

Guangzhou Icesource CO., Ltd.

## Large Edible Cube 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.

Tel : +86 20 3919 9220

Fax : +86 20 3919 9299

E-mail : sale@icemakerchina.com

Web. :www.icesourcegroup.com

Address : Building 101, No.44, Qianfengbei Road, Shiqi Town, Panyu District,  
Guangzhou, China.



CBFI Large Edible Cube Ice Machine Your First Choice to build an edible ice factory



### **Edible Cube Ice**

Cube ice has the smallest contact area with frozen products during all types of ice in present market. Because of its shape is square, hence the name Cube Ice.

### **Ice Mold Size**

22×22×22mm、29×29×22mm、38×38×22mm

### **Features**

Cube ice is crystal, clean, sanitary, and with best melting resistance, which suitable for drinks modulation, food decoration, food preservation, and so on. So cube ice is mainly used as edible ice.

### **Cube Ice Application**

Hotel, Bar, Banquet Hall, Western Restaurant, Fast Food Restaurant, Convenience Store, Cold Drinks Shop, KTV, Breakfast Restaurant, Western-style Fast Food, Beer House, etc where need ice.



# HISTORY BACKGROUND OF CUBE ICE MACHINE



## PRODUCT ADVANTAGES

- 1** CBFI is the creator of large-scale edible cube ice machines and has core invention patents
- 2** Using self-developed flat wall liquid film heat exchange and circulating hot air ice harvesting technology
- 3** High production capacity, low power consumption, uniform ice thickness, stable ice removal
- 4** Provide a one-stop solution for fully automated large-scale edible cube ice production lines, reduce labor costs, improve production efficiency, and ensure the safety and hygiene of edible ice in all aspects

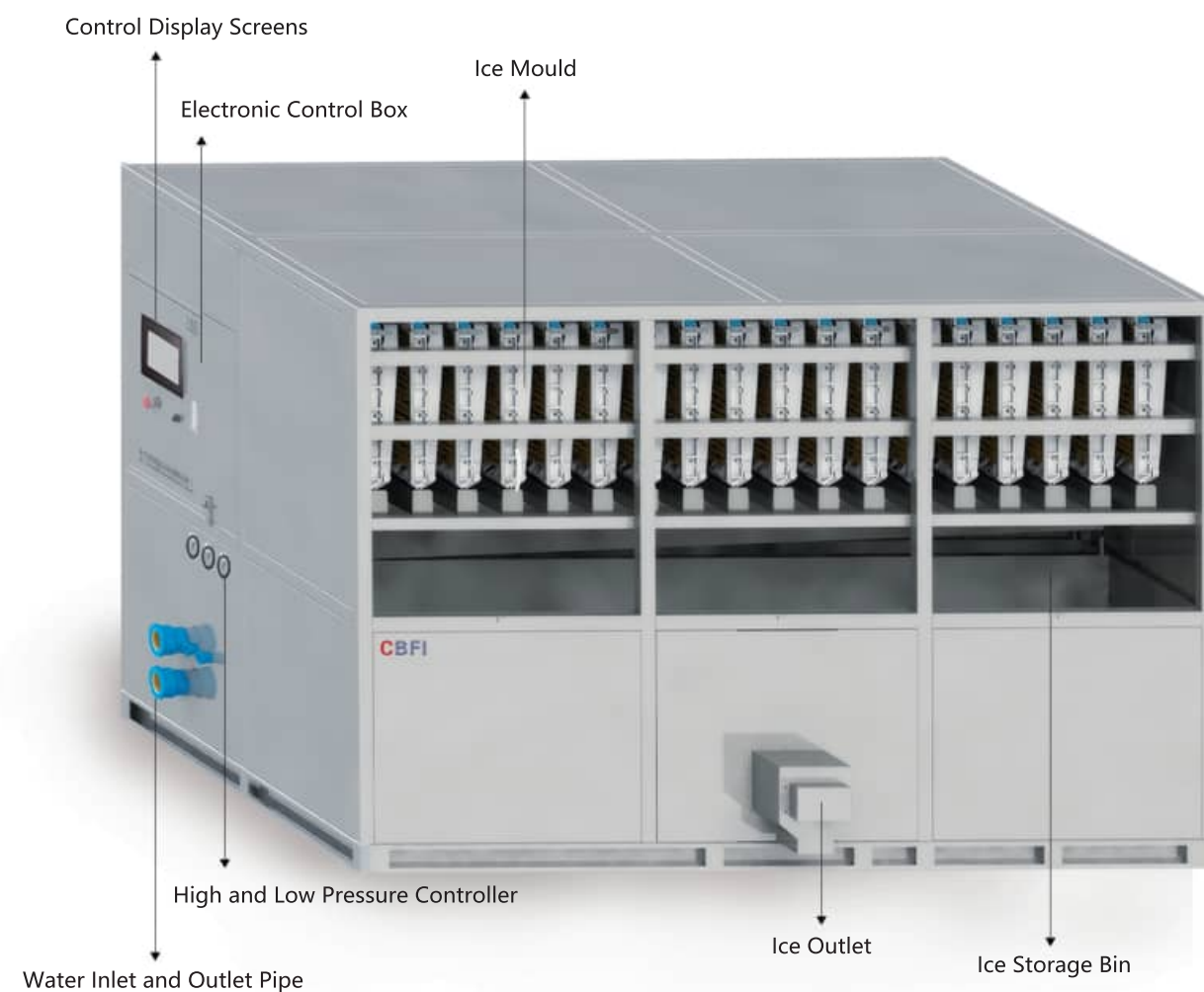


## Designing structure drawing of cube ice machine

Large capacity edible ice machine applies the overall design.

