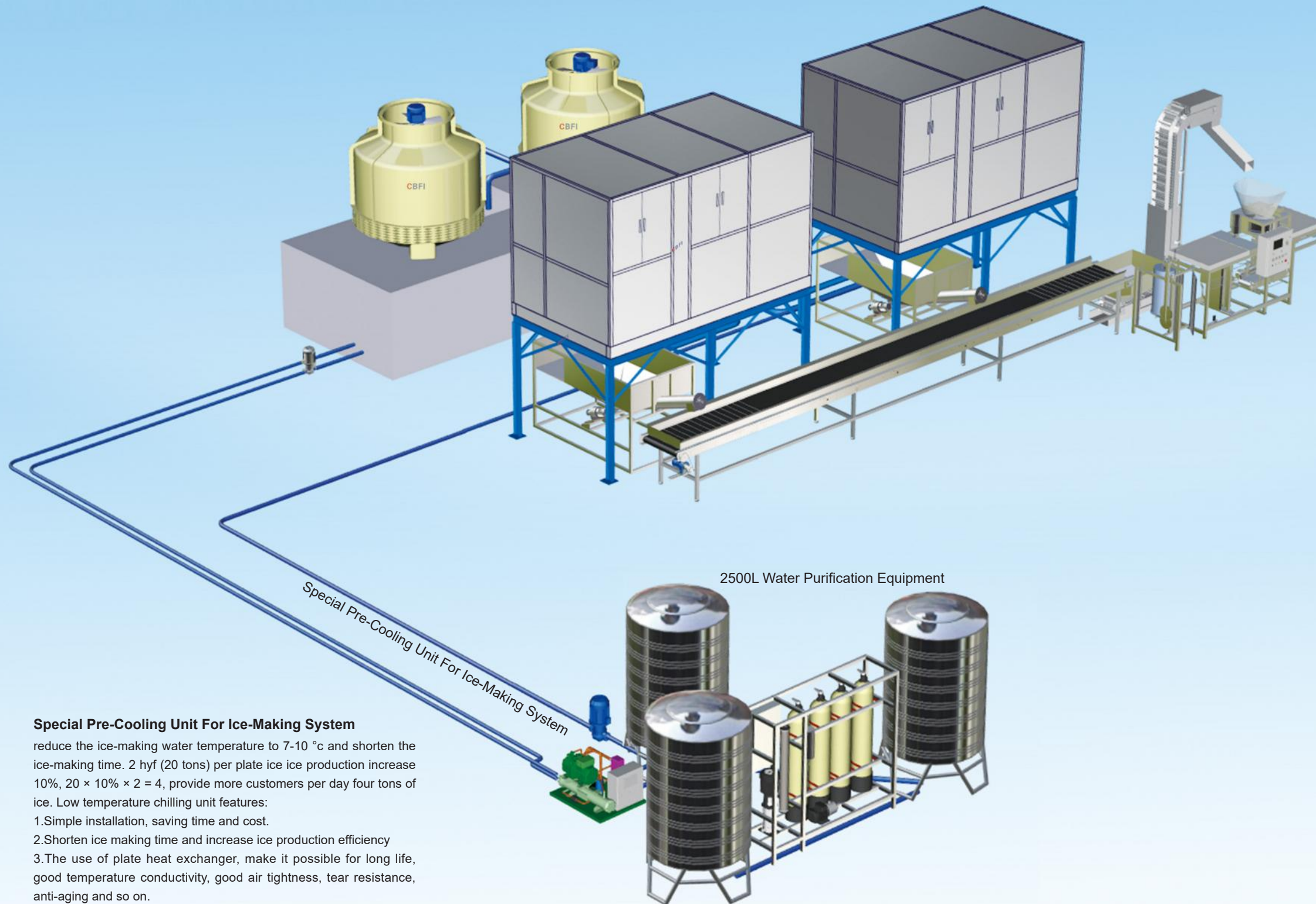
**Automatic Ice Packer Ice Storage Device**

The plate ice machine delivers ice through the ice delivery screw and conveys the plate ice to the conveyor belt of the packaging machine. The ice cubes are stored in the ice storage bin. The ice cubes are stored and can be packed to a certain amount through the output of the ice-transmitting screw, it can be manually controlled and packaged according to the required weight of the ice, and then the packed ice is stored in the ice storage. All the materials above in contact with ice cubes are made of food grade materials to ensure that the ice cubes are clean and healthy.

