

Customers Benefit From Icesource



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DIRECT COOLING BLOCK ICE MACHINE

Guangzhou Icesource CO., Ltd

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Block Ice

The biggest ice size, the smallest contact area with the outside world, and difficult to melt.

Block Ice Size

Block ice size can be customized depend on bucket size. It can also crush according to different requirements then applied in different industrial area.

Ice Feature

Block ice with the feature of large ice size, large refrigeration storage, melting resistance, low cost and easy operation. After crushing, block ice contact area with goods will enlarge, which can quickly cool down the food, slow down food deterioration, and prolong the preservation time.

Block Ice Application

Ports, ice factories in docks, food processing, aquatic products preservation, cooling, long-distance transportation, aquatic products, food preservation, cooling in special fields, ice sculpture, ornamental use, etc. It is especially suitable for environment with high temperature and unstable voltage.

ICE MAKING FIVE STEPS

Automatic Block Ice Machine



CBFI ABI automatic block ice machine full series

One-stop automatic operation

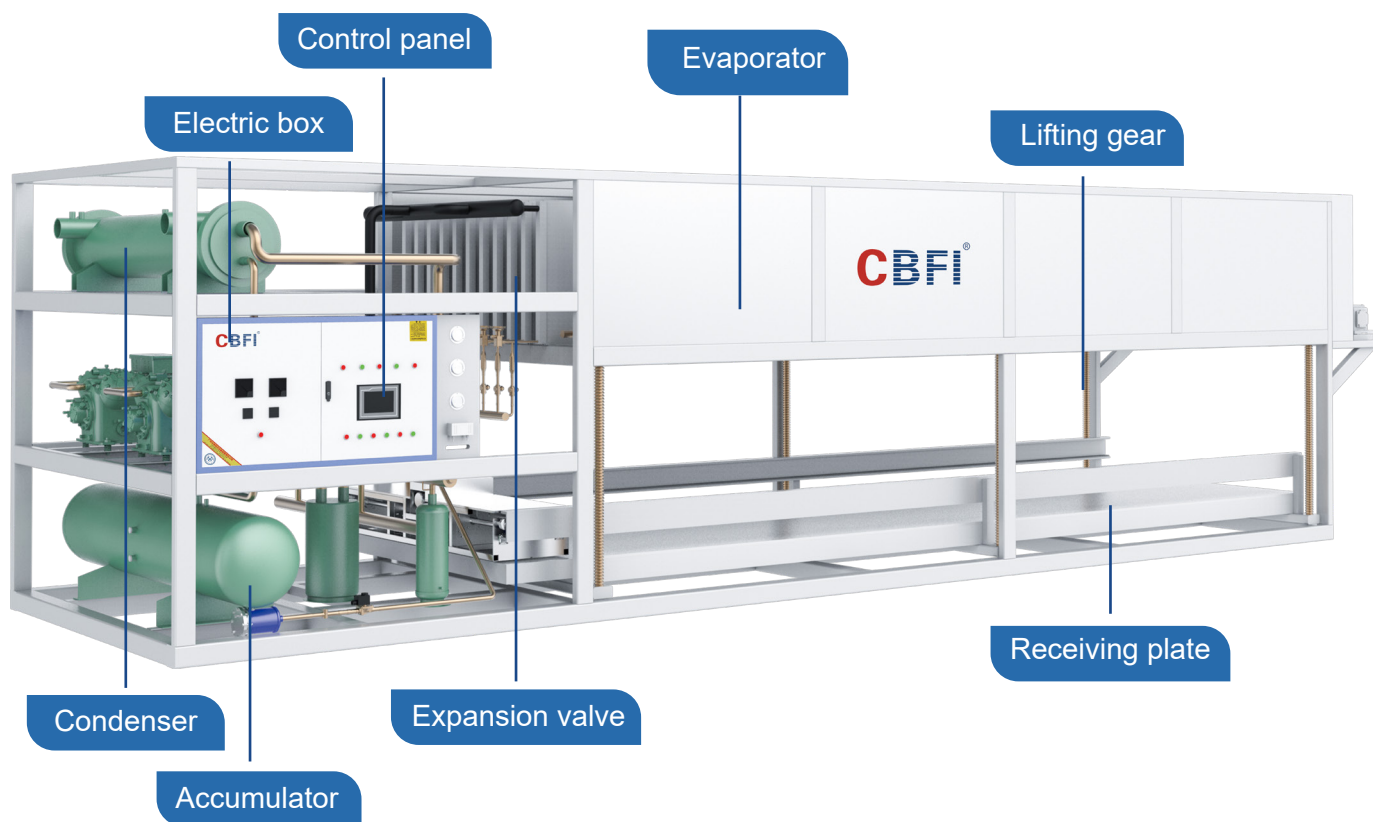
ABI series automatic block ice machine is independently developed by CBFI,

The first prototype was built as early as 2014.

Our team always adhere to the Customers benefits from Icesource corporate core values.

