



商用海鮮缸水冷機

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商用海鮮缸水冷機優點

1. 易於安裝：只需要連接出入水喉便能使用，一般裝修師傅都懂得安裝，免卻高昂的安裝費用。
2. 保用可靠：商用海鮮缸水冷機由設計至使用的元件針對商用海鮮缸的使用。相對市面上海鮮缸分體水冷屬於改動正常用途使用，導致原廠保養失效，維修成本高。
3. 可調溫度特低，以適合不同海鮮要求
4. 韓國製造，信心之選。

本公司同時提供海鮮缸畫圖設計，訂造，組裝及安裝商用海鮮缸水冷機，後續定期保養服務。

歡迎查詢:

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Water Chillers for Hydroponics

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Why Do You Need a Water Chiller in Hydroponics?

Well technically, you don't. There are plenty of other ways to cool down your reservoir if you want to save some cash. However...

High water temperatures are a consistent problem in many hydroponic setups, especially if you're using a small reservoir in a system like deep water culture. The rising temperatures decrease the amount of dissolved oxygen around the root zone.

This in combination with the accelerated growth cycle of plants in a hydroponic environment usually results in oxygen deprivation. That means your plant dies. And dead plants are no good. Along with that, warmer water increases the likelihood that pathogens like pythium take root in your system.

A water chiller is one of many methods to cool down your system, but it's by far the most effective. The only reason not to go for a water chiller is the price...it's one of the more expensive solutions, but also one of the most effective and reliable.

Oxygen and Hydroponic Water Temperature

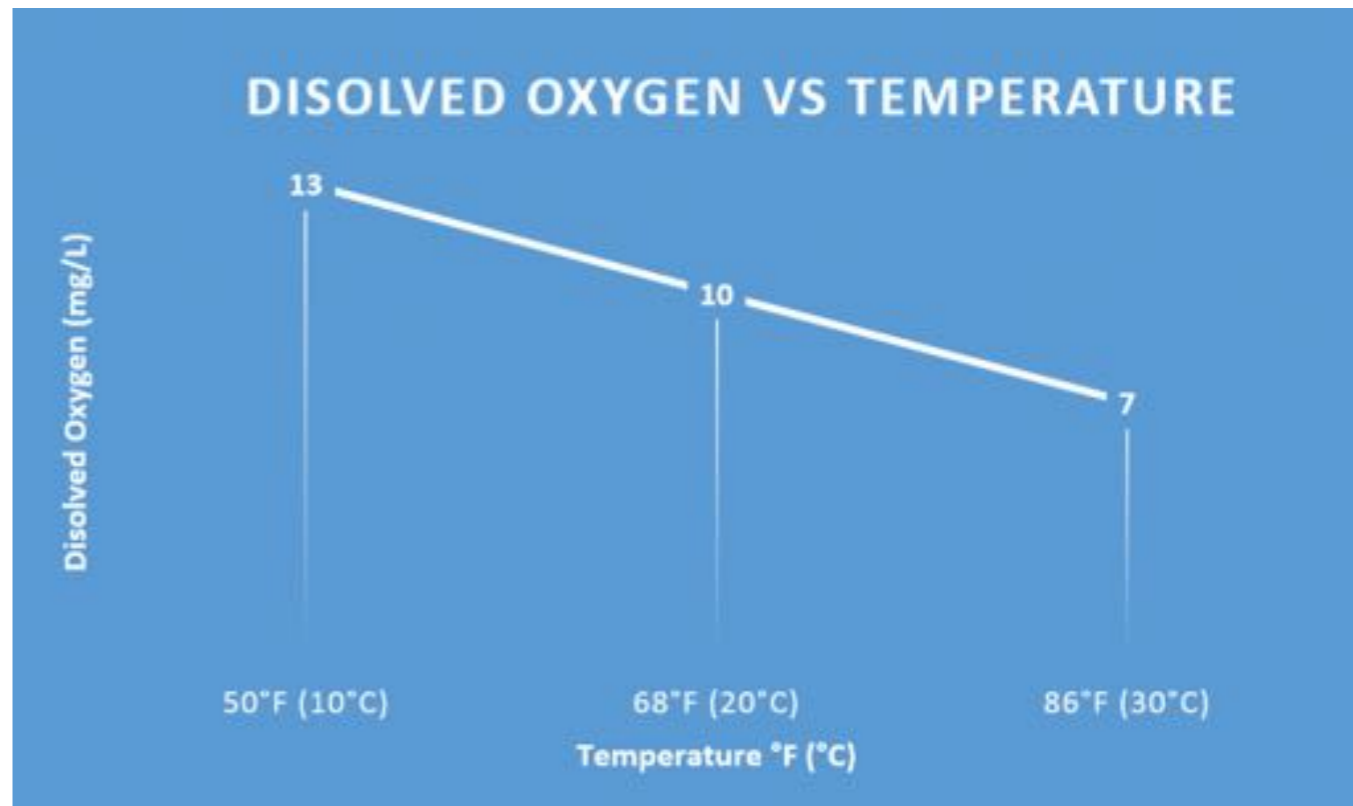


There is a roughly 3 mg/L drop in oxygen for every 18°F (10°C) degree rise in temperature of the water. This means that warmer water will carry less oxygen to your plants.