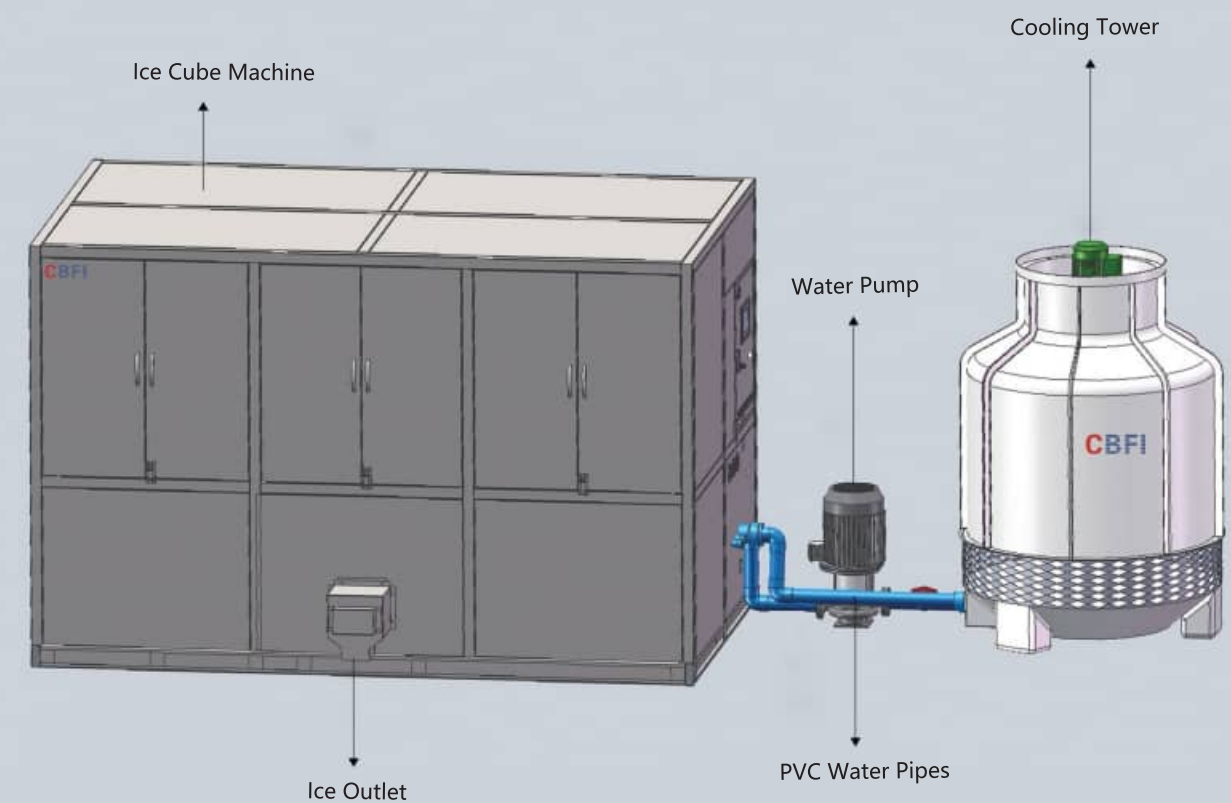
Advantage:

- Ambient temperature self-adjust system, ensure ice thickness won't change because of ambient temperature difference.
- Proprietary design of refrigeration system, gains government patent right: ZL201420070472.X.
- Power consumption is 80kW.H per 1 ton ice.
- Modular design with small area occupy, can easily dock with the ice packaging system.



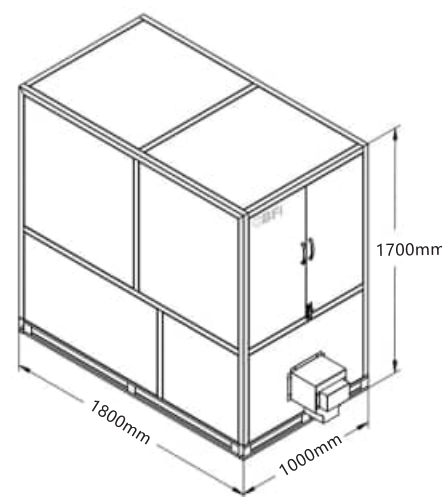
## 3D diagram of cube ice machine

CBFI large cube ice machine is the first fully automatic machine that adopt the four advanced technologies: automatically adjusts the ice thickness, ambient temperature self-adaption, automatically supply ice-making water after ice harvest and auxiliary type condensating pressure stable system. The production process is fully automatic, cube ice shapes are with uniform appearance and without ice thickness difference. The proper use of the two patent technology: flate plate heat exchange technology and circulating heat ice-dropping technology provides sufficient technical guarantee for products going global.



