

Renting vs. Buying an Industrial Chiller

Ghostwritten for Industrial Chiller company

On September 13, 1833, 100 tons of ice arrived by ship in Calcutta, India after a four-month journey. This feat was accomplished by packing ice blocks together in the insulated hold of the ship. The hold was insulated with wood planks, hay, and refuse from tanners' pits. Since there was no refrigerated shipping, improved packing technology was the only way to reduce the amount of ice lost in shipping, which was significant: 180 tons of ice were initially packed into the hold of the ship. Businesses have always needed a way to keep things cool.

Today, industrial and commercial chillers are the silent workhorses of commerce and industry. So many industries use chillers in their manufacturing processes as well as for safe handling and storage of food, pharmaceuticals, and beverages that they are ubiquitous. Chillers control temperatures in heat sensitive data centers, and maintain ice skating and hockey rinks. The ability to control temperatures is crucial to business now just as it was in 1833.

It's crucial to have chillers that are adequate for the processes that they are used for, and there are a number of elements that come into play. Cost is obviously one factor that needs consideration, but there are others that may make a more expensive unit more economical in the long run. Users need to know what cooling capacity they need, the temperature ranges involved, heat load of application, and piping type.

Keep in mind that cooling capacity specifications are measured in ideal testing conditions. It's not that the testing is inaccurate, but that the controlled heat load used to test the cooling capacity is applied to a closed loop that doesn't have the fluid volume of a real world operation. Therefore, industry sources recommend increasing your chiller's capacity by around 25% over your estimated need. This increase absorbs environmental losses and other hard-to-measure aspects of a real application and ensures the needed cooling capacity will actually be available.

Another consideration of importance is any chiller system's scalability. Will your operation remain the same? How soon could you theoretically outgrow your current chiller and what would be the cost of replacing it? Here you have to keep in mind not only the cost of the physical replacement, but compatibility with current applications, necessary upgrades to other machinery or facilities, and possible reduced production capacity during the upgrade.

These are a few reasons that it may make sense to look into our selection of rental chillers. With a rental chiller, you are able to try out the chiller that most closely matches your needed cooling capacity. If it doesn't work as needed due to some unaccounted for environmental losses in your application, you can exchange it for the needed capacity. In addition, you can afford the recommended 25% padding of your cooling capacity. The same goes for scalability: if you find yourself needing more cooling capacity, you can get another rental chiller that meets your new needs. The savings in these instances are substantial, running into thousands of dollars.

Another area of huge savings is the lack of costs associated with any necessary repairs or ongoing maintenance of the cooler. Repairs are costly not only in terms of parts and labor for fixing the cooler itself, but also in downtime. Adding maintenance of a purchased cooler to your current maintenance staff's work load is sure to add additional man-hour costs, whether from additional (possibly overtime) hours for current maintenance staff or the need to hire additional maintenance staff.