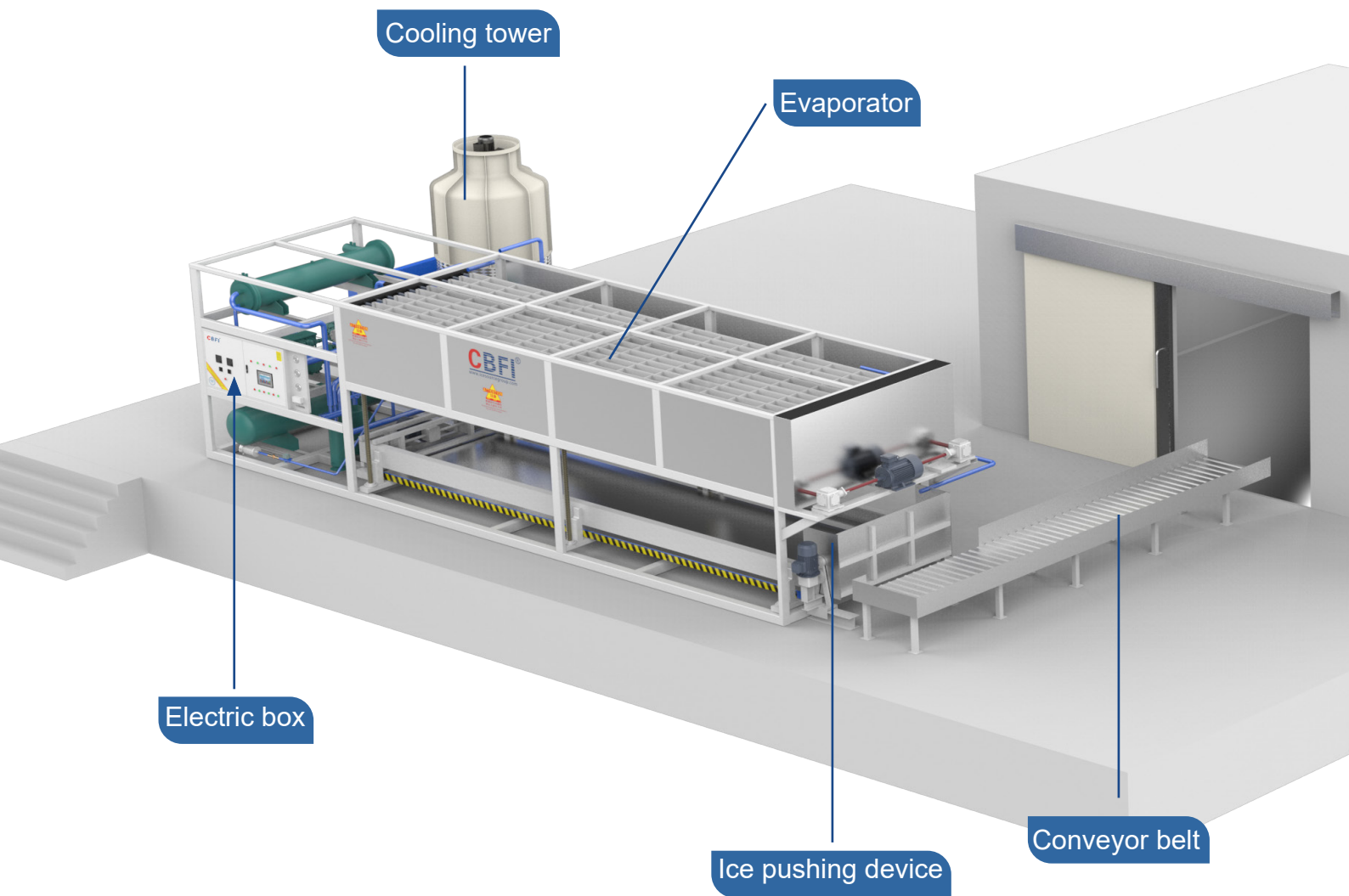
Insist on quality workmanship, constantly bring forth the new from the old.

To provide customers with the highest profit margin solutions.