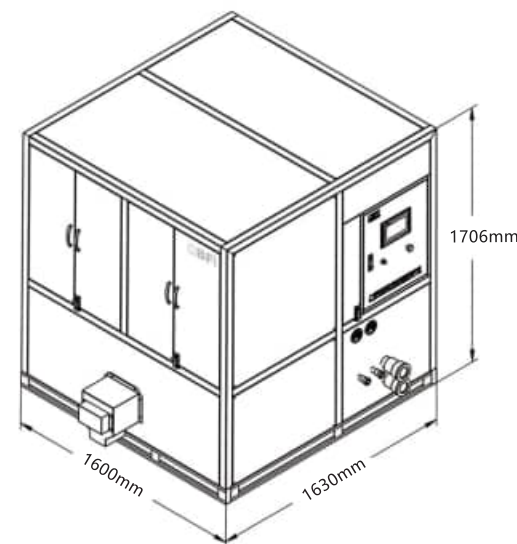
# Cube Ice Machine

The edible cube ice machine daily production capacity can be 1 ton, 2 tons, 3 tons, 5 tons, 10 tons, 15 tons and 20 tons. The non-standard cube ice machine can be customized according to clients' requirement.



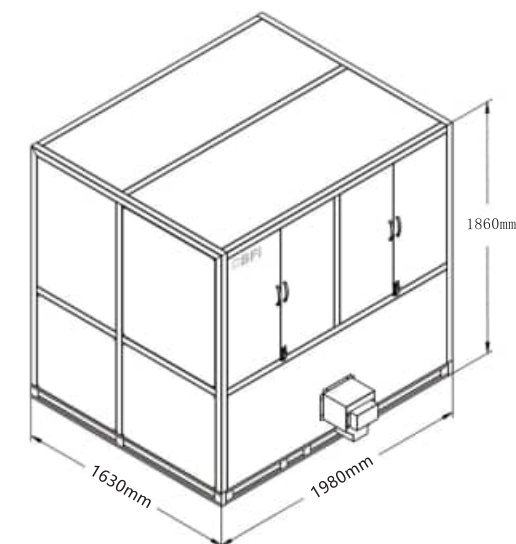
**CV1000 1 ton Cube Ice Machine**

Ice making capacity : 1ton/24h  
Compressor rated power : 3KW  
Power of circulating water pump: 0.37KW  
Power of cooling water pump: 1.1KW  
Power of cooling fan: 0.18KW  
Ice making machine size: 1800x1000x1700 (mm)  
Weight: 800KG



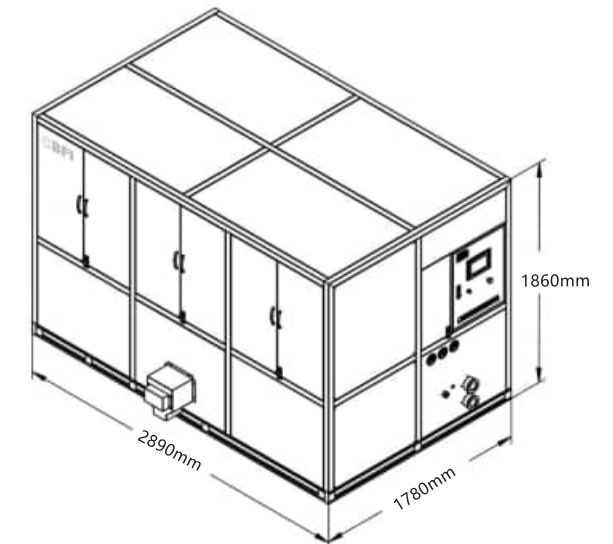
**CV2000 2 tons Cube Ice Machine**

Ice making capacity: 2Ton/24h  
Compressor rated power : 6KW  
Power of circulating water pump: 0.37KW  
Power of cooling water pump: 1.5KW  
Power of cooling fan: 0.37KW  
Ice making machine size: 1630x1600x1706 (mm)  
Weight: 1000KG



**CV3000 3 tons Cube Ice Machine**

Ice making capacity: 3Ton/24h  
Compressor rated power : 9KW  
Power of circulating water pump: 0.37KW  
Power of cooling water pump: 1.5KW  
Power of cooling fan: 0.56KW  
Ice making machine size: 1980x1630x1860 (mm)  
Weight: 1200KG

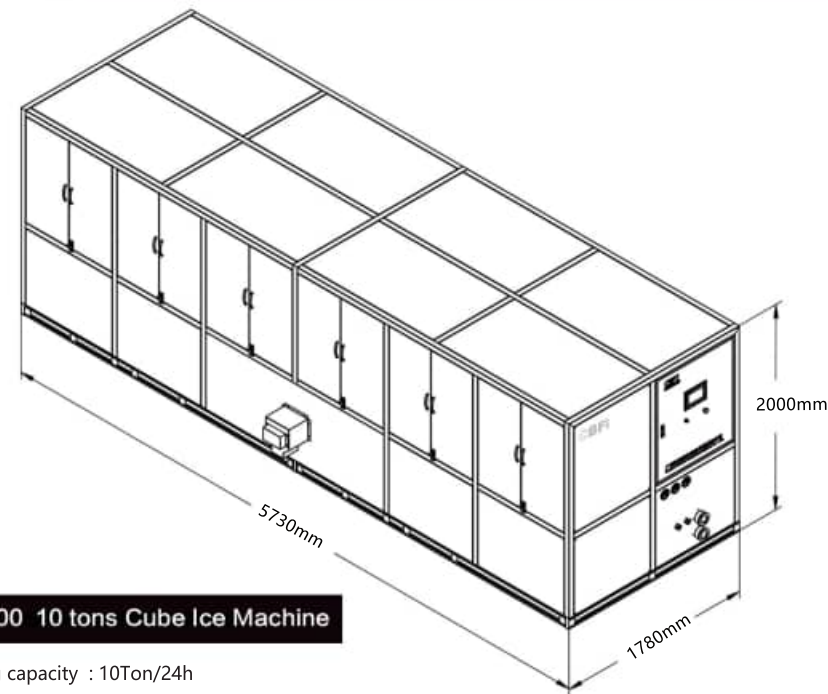


**CV5000 5 tons Cube Ice Machine**

Ice making capacity: 5Ton/24h  
Compressor rated power : 18.25KW  
Power of circulating water pump: 0.55KW  
Power of cooling water pump: 2.2KW  
Power of cooling fan: 1.5KW  
Ice making machine size: 2890x1780x1860 (mm)  
Weight: 1600KG

