

Issue 14 The information hub is designed to provide - mainly technical - information relating to Water Coolers and Boilers, to assist you with your work

"Chilled Water Capacity Of Water Coolers"

How much chilled water can I get from my water cooler?

This is not an easy question to answer, because there are many factors influencing the result! The setting in our coolers chills the water at 12C or below. To start with, what are we trying to measure?

1. Instant draw off: The amount of chilled water you can draw off continuously at or below a temperature of 12C
2. Hourly capacity: The amount of chilled water you can draw off below a threshold temperature of 12C over an hour

Having defined what we are trying to measure, we need to establish the various factors which influence instant draw off and hourly capacity. They are:

1. Influent water temperature: If the influent water temperature is below the threshold 12C, then the Instant Draw Off and Hourly Capacity is literally unlimited. If the influent temperature is above 12C, then it will affect both measurement.
2. The way and frequency of drawing chilled water: If you drain the cold tank every time you draw water, this affects the recovery time very differently than if you draw off in small quantities.



You can see how complicated it is to answer the simple question of "How much chilled water can I get from my water cooler". Anyone who tells you differently is being "economical with the truth".

We are trying to be as accurate as possible with our capacity information, but it is a bit like getting a handle on the rated Miles Per Gallon of your motor car. It is impossible to be precise!

Given the UK climate in winter, (and unfortunately also often during the summer) we know that the influent water temperature plays a major role in all of this.

There is one other obvious factor which affects instant draw off and hourly capacity, and that is the power of the chilling unit.

Our ArcticChill Direct Chill/Pressure Cooler range for instance has a more powerful compressor than most other conventional Water Coolers

Other Direct Chill systems such as Ice Bank and Dry Cool systems also have a positive effect.

