

**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

Scale is the enemy of ALL hot water boilers including those in hot & chilled water coolers! 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.

### Scaled Up Water Cooler Hot Tank

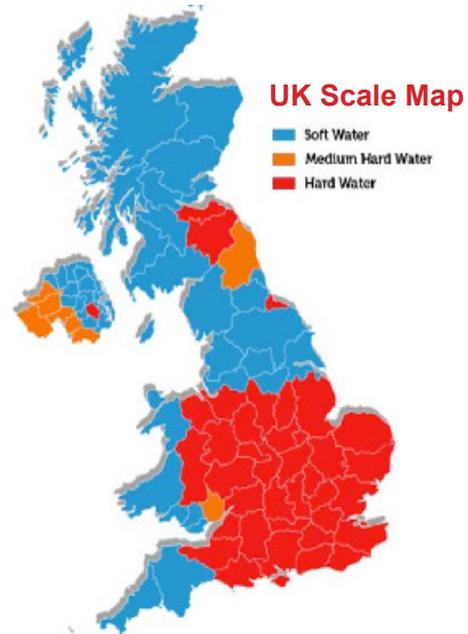


A hot tank can scale up in a relatively short time – depending on the water hardness, the hot temperature and with high use.

The only option then is to de-scale the hot tank. De-scaling the 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.

### Brita Scale Filters



### Here are some guidelines of how to de-scale the hot tank in a conventional hot & cold water cooler

- Turn the mains water off (POU Cooler) or remove the bottle (bottled 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 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 can sometimes take 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 re-setting or in case it has burned out it may need re-placing.