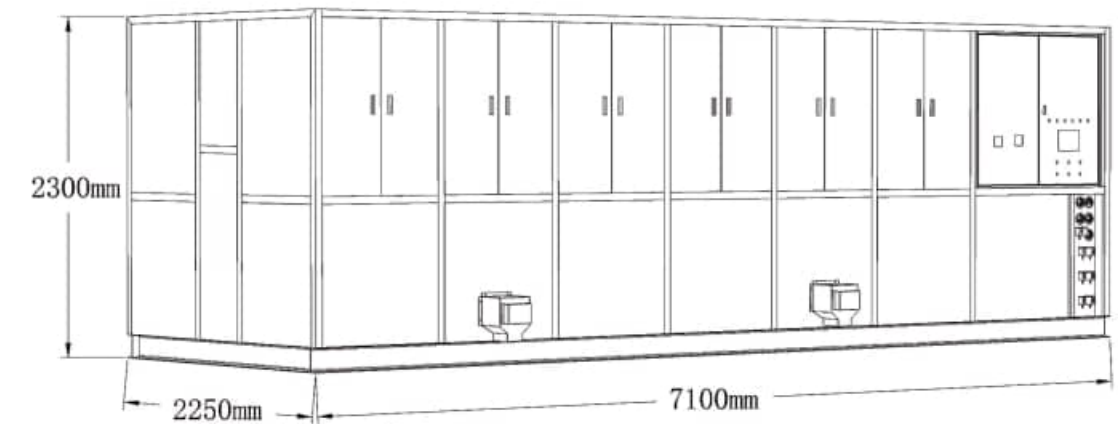


## Cube Ice Machine



**CV10000 10 tons Cube Ice Machine**

Ice making capacity : 10Ton/24h  
 Compressor rated power : 37.5KW  
 Power of circulating water pump: 1.1KW  
 Power of cooling water pump: 4KW  
 Power of cooling fan: 1.5KW  
 Ice making machine size: 5730x1780x2000 (mm)  
 Weight: 3000KG



**CV20000 20 tons Cube Ice Machine**

Ice making capacity : 20Ton/24h  
 Compressor rated power : 58.4KW  
 Power of circulating water pump: 4.4KW  
 Power of cooling water pump: 5.5KW  
 Power of cooling fan: 2.2KW  
 Ice making machine size: 7100x2250x2300 (mm)  
 Weight: 5000KG

