Distillery Chillers

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1.What is Distillery Chillers ?

Chillers in Distilleries are used to cool a number of different distillation processes in the distillery industry.Chillers are refrigeration machinery that cool liquid – usually a glycol and water mix, which is circulated to control the temperature of many different processes: distillation columns, mash coolers, heat exchangers, fermentation tanks,dephlegmating, and other distillation processes.Tongwei Chiller is specialized in manufacturing and supplying industrial-grade process chiller in distillery industry.We offer **packaged chillers**, **Portable Chillers**, **Glycol Chillers** and other water cooling systems that keep the distillery processes cool. Now, we have installed many chillers in distillery where our experience and expertise are meeting the needs of distilleries around the world.

We can also custom design and manufacture distillery chillers to meet your specific needs.If you need a distillery chiller for a different distillery process? ***Contact Us***–we're here to help.

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2. Why Need a Chiller for Distillery?

Distillery chillers for spirits production often use water and glycol as mixer to cool fluids during the mashing, fermentation, dephlegmating, and other distillation processes. They are crucial for enhancing production to keep the operation running smoothly. This post will dig deeper into the benefits of a distillery chiller to uncover how they can help grow your bottom line.

A distillery chiller can enhance your spirits production in several profit-building ways, including:

- Increased efficiency
- Higher quality
- Better taste

3.What's the Difference Between Air-cooled & Water-cooled Distillery chillers?

There are two types of distillery chiller: one is **air-cooled disitllery chiller** ,the other is **water-cooled distillery chiller** ;

Air-cooled distillery chillers use ambient air to dissipate heat from the distillery processes. They are energy-efficient, space-saving, and less maintenance that helps save money.

Water-cooled distillery chillers use water from an external water cooling tower to dissipate heat from the brewing processes. These systems are longer lifespan, Relatively quiet, and more consistent cooling performance than the air-cooled brewery chiller.

Air-cooled Distillery Chiller Installation Drawing

Water-cooled Distillery Chiller Installation Drawing

Contact us for helping to choose the best distillery chillers for your distillery processes.

4.What Are the Differences Between Distillery Scroll Chiller and Distillery Screw Chiller?

Distillery Scroll Chiller	Distillery Screw Chiller
▪1/2HP-60HP(2KW-170kw)	Above 60HP(Above 170KW)
▪Danfoss/Panasonic Scroll Compressor	Hanbell/Bitzer Screw compressor
▪Built with water tank and water pump	Without water tank and water pump

Air-cooled Distillery Scroll Chiller

Air-cooled Distillery Screw Chiller

Water-cooled Distillery Scroll Chiller

Water-cooled Distillery Screw Chiller

5.What Are The Main Components of Distillery Chillers?

5.1 Compressor

The compressor is the key mover in distillery chiller because it produces pressure variations to

stir the refrigerant around.

From 1/2HP(1/2 Ton) to 60HP(5oTon) brewery chiller , which is with **Panasonic** or **Danfoss brand Scroll compressor** ,

Above 80HP(70 Ton) brewery chiller , which is with **Hanbell** or **Bitzer brand Screw compressor** ,