**Automatic Packing Ice Machine**

The automatic ice packer is a kind of equipment that integrates feeding, weighing, bag making, filling, sealing, printing, and counting into one, and automatically packs ice pellets into bags. The device has high ice speed, stable operation, and simple operation., which greatly improve work efficiency. For a large-scale edible ice-making plant it can greatly reduce labor and save costs. Automatic ice packer is the first choice for large-scale edible ice plant.



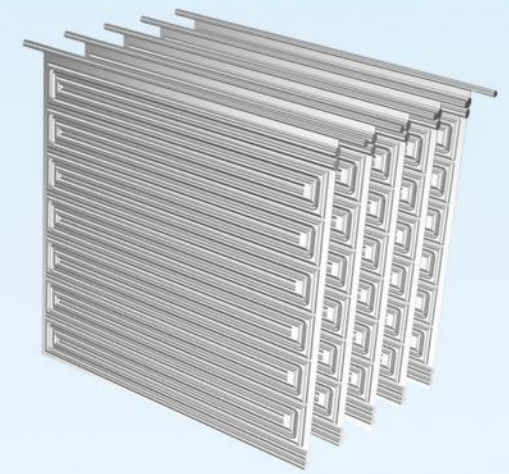


**Special Pre-Cooling Unit For Ice-Making System**

reduce the ice-making water temperature to 7-10 °c and shorten the ice-making time. 2 hyf (20 tons) per plate ice ice production increase 10%,  $20 \times 10\% \times 2 = 4$ , provide more customers per day four tons of ice. Low temperature chilling unit features:

- 1.Simple installation, saving time and cost.
- 2.Shorten ice making time and increase ice production efficiency
- 3.The use of plate heat exchanger, make it possible for long life, good temperature conductivity, good air tightness, tear resistance, anti-aging and so on.

2500L Water Purification Equipment



**Super Pressure Resistant For Ice Machine**

The ice machine ice plate adopts 304 stainless steel plate, density is 7.93g/cm<sup>3</sup>, anti high temperature 800°c, good processability and high toughness. Our plate ice machine evaporator adpot hydraulic expansion technology and "s" type walkway technology, this is our patented technology, this technology will evenly expand the stainless steel plate to make sure the refrigerant in the stainless steel ice machine will be evenly distributed, one-stage flow allows water to freeze uniformly on the surface of the ice maker without causing problems with ice removal. After rigorous professional experiments and tests, our plate ice maker machine can endure the pressure of xxkg, plate ice machine maximum pressure is only 16kg, which means our plate ice maker machine has super compressive capacity.



**Ice Machine Built-In Ice Axis**

The icing machine has a built-in crushed ice screw, which removes the ice from the plate ice, and the crushed ice screw starts working synchronously, breaking the whole piece of ice into the ice storage bin. The crushed ice size is customized by by controlling crushed ice screw control board.



## Scope:

Plate ice has good resistance to melting, and it is found in places where ice is needed, such as drinking supplies modulation, decoration, food ice, cold drinks, fast food restaurants, restaurants, hotels, bars, seafood, convenience stores, and vegetable supermarkets.



Cooling Down



Cold Drinks



Cold Drinks Shop



Fast Food Restaurant



Restaurant



Hotel



Bar



Seafood



Vegetable Supermarket

## Customer Individual demands filling out forms

1. Which country will you use this equipment and what is the industrial 3 phase power supply over there.
2. Is this your first time doing the business or have been doing this business already.
3. Which kind of ice machine are you interested and how many tons per 24 hrs you need. Besides will you use this ice for your own business or sell to customers.
4. Do you only need ice machines or a complete ice factory solutions.
5. Is your factory ready for the machines or its a bare land and whats the length, width, height of it. (In meters or feet)
6. Whats the average temperature over there, whats the highest temperature in hot season and lowest temperature in cold season.
7. Will you use the government power or a generator, is the power from government stable or you also considering use the generator as backup.
8. Is the water from tap or from the underground, what about the water conditions, is it drinkable.
9. Installation of the machine is simple, do you know some people who knows about electricity, refrigerator or refrigeration over there in local.
10. If you have any other requests, please write it here.

Guangzhou ICESOURCE adhering to the philosophy that technological innovation is the untiring power of the development and expansion of the company, and always unswervingly take the road of independent research and development. The affirmation from customers makes us more confident and more firm on product innovation, to fight for a better and better quality.