ONE-STOP SOLUTION

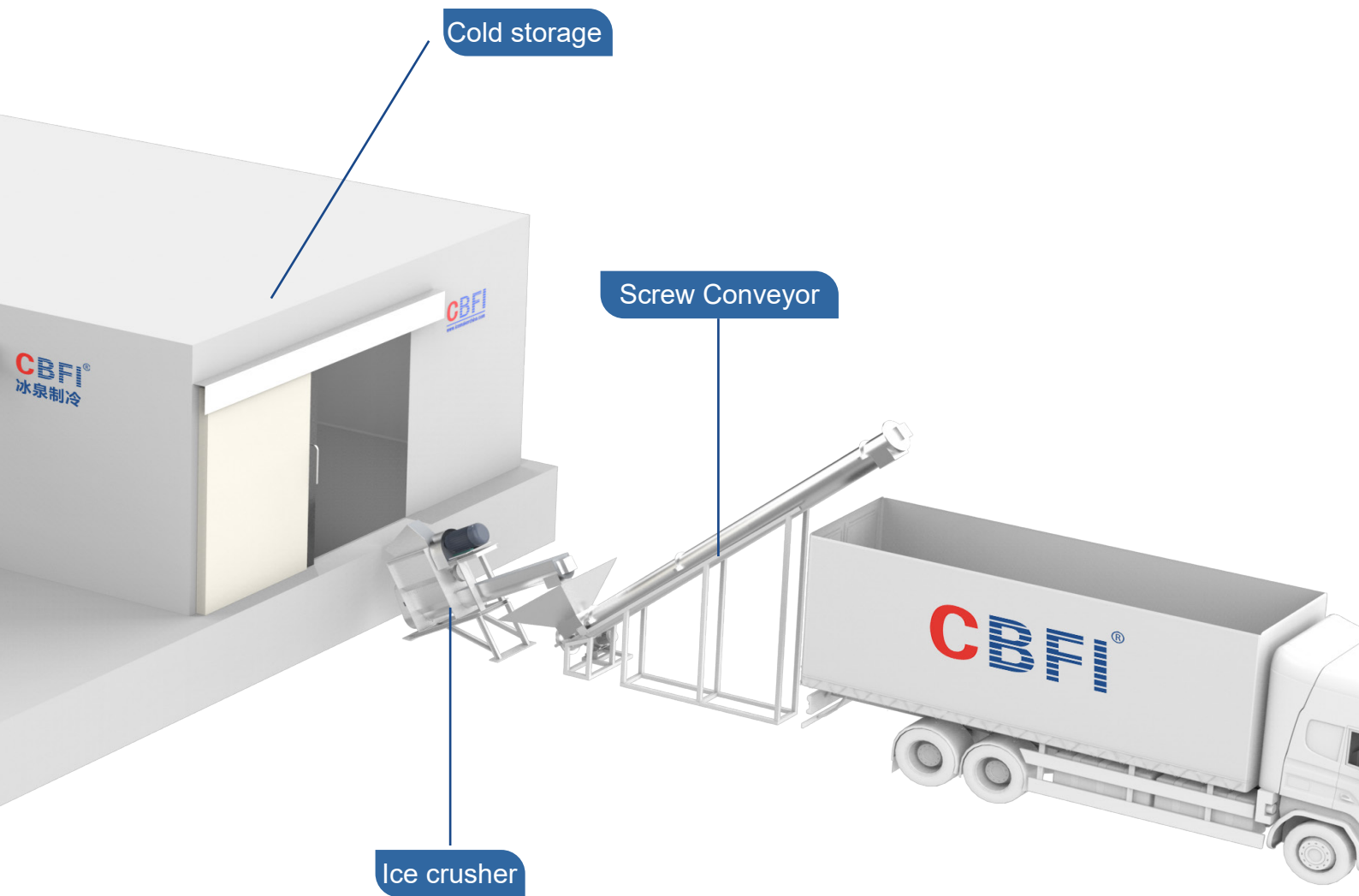
Automatic Block Ice Machine



Complete set of equipment for Automatic Block Ice Machine

This project is an ice plant, and the overall equipment includes:

1. Cooling tower *1, deicing and filling water circulation pump *1
2. 10-ton automatic block ice machine *1, ice pushing device *1
3. Conveyor *1, elevator *1, ice crusher * 26m*8m cold storage *1



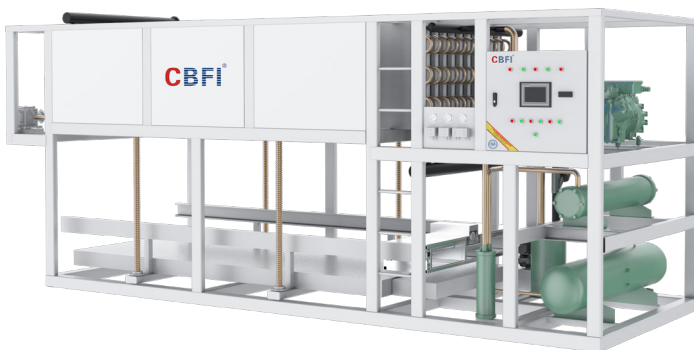
PARAMETER

Automatic Block Ice Machine

Automatic block ice machine is a new type of ice making machine, which evaporates refrigerant in the evaporator and makes ice with direct cooling water through the evaporator. The main components include refrigeration system, lifting device, control system. Evaporator is made of aluminum plate. The refrigerant flows inside the aluminum plate, and the external heat exchange with water makes ice.

ABI30 / 3 tons per day

Ice making capacity: 3 tons /24 hours
Compressor brand: Hanbell&Bitzer
Refrigerant charge: 90KG
De-icing water pump: 1.1KW
Cooling water pump power: 2.2KW
Ice maker size: 5340*1570*2110(mm)
Ice size: 300*140*650(mm)
Ice weight: 5/10/15/25/50KG

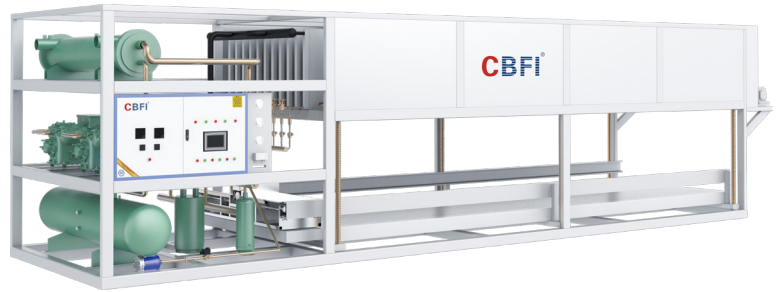


ABI50 / 5 tons per day

Ice making capacity: 5 tons /24 hours
Compressor brand: Hanbell&Bitzer
Refrigerant charge: 130KG
De-icing water pump: 5.5KW
Cooling water pump power: 2.2KW
Ice maker size: 6500*1870*2500(mm)
Ice size: 400*160*840(mm)
Ice weight: 20/25/30/40/50KG

ABI100 / 10 tons per day

Ice making capacity: 10 tons /24 hours
Compressor brand: Hanbell&Bitzer
Refrigerant charge: 210KG
De-icing water pump: 7.5KW
Cooling water pump power: 4KW
Ice maker size: 8200*2230*2500(mm)
Ice size: 400*160*840(mm)
Ice weight: 25/50KG



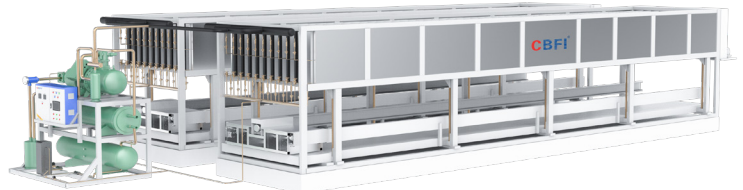
ABI200 / 20 tons per day

Ice making capacity: 20 tons /24 hours
Compressor brand: Hanbell&Bitzer
Refrigerant charge: 400KG
De-icing water pump: 7.5KW
Cooling water pump power: 7.5KW
Ice maker size: 11800*2270*2560(mm)
Ice size: 380*160*860(mm)
Ice weight: 25/50KG



