

Frequently Asked Questions...



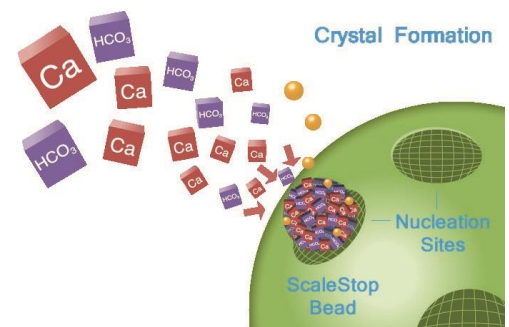
What is Next ScaleStop?

A Next Filtration patented technology known as Template Assisted Crystallisation to give its full description - but TAC for short. It is an environmentally friendly water treatment technology which through catalytic reaction prevents the formation of limescale. Designed to protect boilers and water heaters, commercial and domestic appliances, shower heads, plumbing components, pumps, pipes, valves, solenoids etc. TAC is a highly effective alternative to conventional water softeners. Independently proved to be equal in efficiency, but with none of the limitations of use.

In the same independent evaluations electro/magnetic water conditioners had only 50% efficiency.

How does it work?

TAC prevents the formation of limescale by converting dissolved hardness minerals into physical but harmless, microscopic crystals by a catalytic reaction in the water being treated. These crystals once created travel through the plumbing system and appliances in colloidal suspension - they do not stick to surfaces, which prevents the formation of limescale deposits.



What can I do if I have hard water and a limescale problem?

One easy solution...Install a Next ScaleStop TAC system.

hard water, easy solution.

Will ScaleStop remove existing limescale?

Yes, a gradual process will remove existing deposits.

Is ScaleStop different to a Water Softener?

Yes....most certainly. TAC is a specifically developed media which by a catalytic reaction converts the dissolved hardness mineral calcium carbonate (CaCO₃) into insoluble microscopic crystals which do not form as limescale. This conversion does not remove the beneficial minerals - calcium and magnesium from the water, but retains them in a safe and stable presence which has health benefits and international drinking water safety certifications.

Water softeners in a completely different process, use the principles of ion exchange to remove calcium and magnesium ions from water and replace them with sodium ions. A water softener wastes water - an increasingly important resource, needs regular top up with salt, and discharges brine pollutants into drains and the wider environment. It is generally recommended not to drink softened water - which is why there is a separate untreated supply.



Is ScaleStop different to an electro/magnetic de scaler ?

Yes. Electro/magnetic de scalers or water conditioners, have low efficiency (typically around 50%) and a limited time effect on treated water. Any effect that these devices have typically lasts for only about 24 to 48 hours.



What are the applications where ScaleStop is used?

This list is an exhaustive one.... For all practical purposes, any application which requires protection from the problems created by the accumulation of limescale deposits. In effect, any home or business in hard water areas. TAC has some particular applications in which it is quite simply better than anything else on the market when all factors are considered....highest efficiency - low cost of ownership - practically no maintenance - environmentally friendly. These include boilers and water heaters, ice machines, coffee machines, shower heads, commercial laundry equipment, reverse osmosis membrane protection, irrigation systems.....

It's use is not recommended in closed loop systems unless they "blow down" or where chemicals such as phosphate are added to the water.

What are the operating conditions?

Broadly speaking, public mains water supplies present no challenges for Next TAC systems. There is no requirement to test for water hardness. TAC systems are recommended to be connected at the point of entry (POE) where the whole building needs protection, or at the point of use (POU) where an individual machine or appliance needs protection. TAC systems are specified based on the flow rate of the incoming supply, and in large installations for hotels, hospitals, schools etc., it's the peak flow demand. Some public water supplies carry sediments, in which case simple pre filtration is recommended.

Will ScaleStop treat bore hole or well water?

Yes, but probably some element of pre filtration or other treatment (iron and manganese removal for example) will be needed. Advice on pre filtration is available from Next Filtration if a full water chemistry analysis is provided.

How easy is installation?

All Next ScaleStop TAC systems are light weight and compact, needing little space and only two water connections one IN and one OUT. They do not need electrical connections, and need no secondary plumbing for drinking water or drain. All Next ScaleStop TAC systems are available with a flow bypass to make cartridge changes or tank media change easy. This feature means that there is no interruption to the water supply when the system is serviced. Up to 32 litres a minute (lpm) flow, 3/4" or 1" connections, and up to 114 lpm 1" or 1.25". Above this it's 2". Full instructions can be found in the Installation, Operation & Maintenance manuals (IOM's) provided.

What maintenance does ScaleStop need?

Virtually none. Just a cartridge or media change in accordance with normal 123 planned maintenance schedules.

How often are cartridges and tank media changed?

123! Cartridges are recommended to be changed after 1 year in food services applications. After 2 years in domestic applications, and after 3 years in tank systems.

What makes Next ScaleStop so environmentally friendly?

- Significantly reduces heating energy consumption where there is no protection or inefficient protection • High efficiency protection maintains high efficiency in boilers and water heaters
- Zero operating energy required - works on water pressure only.
- Zero water wasted
- Zero brine discharged
- Zero salt or chemicals used

How does Next ScaleStop save energy?

When limescale develops on heat exchangers and heating elements - such as immersion heaters, the coating "insulates" the surfaces and significantly reduces heat transfer efficiency. More energy is wasted when heat sensors in the boiler or water heater are coated with limescale.... The insulating effect prevents the sensor from accurately measuring water temperature and gives false low readings. The boiler "thinks" the water is not hot enough (even though it actually is) and keeps running, when an accurate sensor reading would shut it down.