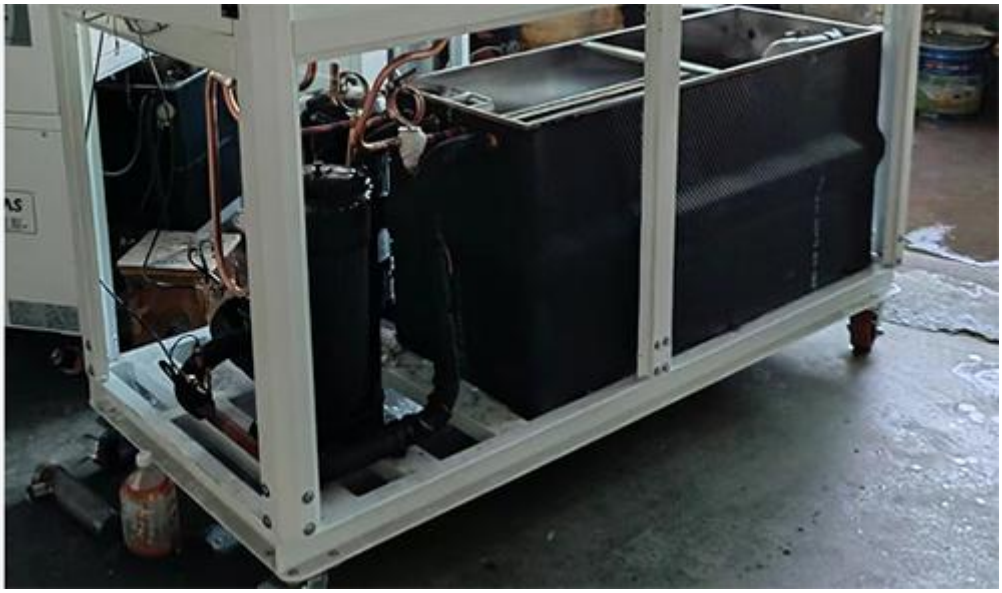
These brand compressors are with high refrigeration efficiency,low noise ,energy saving,environmental protection and durability,safety and stability.

Panasonic Compressor

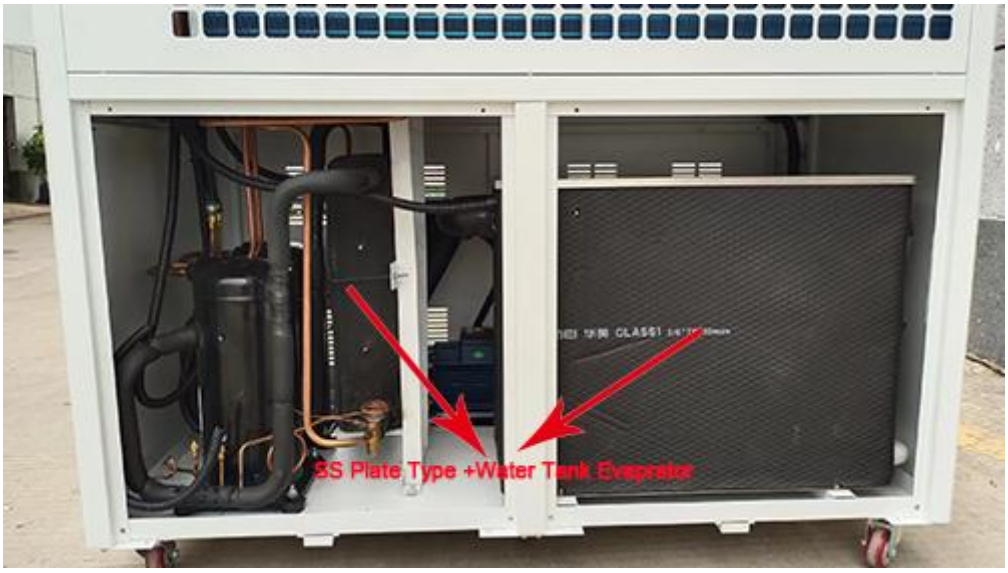
Danfoss Compressor

5.2 Evaporator

The evaporator is a crucial component of air-cooled distillery chiller, as it is responsible for extracting heat from the liquid being cooled,it is located between the compressor and the expansion valve. There are three types of evaporators : **coil in water tank evaporator , shell and tube evaporator, 304SS stainless steel plate type evaporator.**