ABI300 / 30 tons per day

Ice making capacity: 30 tons /24 hours
Compressor brand: Hanbell&Bitzer
Refrigerant charge: 550KG
De-icing water pump: 15KW
Cooling water pump power: 11KW
Ice maker size: (7600*2290*2400)*2(mm)
Ice size: 265*135*750(mm)
Ice weight: 25/50KG



ABI500 / 50 tons per day

Ice making capacity: 50 tons /24 hours
Compressor brand: Hanbell&Bitzer
Refrigerant charge: 850KG
De-icing water pump: 22.5KW
Cooling water pump power: 11KW
Ice maker size: (10600*2270*2500)*3(mm)
Ice size: 400*160*840(mm)
Ice weight: 25/50KG



EQUIPMENT PARAMETER

Automatic Block Ice Machine

Model	Compressor brand	Refrigerating capacity (kw)	Compressor power (kw)	cooling method	Lifting motor (kw)	Cooling tower power (kw)	Cooling water pump power (kw)	Machine size L*W*H(mm)	
ABI30	Bitzer	23.9	9.44	water cooling	1.1	0.55	1.1	5340*1570*2110	
								5730*1630*2500	
ABI50	Bitzer	48.2	18.9	water cooling	1.5	0.55	1.5	5900*1930*2400	
								6500*1870*2500	
ABI80	Hanbell	69.7	28.4	water cooling	3	1.5	4	6540*2290*2400	
								8400*2290*2400	
								6900*2270*2500	
ABI100	Hanbell	98.3	39.1	water cooling	4	1.5	4	10000*2250*2300	
								7520*2250*2300	
								8200*2230*2500	
ABI150	Hanbell	131.6	51.1	water cooling	5.5	1.5	5.5	8700*2290*2500 (Evaporator) 2500*2000*2300 (Compressor Unit)	
								10900*2270*2500 (Evaporator) 2500*2000*2300 (Compressor Unit)	
								11000*2240*2500 (Evaporator) 2500*2000*2300 (Compressor Unit)	
ABI200	Hanbell	196.8	72.6	water cooling	7.5	2.2	7.5	11300*2250*2400 (Evaporator) 2800*2000*2300 (Compressor Unit)	
ABI300	Hanbell	311.1	141.4	water cooling	5.5*2	2.2	7.5	9800*2270*2500*2 (2*Evaporator) 3200*2000*2500 (Compressor Unit)	
ABI500	Hanbell	850	141.4	evaporative cooling	5.5*3	2.2	7.5	9800*2290*2400*3 (3*Evaporator) 3200*2000*2500 (Compressor Unit)	



Remark:

- * Lifting operation: automatic
- * Daily output of more than 20 tons is non-standard, parameters can be determined according to customer demand.
- * Design parameters: refrigerant R507, voltage: 380V/50Hz/3Ph, 220V/60Hz/3Ph, 440V/60Hz/3Ph, 380V/60Hz/3Ph and other customized voltage.
- * Standard parameters: ambient temperature 28°C, water supply temperature 16°C.
- * Design conditions: condensation temperature 38°C, evaporation temperature: -15°C.
- * The above parameters are based on the corresponding ice mold size. If the ice mold size is different, please contact the technical department again to check the parameters.