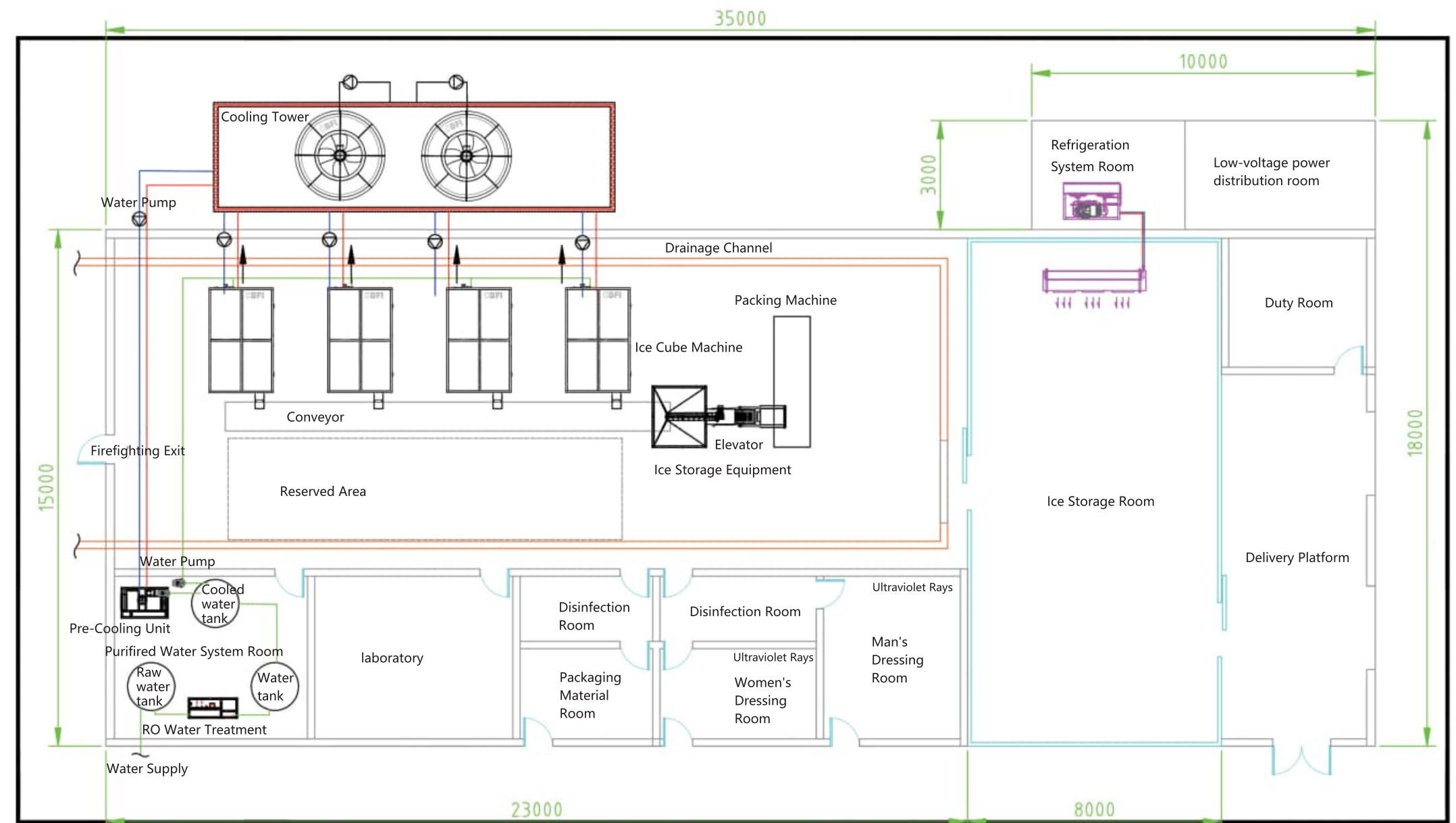


# Edible Cube Ice Machine Plant Design

With the development of social economy, people's living standard has been improved and their demand on food application is higher and higher. At the present market, most of ice plant runs in this model: it just has one set ice machine, one worker and one small cold room and the ice production cannot meet the national food requirements. Aiming at edible ice market, our company has been through years of experience in the production of edible ice equipment and feedback on market research. According to production process specification of edible ice and requirements 《SB/T 10017-2008》, we specially designed the latest ice plant that conformity with QC and improve the safety of edible ice. Thus, it can stop ice contamination from the source and make customer's ice plant regulation and say goodbye to tiny workshop. In order to assure consumers enjoy ice in safety and security, we contribute to the standardization of the edible ice market.

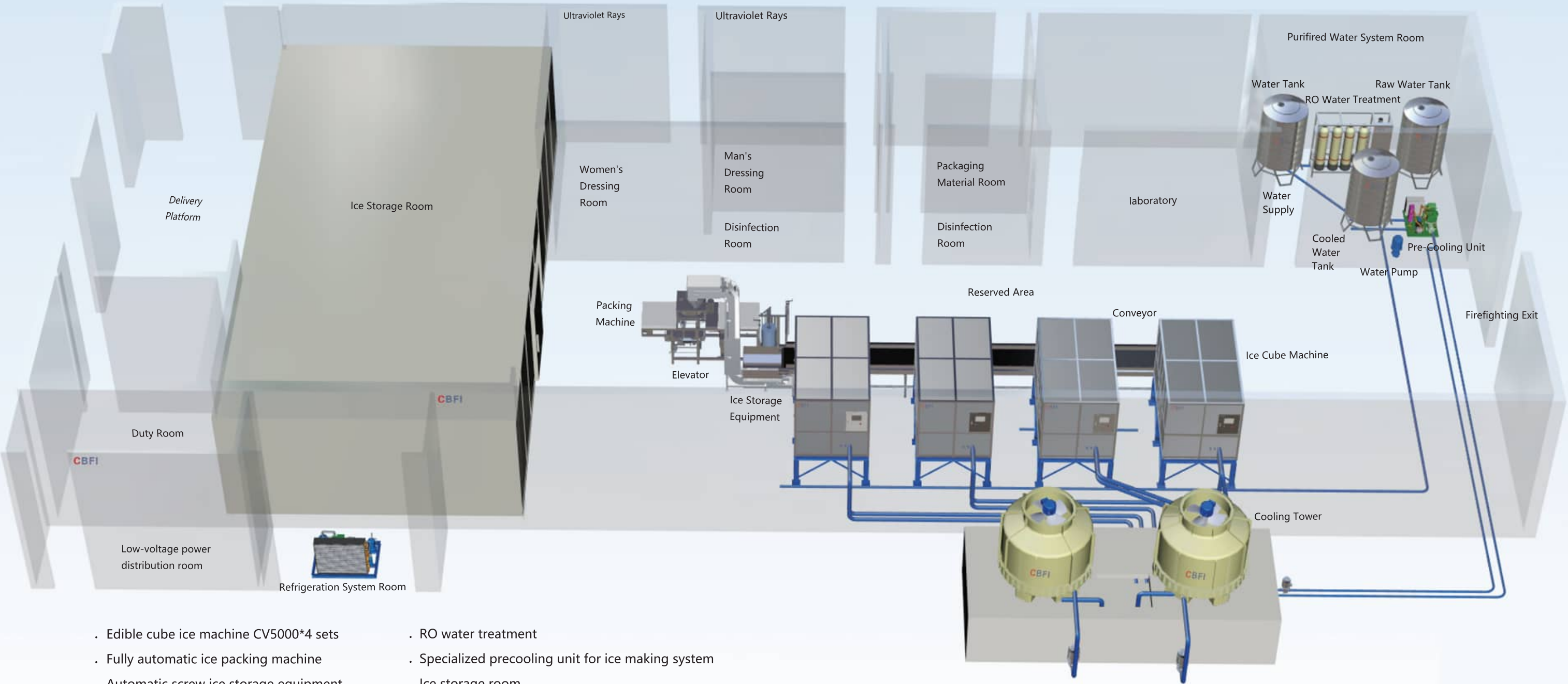
## The solution of edible ice cube machine plant with QC in Malaysia

