

Issue 11 The information hub is designed to provide - mainly technical - information relating to Water Coolers and Boilers, to assist you with your work

Descaling A Conventional Hot & Cold Water Cooler

The complication with most conventional water coolers is that the hot tank is not accessible and you can therefore not see if the hot tank is scaled up. The first thing you may notice is that the cooler "will not work".

Scale can build up in the coolers hot tank when water from the mains supply or from a bottle is heated. This will vary in hardness depending on the hard water area. Bottled water can also vary in hardness, depending on minerals used.

We have created a Post Code Scale Checker, which is available to use on our website [CLICK HERE](#) it will tell you how soft or hard the mains water is at your installation site on a scale of 0-26. Just enter your post-code and check:



- 0 - 5 Soft Water - No Scale Filter
- 6 - 15 Hard Water - Resin Scale Filter, Highly Recommended
- 16 - 26 Very Hard Water - Must Use A Resin Scale Filter.

[Check Your Postcode](#)

Scaled Up Water Cooler Hot Tank



A hot tank can scale up in a relatively short time – depending on the water hardness, how hot the temperature and if there is high use.

The only option then is to de-scale the hot tank. De-scaling the often inaccessible hot tank has to be done "in the dark".

The only way to avoid scale on mains fed coolers is to use a resin based scale prevention filter. These are not cheap, and the temptation of using a low cost carbon block filter with siliphos beads is great. Unfortunately our tests have shown that they are not very effective.

UK Scale Map



How to de-scale a sealed hot tank in an open tank hot & cold water cooler

- Turn the mains water off POU cooler.
- Drain the cold water tank through the taps, and then turn the power to the cooler off at the mains (for manual tap coolers you could turn the power off before draining the cold tank, but you need "power on" if the cooler uses solenoids)
- Drain the hot tank through the tank drain tap/plug which is most often found at the back of the cooler, or for some table top units is found underneath.
- Pour the right concentration of de-scaler into the cold tank and allow it to gravity feed into the hot tank beneath. Make sure the hot tank is full of de-scale solution. De-scaling will generally be accompanied by aggressive foaming which should be visible at the cold tank feed into the hot tank. If de-scaling is complete, the foaming will stop. This sometimes takes up to 30/45 minutes.
- Flush fresh water through the water tanks to remove all traces of the de-scaler.
- Turn the power to the cooler on.
- In some cases a thermal cut out or safety stat, which most boilers have to protect the heating element, may need to be reset, or in case it has burned out it may need replacing.

Installing the EZYTAP in a Hard Water area

The EZYTAP has two separate mains water inlets. One to connect to the ambient/chilled side and the other to connect to the boiler side. This allows you to connect the boiler to a resin based scale removal filter, and then the ambient/chilled inlet to a cheaper carbon filter (See Installation Diagram). Unfortunately, resin filters are about 10 times more expensive than carbon filters. The temptation therefore is to use a cheaper carbon filter with Siliphos beads (sometimes sold as scale filters). However, our tests have shown that they do not do the job! There is another complication with resin filters. They get quickly "consumed" by the amount of water passing through them. This is why the EZYTAP has two separate mains water inlets – to allow you to connect a cheaper carbon filter to the ambient/chilled side and use the expensive resin filter only for the hot water.