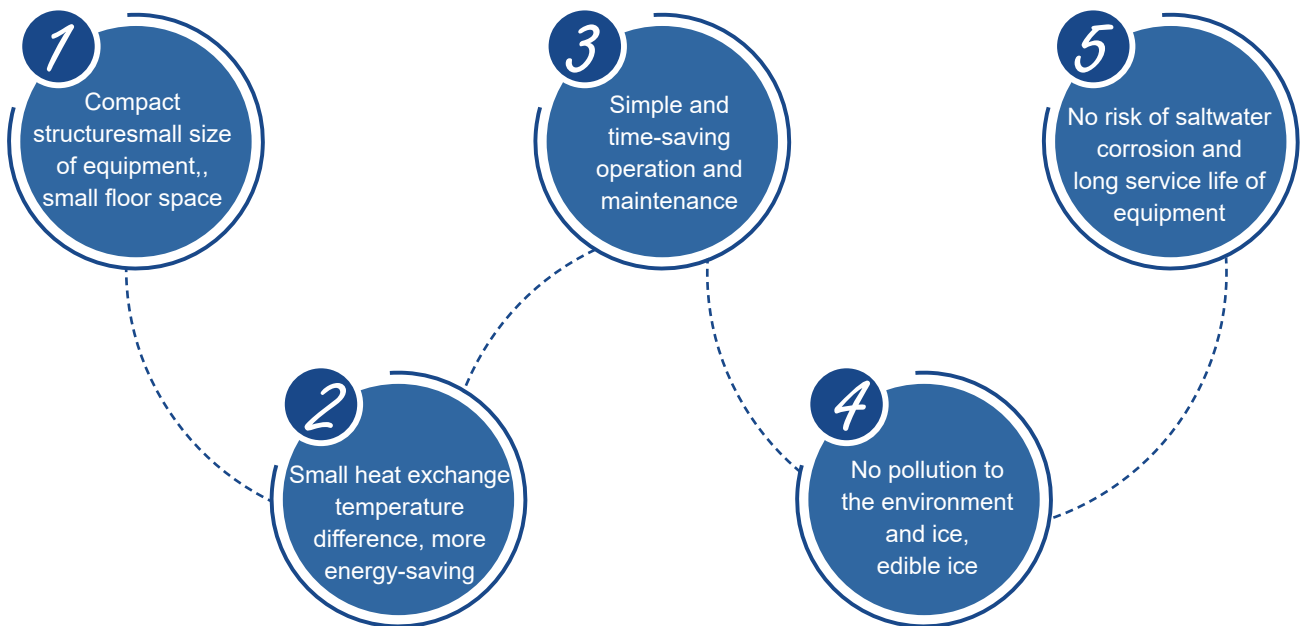
ICE MOLD SIZE

Parameters table

	Model	Ice weight (KG)	Ice mold size L*W*H(mm)	Ice size L*W*H(mm)	Ice out Times/24 hours
	ABI30	5	160*90*510	160*80*450	6 times
		10	230*90*680	230*80*620	6 times
		15	250*110*740	250*100*650	5 times
		25	300*150*740	300*140*650	3 times
		50	400*170*925	400*160*840	2 times
	ABI50	20	260*140*740	260*130*650	3 times
		25	300*150*740	300*140*650	3 times
		30	300*150*850	300*140*760	2 times
		40	350*160*925	350*150*830	2 times
		50	400*170*925	400*160*840	2 times
	ABI80	25	300*150*740	300*140*650	3 times
		50	400*170*925	400*160*840	2 times
	ABI100	25	300*150*740	300*140*650	2 times
		50	400*170*925	400*160*840	2 times
	ABI150	25	270*140*850	265*135*750	3 times
		50	400*170*925	400*160*840	2 times
	ABI200	25	300*150*740	300*140*650	3 times
		50	380*170*966	380*160*860	2 times
	ABI300	25	270*140*850	265*135*750	3 times
		50	400*170*925	400*160*840	2 times
	ABI500	25	300*150*740	300*140*650	3 times
		50	400*170*925	400*160*840	2 times

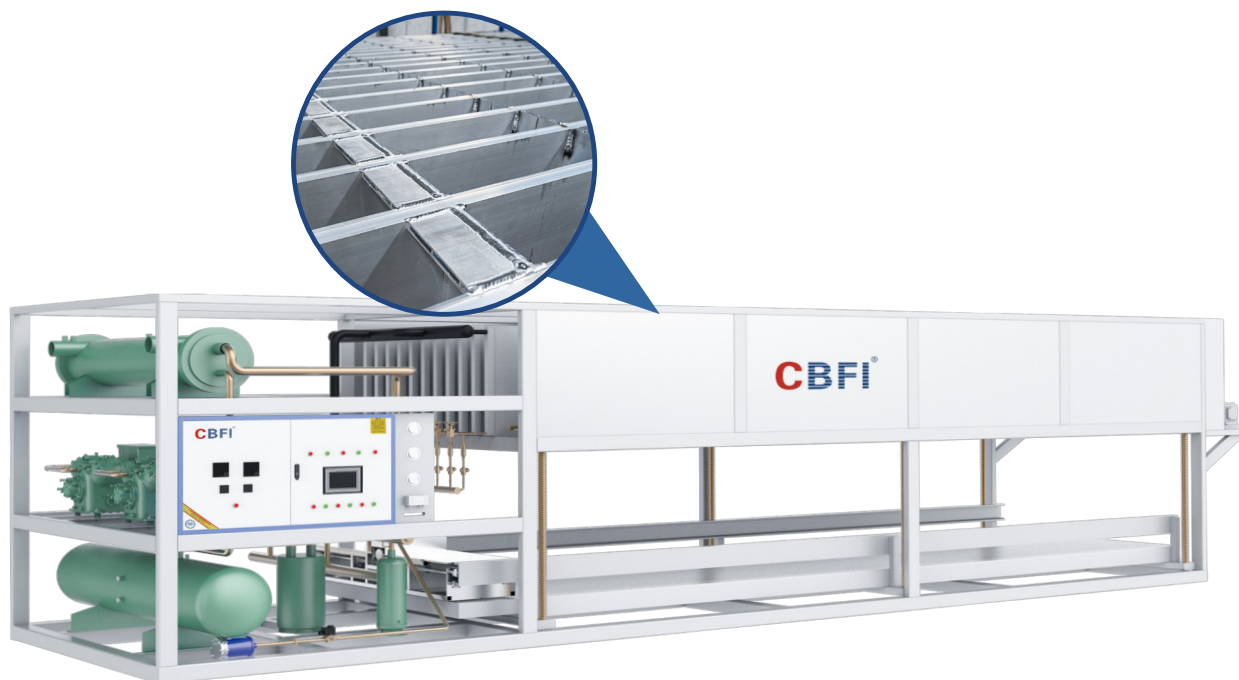
ADVANTAGES

Automatic Block Ice Machine



Evaporator process

The aluminum evaporator is an important part of the ice machine for direct cooling. The refrigerant flows inside the aluminum plate and the ice is made by direct heat exchange with water outside. Aluminum has a high thermal conductivity, 4.5 times that of carbon steel and 12 times that of commonly used stainless steel. Fast ice making, low density and light weight of aluminum, 1/3 of the weight of the same volume of steel. Special zigzag runner design, greater contact area, higher heat exchange efficiency.