One of Malaysian company is a giant to produce and supply edible ice in locally. To meet growing market demand, they start to look for refrigeration equipment manufacturer. Guangzhou Icesource Co.,Ltd provide a complete solution to build a newest edible ice plant. Standard equipment : Edible ice cube machine CV5000, 4 sets; Water purification equipment ; Ice Storage Room one set; Other supporting facilities : men's and women's dressing rooms, packaging material room, laboratory, water purification room, disinfection room, disinfection equipment, low-voltage distribution room, and refrigeration system room. To improve production efficiency, there has options equipment: water chiller that match with refrigeration system (it increase 10% production), matching ice storage device with conveyor belt and automatic ice packing machine.





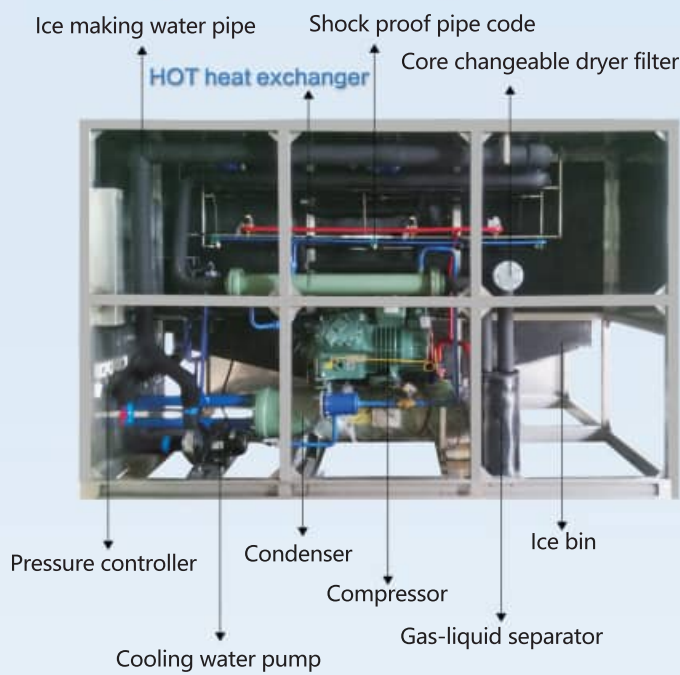
# Virtual Simulation Diagram Of Cube Ice Machine Factory



- . Edible cube ice machine CV5000\*4 sets
- . Fully automatic ice packing machine
- . Automatic screw ice storage equipment
- . Cooling tower
- . RO water treatment
- . Specialized precooling unit for ice making system
- . Ice storage room
- . Cold room refrigeration unit



# Professional design improves refrigeration efficiency and ensure machine running stably



- The HOT heat exchanger is patented design of Guangzhou Icesource. By adopting this design, the temperatures of the refrigerant become lower after they go through the Expansion valve, improving the refrigeration efficiency.
- The HOT heat exchanger makes the refrigerant evaporate again and make sure the refrigerant be gas completely before entering compressor and avoid The Liquid Hammer Phenomenon caused by liquid refrigerant entering compressor.