Coil in SS Water Tank Evaporator

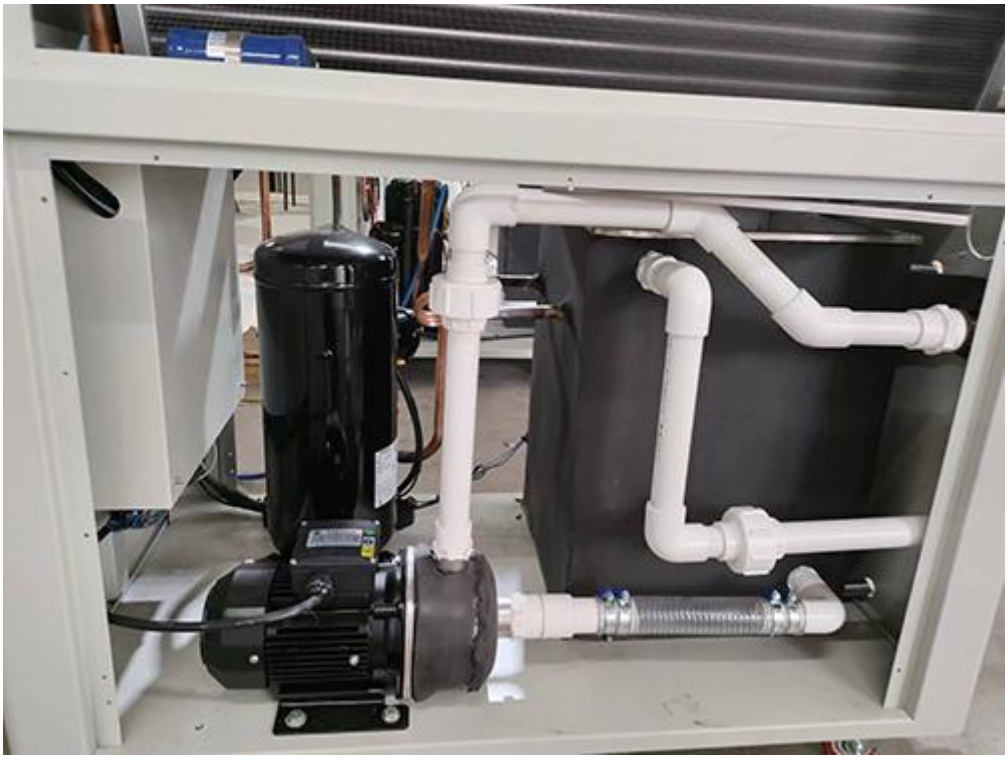


SS Plate Type+ Water Tank Evaporator

Shell and Tube Evaporator

5.3 Water Pump

The water pump is designed to increase the pressure and the flow of the chilled water in a closed space.



Water Pump

High Pressure Water Pump

5.4 Condenser

The condenser for air-cooled brewery chiller is equipped with efficient cross-seam fins and female threaded copper tubes for high heat exchange efficiency and good stability.Its function is to cool down the refrigerant steam released from the compressor into a liquid or gas-liquid mixture.

Aluminum fin+fan Condenser for air -cooled brewery chiller

The condenser for water-cooled distillery chiller is shell and tube ,with the internal copper tubes employing an outer thread embossing process.This design effectively enhances the heat exchange efficiency between the refrigerant and water during the process. Compared to traditional smooth copper tubes, the outer thread embossing process increases the surface area of the copper tubes, thereby expanding the contact area for heat exchange and improving the thermal conductivity of the condenser. This optimization design allows the condenser of the water-cooled chiller to transfer heat from the refrigerant to the water more rapidly and consistently, enabling the water to carry away the heat.

Shell and tube Condenser for water-cooled distillery chiller

5.5 Controller Panel

Distillery chillers use precision digital temperature controller, it RS485 communication port，which can do remote monitoring and control. Simple operation, low failure rate, high safety factor, easy installation.

6.Contact Us to Learn More About Our Distillery Chillers

Don’t delay in making the best decision for your manufacturing business and your future by increasing your production capabilities with an distillery chiller. Contact us today for more information on a distillery chiller.

Our probessional team will help you with any questions you have on our distillery chiller units. We look forward to hearing from you!