Welding process

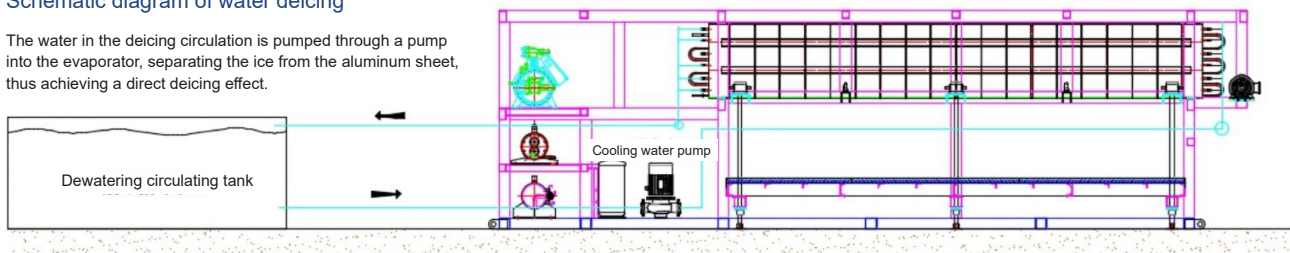
The baffle plate is welded into a grid. The baffle plate is more firmly fixed than other manufacturers' slots, and will not move due to ice expansion force.

Water deicing system

The water deicing system of refrigeration system adopts single working condition design, and the system is stable. A water pump can remove ice with lower energy consumption and faster time. The evaporator is designed with serrated flow passage to increase heat transfer area and achieve high ice-making efficiency. The refrigerant is exchanged with water through an aluminum plate, the water in the aluminum plate evaporator is frozen into ice, and the block ice removal can be completely automated. No pollution, no environmental impact.

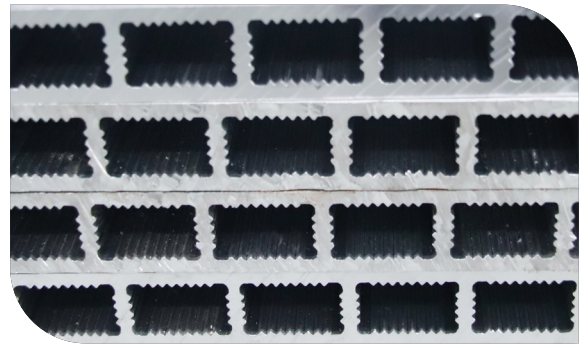
Schematic diagram of water deicing

The water in the deicing circulation is pumped through a pump into the evaporator, separating the ice from the aluminum sheet, thus achieving a direct deicing effect.



Aluminum plate

The aluminum plate is used as the evaporator, and the heat exchange between the refrigerant and the water is carried out directly, and the block ice removal can be completely automated.



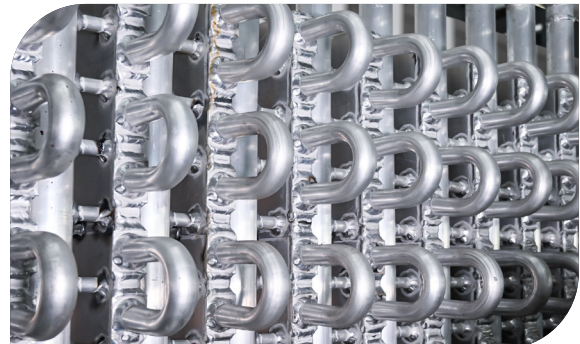
Serrated runner design

The evaporator is designed with serrated flow passage to increase heat transfer area and make ice more efficiently.



Operation full automation

Fully automated and simple operation can realize intelligent cloud control of Internet of Things and real-time monitoring of mobile phones.



Port interface

The ice-making and de-icing systems are integrated and independent, and the ice-making and de-icing systems can also realize the recovery of cold volume.

The function of sealing strip

The sealing plate can be used for many times. The sealing plate is in contact with the sealing strip and pressed tightly, but does not contact with the bottom of the evaporator. A gap is reserved, so the ice molds are connected.



Sealing strip

Sealing tape, good sealing, can be used many times.



Water sealing plate and sealing strip

The sealing plate is in contact with the sealing strip and pressed tightly, but not with the bottom of the evaporator, leaving a gap, so that the ice molds are connected.

The ice pushing device

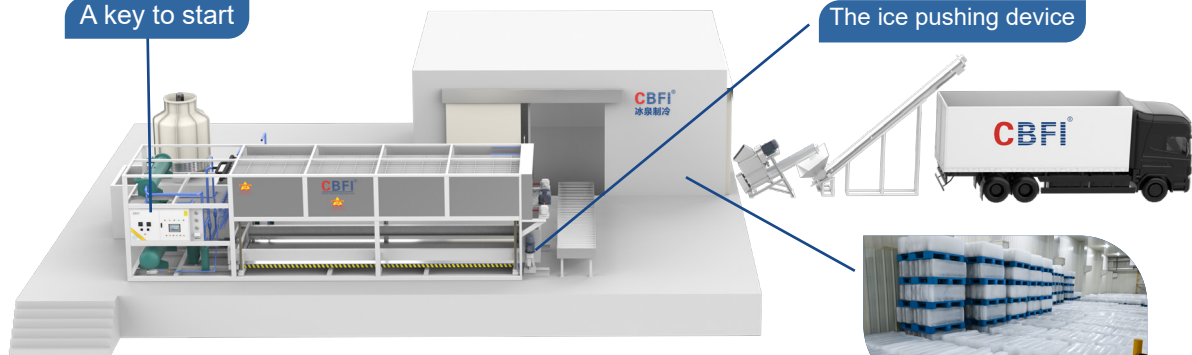
The volume of ice blocks of the automatic block ice machine is large, and the weight of the ice blocks varies from 8 to 40kg. The ice blocks can be transported to the cold storage with auxiliary tools such as ice pushing device.