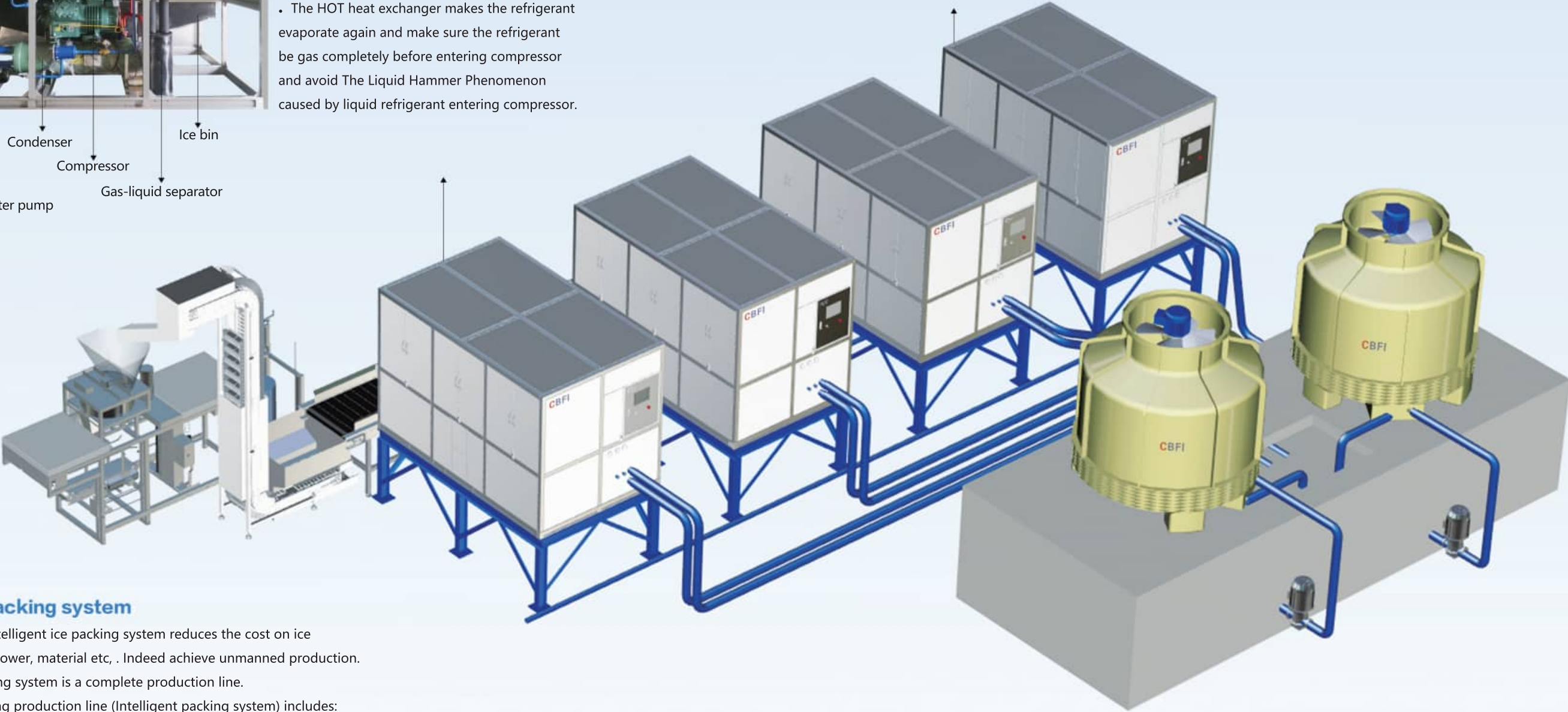
## Anti-vibration system

Shock proof pipe is fixed in front of the copper pipe and evaporator, to avoid refrigerant leakage due to crack or fracture of copper pipe during transportation and machine using.



## Shockproof foot cushion

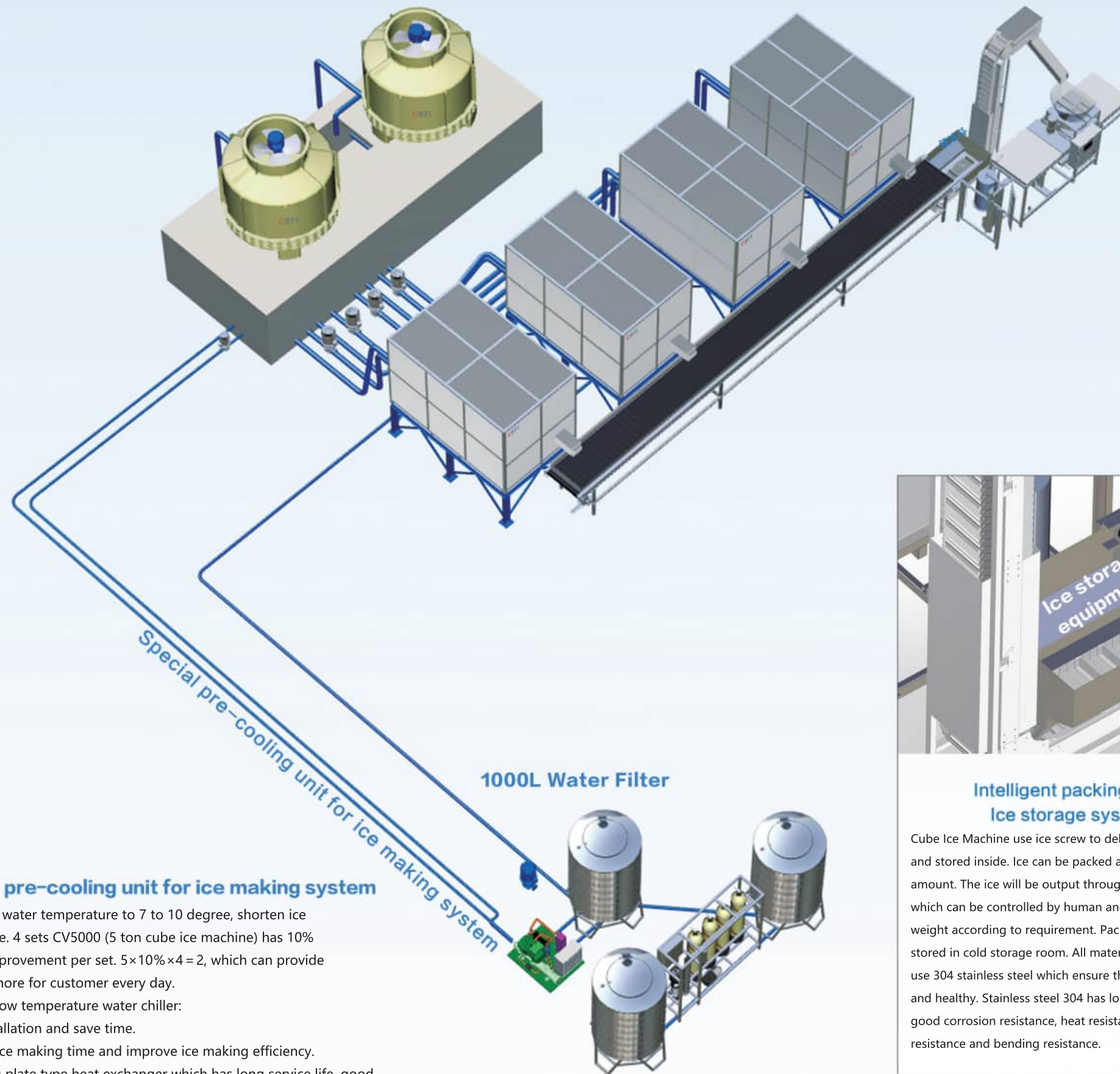
Shockproof foot cushion is fixed between water cooling condenser and compressor to reduce compressor vibration.