Oxygen isn't the only concern for hydroponic gardens. Warmer water also has the added side effect of being a breeding ground for bacteria and fungus that are harmful to plants.

Conversely, too cold of water will cause plants to start to shut down and not intake as many nutrients as they normally would.

The ideal hydroponic temperature range is somewhere between 65°F (18°C) and 68°F (20°C) for truly optimal plant growth.



How large Of A Chiller Do You Need?

The formula is pretty simple. Simply cool your hydroponic system down to your desired temperature. This is best accomplished with bagged ice or other methods that will not add water volume to the system.

Once at your desired temperature, remove the ice and allow your system to run for one hour with all lights and other sources of heat active in order to know how much energy the system has to compensate for.

At the end of the hour measure the water temperature. Subtract your desired temperature from this reading. This is your temperature differential. The size of water chiller needed will be:

Number of gallons in your hydroponic system X 8.33 (specific weight of water at 68°F (20°C)) X temperature differential = BTU's required.

You should give yourself a safety net and add 25% to this number.

Example

Lets say you have a 100 gallon hydroponic system. You want the ideal temperature to be 65°F. You cool your system down to 65°F through ice bags or any other method that doesn't effect the water volume.

Once the system is cool, turn on your grow lights, humidifier, and any other devices that might run on a day to day basis that might



Daell Water Chiller from 1/2hp to 3hp

add to the heat of the system and run it all for an hour.

At the end of the hour, measure the water temperature. For our example lets say its at 70°F. This gives you a temperature differential of 5 degrees. Now we multiply: 100 gallons X 8.33 X 5 degrees = 4,165 BTU/hr.

If we add the additional 25% (4165 X 1.25) we get 5206.25 BTU/hr.

You can convert BTU/hr to tons of refrigerant or HP by dividing by 12,000. For example 5,206.25 / 12,000 BTU/hr = .43 tons or almost 1/2 HP. Table 1 shows common BTU/hr to tons of refrigeration or HP ratios.

DA

Air cooling type titanium cooler for sea water (Built-in air cooling type)



DA - 500B

DA - 1000B
DA - 1500B
DA - 1000L
DA - 1500L

DA - 2000B
DA - 3000B
DA - 2000L
DA - 3000L

DA-5000CL

Characteristics

- Cool off sea water or fresh water by using the heat in the air as the heat source by activating freezing cycle with electric energy
- Prides itself for its powerful corrosion resistance by using titanium heat exchanger with most outstanding cooling effectiveness

Usage

Used for cooling or air-conditioning seafood restaurant, fishery product center, fishery, fish farm, cattle shed-pigsty, water culture, greenhouse, food plant



Seafood Restaurant



Fish Farm/Fishery



Aquarium

Specification

型號	DA-500B	DA-1000B	DA-1500B	DA-2000B	DA-3000B	DA-3000B	DA-5000B
電源	AC220V 50Hz 1 Phase				AC380V 50Hz 3 Phase		
壓縮器容量	1/2HP	1HP	1.5HP	2HP	3HP	3HP	5HP
建議冷卻水量 (L) (海鮮龍蝦缸)	500 L	1000 L	1500 L	2000 L	3000 L	3000 L	5000L
建議冷卻水量 (L) (水族用)	2000 L	3800 L	5600 L	7800 L	11500 L	11500 L	19000L
冷卻量 (BTU/h)	6000 BTUs 2.9 amps 230V	12,000 BTUs 5.5 amps 230V	18,000 BTUs 8.8 amps 230V	24,000 BTUs 11.0 amps 230V	36,000 BTUs 16.0 amps 230V	36,000 BTUs 16.0 amps 380V	60,000 BTUs 28.0 amps 380V
熱交換器	海水用鈦合金熱交換器						
用途	海水、淡水兼用						
控制溫度	IC 電子式溫度控制器，溫控可調範圍為 2-90 °C						
設定溫度偏差	溫度設定單位為 0.1°C，設定即 +0.5 °C 啟動，設定值 -0.1 °C 停止						
連接管	1" x 1"			1 1/4" x 1 1/4"			
製冷劑	R-410 環保雪種						
外觀尺寸 (W*D*H)	530 x 350 x 390	670 x 380 x 490		670 x 420 x 940		670 x 420 x 1400	
進水流量	1800-3000 L/h	2400-3600 L/h	3600-5400 L/h	4800-7200 L/h	7200 - 11000 L/h	7200 - 11000 L/h	9000 - 13000 L/h
重量 (kg)	25	36	38	57	62	65	92
	韓國製造						

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Updated 2023.4