A key to start



The ice pushing device

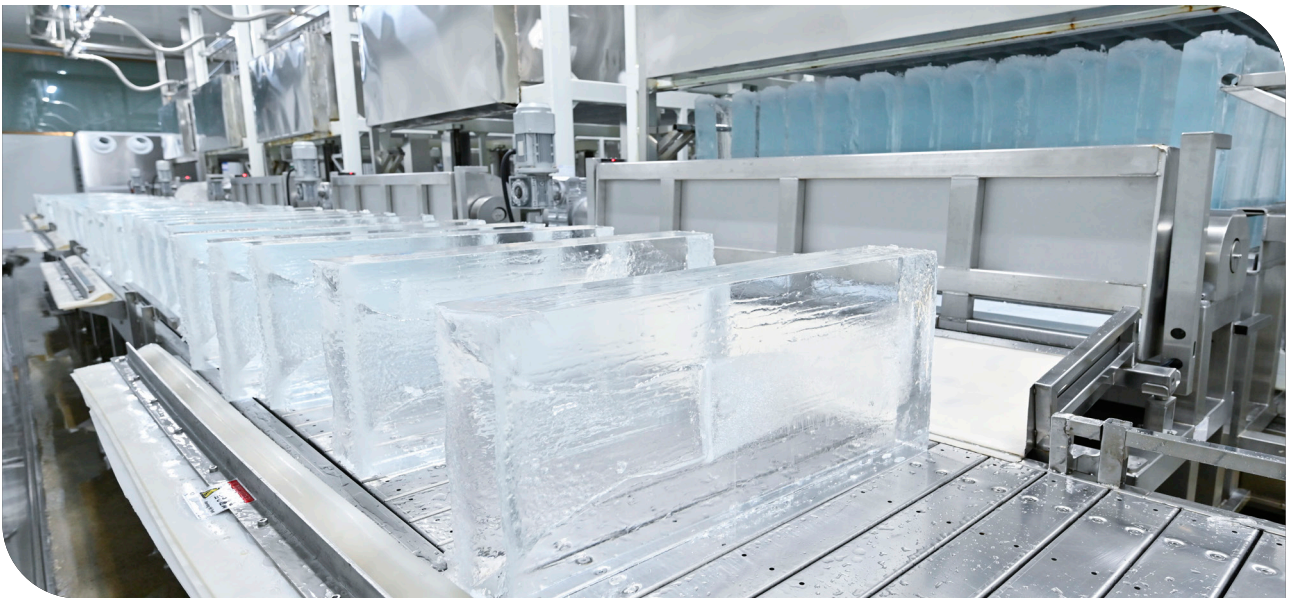


Put into cold storage

TRANSPARENT ICE

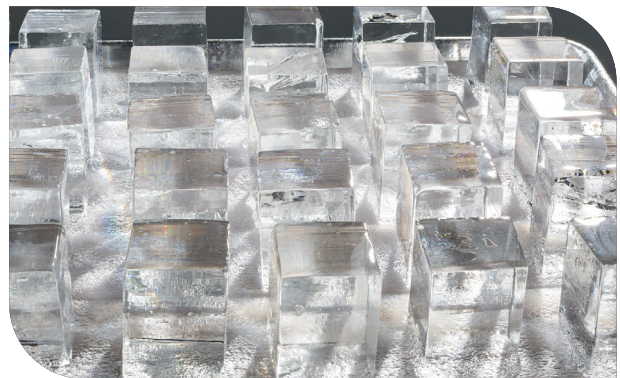
Automatic Block Ice Machine

Transparent ice machine is an ice maker which is used to produce all transparent blocks of ice according to the special requirements of our customers. Clear block ice does not have any bubbles and impurities, it is as clear as crystal, the ice is hard, not easy to melt, very suitable for artistic ice sculpture production, medical and laboratory ice and other occasions.



Ice making time

Production of transparent block ice, ice - making time of 48 hours.



The technical requirements

Advanced bubble ice - making technology

COLD ROOM

Guangzhou Icesource Co., Ltd.

1. The cold room looks like a container and is suitable for a wide range of applications. It can hold 5-100 tons of various kinds of food, such as ice, fruit, fish and vegetables.
2. Automatic intelligent control, with temperature setting; temperature control, automatic defrosting and other functions, automatic and accurate temperature control, energy saving and consumption reduction;
3. Convenient maintenance, safe and reliable operation, faultless operation within inches long, no special person is required to monitor;
4. Long shelf life, high economic efficiency and simple operation technology.



ICE CRUSHER

Guangzhou Icesource Co., Ltd.



Ice Crusher



Screw ice crusher

Ice crusher parameters

Ice crusher specifications	Material	Roller size	Size of crushed ice	About the weight of crushed ice	Machine size	Machine weight	Motor Power	Ice crushing capacity
A conventional ice cube crusher	304 stainless steel	Φ 219*385mm	Ice cubes within 380mm*120mm	Ice cubes within 50kg	860mm*620mm*1090mm	About 100kg	3kw	4 tons/hour
B roller extended ice block ice crusher	305 stainless steel	Φ 219*480mm	Ice cubes within 470mm*120mm	Ice cubes within 60kg	860mm*710mm*1090mm	About 110kg	4kw	
C roller thickening and lengthening ice block ice crusher	306 stainless steel	Φ 406*550mm	Ice cubes within 540mm*230mm	Ice cubes within 100kg	1450mm*780mm*1900mm	About 260kg	5.5kw	2 tons/hour
Conventional tube ice, cube ice crusher	307 stainless steel	Φ60*290mm	All tube ice/cube ice	All tube ice/cube ice	540mm*475mm*920mm	About 80kg	1.5kw	

Design parameters: voltage 380V/3P/50HZ, material 304 stainless steel.
Remarks: The ice crusher can crush the weight of ice cubes for reference only. The specific selection of the ice crusher depends on the size of the ice cubes to be crushed.

Ice Crusher

The ice breaker is a kind of ice equipment specially designed for large blocks of ice. It is easy to operate and reliable. The inside of the machine is equipped with anti-ice rebound baffle. The whole is made of 304 stainless steel with strong corrosion resistance and service life of more than 10 years.