## Intelligent ice packing system

Guangzhou Icesource intelligent ice packing system reduces the cost on ice packing including manpower, material etc, . Indeed achieve unmanned production. This intelligent ice packing system is a complete production line. Full-automatic ice packing production line (Intelligent packing system) includes: Ice storage system, cylindrical selector, quick freezing tunnel, ice bin, Z-type elevator, packing system.





### Special pre-cooling unit for ice making system

Reduce the water temperature to 7 to 10 degree, shorten ice making time. 4 sets CV5000 (5 ton cube ice machine) has 10% capacity improvement per set.  $5 \times 10\% \times 4 = 2$ , which can provide 2 tons ice more for customer every day.

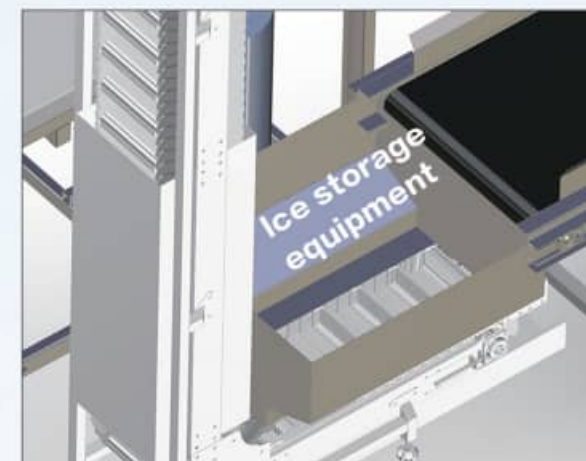
Feature of low temperature water chiller:

1. Easy installation and save time.
2. Shorten ice making time and improve ice making efficiency.
3. Adopting plate type heat exchanger which has long service life, good heat conductivity, air tightness, tear resistance and aging resistance.



### The evaporator processing craft make the life span much longer.

Ice maker adopts alloy solder containing 42% silver and weld in one time forming by use of high temperature oven. Guangzhou Icesource ice mould surface can resist 60% concentrated nitric acid corrosion, which ensures ice making machine long-term and stable running performance. Ice making water flows from the top to the bottom of the evaporator during ice making. And after long time running, some dirt may form in the surface of the ice maker due to different water conditions. This is normal phenomenon and regular cleaning is necessary. People usually use acidic liquid cleaner to clean the ice maker. The common ice maker will be corroded while contact with the acidic chemical material. However Guangzhou Icesource' s anti-corrosion ice maker can avoid all the corrosion phenomena which greatly increases the service life of the ice maker and assure the production of edible ice in safe, sanitary and healthy.



### Intelligent packing and Ice storage system

Cube Ice Machine use ice screw to deliver ice into ice bin and stored inside. Ice can be packed after storing in some amount. The ice will be output through ice screw conveyor which can be controlled by human and packed in different weight according to requirement. Packed ice would be stored in cold storage room. All materials contact ice will use 304 stainless steel which ensure the ice is clean, sanitary and healthy. Stainless steel 304 has long service life for its good corrosion resistance, heat resistance, stamping resistance and bending resistance.

### Coating anti-corrosion comparing testing

Using 70% concentrated nitric acid to test the anti-corrosion quality of Guangzhou Icesource and other suppliers' ice mould. Other supplier' s ice mould reacted violently and get rusty easily when contact with concentrated nitric acid, while ice mould of Guangzhou Icesource don' t have any influence.



# Edible cube ice

Cube ice is transparent, crystal, clean and sanitary. It is the best choice for cold drink



# Application

Cube ice has good melting resistance, and widely used in drinking modulation, decoration, food preservation, hotels, bars, banquet hall, restaurants, fast food shops, convenience stores, cold drink shop, KTV, western fast food, breakfast shop, etc. places that need ice.



Iced



Cold Drink



Cold Drinking Shops



Fast-food shops



Restaurant



Hotels



Bar



Seafood



Supermarket



Edible cube ice machine domestic customer case

CBFI Edible cube Ice Machine, has exported to many countries and regions and got good reputation from customers in domestic and abroad !



6 sets 10 tons Cube Ice Machine Case



4 sets 10 tons Cube Ice Machine Case



4 sets 5 tons Cube Ice Machine Case



10 tons Cube Ice Machine Case



5 tons Cube Ice Machine Case



4 sets 5 tons Cube Ice Machine Case



4 sets 5 tons Cube Ice Machine Case



10 tons Cube Ice Machine Case



3 tons Cube Ice Machine Case

Edible cube ice machine international customer case



3 tons Cube Ice Machine Case



2 sets 3 tons Cube Ice Machine Case



7sets 3 tons Cube Ice Machine Case



7 sets 5 tons Cube Ice Machine Case



2 sets 5 tons Cube Ice Machine Case



3 sets 5 tons Cube Ice Machine Case



5 tons Cube Ice Machine Case



2 sets 10 tons Cube Ice Machine Case



2 sets 10 tons Cube Ice Machine Case