Home > Tube ice machine - Focusun Ice Machine

Focusun is proud of inventing the first tube ice machine in the world. Over 80 years of manufacturing experience strengthens its advanced ice making technology.

Tube ice is a kind of hollow cylindrical ice with external diameter ø22、 \emptyset 29、 \emptyset 35mm and length 25 \sim 42mm. The hole diameter is usually \emptyset 5 \sim 10mm and it can be adjusted according to ice making time.

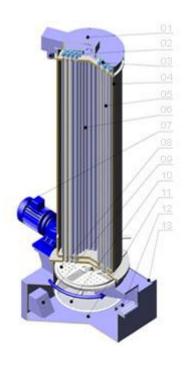
Features: Tube ice is thick and transparent with long storage period. It isn't likely to melt in a short time.

Application: Daily eating, keeping vegetable and seafood fresh, etc.

Tube Ice Machine Features:

- Use hot Freon gas to make ice fall off fast with the whole process takes only 150~180 seconds.
- After the ice is off, the water of low temperature is used for ice-making, saving energy consumption and increasing the volume of production of ice.
- With the unique water distributive pan and air mouth, the water can evenly flow on the tube wall of the evaporator spirally, so it improves the efficiency of heat transfer.
- The use of stainless steel SUS304, aluminum alloy plate-type evaporator, accords with the health and safety requirements.
- The use of air pressure control excludes the risk of rupture of the evaporator tube and the tube ice diameter can be adjusted according to customers' needs.
- Half-full liquid: liquid level controller which manages liquid supply of refrigerant makes the system more stable.

Equipment working theory:



01:Upper water tank

02:Water inlet

03:Distributor

04:Shell

05:Inside heat exchange pipe

06:Heat exchange

07:Reducer

08:Ice cutter

09:Water outlet

10:Ice water separation pan

11:Waste outlet

12:Ice duct

13:Low water tank

As shown, when the refrigeration system begins operating normally, the water in the tank below is transported from the water outlet to the water inlet of upper water tank by the water pump. After the water goes across the distributive pipe, it downwardly flows along the wall of the heat exchange tube. The water then begins a heat exchange with the refrigerant outside heat exchange pipe, which lowers the temperature. Some of the water is formed into tube ice, while the water which does not become ice returns to the low water tank. The water continues circulating so that the ice gets thick, and the hole of tube ice also becomes smaller and smaller.

After a period of time, water stops circulating and the refrigeration system changes into ice cutting mode. The ice cutting framework then begins to operate. The surface of the heat exchange pipe consists of refrigerant hot gas with high-pressure. The hot gas begins a heat exchange with the tube ice in the pipe wall. Hot gas makes contact between the tube ice and the wall of heat exchange, thawing the ice so that it looses adhesive force. The ice then drops into an ice cutting framework because of gravitational force and finally is cut into many pieces of tube ice.