APPLICATION

Block ice

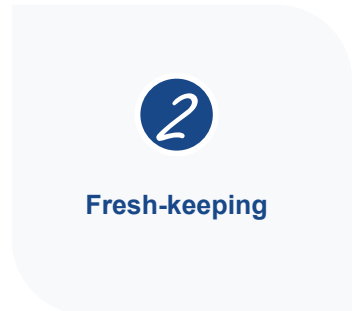
1

Seafood
preservation



2

Fresh-keeping



3

Food preservation



4

Industrial
cooling



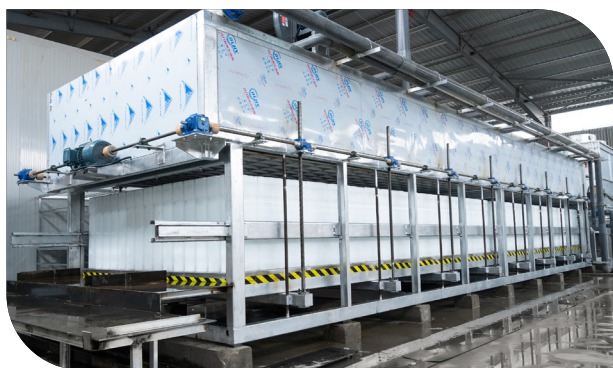
Project Case



190 Tons Direct Cooling Block Ice Machine Project
in Client's Factory



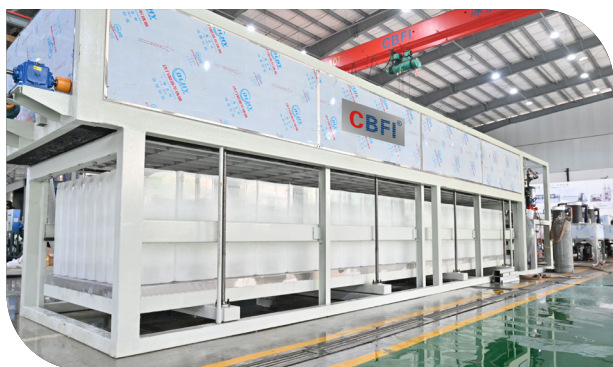
140 Tons Direct Cooling Block Ice Machine Project
in Client's Factory



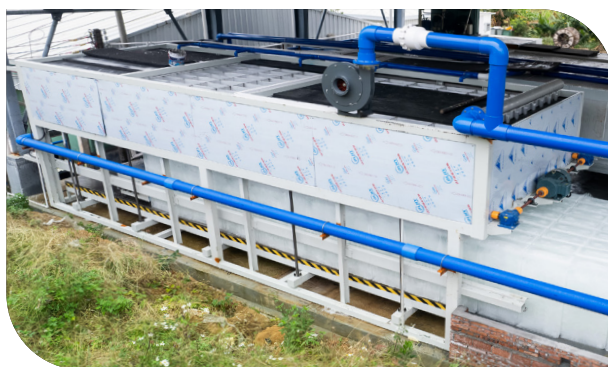
50 Tons Direct Cooling Block Ice Machine Project
in Client's Factory



30 tons Direct Cooling Block Ice Machine in Indonesia



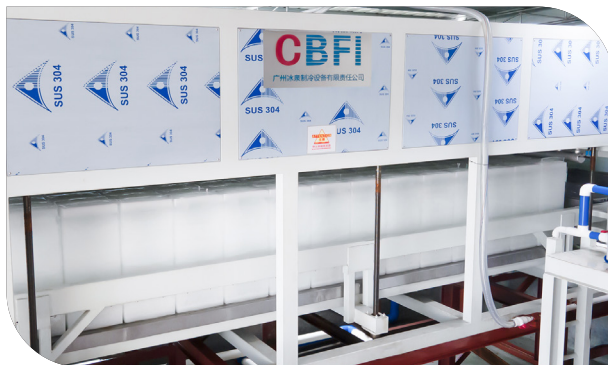
Commissioning site of 25 tons Direct Cooling block ice machine



25 Tons Direct Cooling Block Ice Machine Project
in Client's Factory



10 Tons Direct Cooling Block Ice Machine Project
in Client's Factory



10 Tons Direct Cooling Block Ice Machine Project
in Client's Factory

ABOUT CBFI

Guangzhou Icesource Co., Ltd.

GUANGZHOU ICESOURCE CO., LTD.

A comprehensive refrigeration equipment supplier specializing in the research and development of medium and low temperature refrigeration system processes. The company's research and development began in 2004 and was established in 2010, dedicated to providing complete ice making systems, refrigeration and cooling, and cooling engineering solutions for enterprise customers.

We have accumulated rich experience in equipment and engineering, and provide services to enterprise customers in more than 170 countries and regions around the world. Our products are widely used in multiple industries, and we always adhere to the core of "achieving customers and creating value". We look forward to working with you to create a better future!

Awards & Certificates



Guangdong High-tech Enterprise



Excellent Enterprise in Guangdong Province



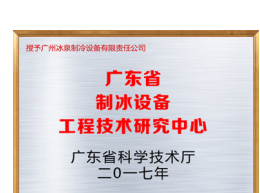
"Contract-honoring and Credit-keeping" Enterprise in Guangdong Province



Specializing in special new small and medium-sized enterprises



The most popular cold chain logistics provider



Guangdong Engineering Technology Research Center for Ice-Making Equipment



OUR ENTERPRISE

Show of Power



- ① 26,500 m² Modern Production Base
- ② Advanced production equipment
- ③ 1 to 1 VIP professional service
- ④ Professional team

