



HWC-Series™

UV-Guard's unique WaterMark certified hard water conditioner (HWC) – the sustainable alternative to a conventional water softener.

What is hard water?

Water hardness is most commonly caused by dissolved Calcium and Magnesium minerals. High concentrations lead to limescale problems with scale deposits forming wherever hard water flows or is used. Hard water scaling is an issue as it can cause quartz thimble/sleeve fouling in UV systems, blocks in pipes, premature appliance or industrial equipment failures, scum rings in swimming pools and baths, heating element deterioration and many other problems.

Unlike conventional water softeners, the HWC-Series produces soft water whilst requiring:

- No electricity
- No salts
- No resins
- No magnets
- No backwashing
- No maintenance



Drinking Water



Warm Water & Legionella



Residential



Aquatics



Agriculture & Horticulture



Industrial & Manufacturing



Food & Beverage

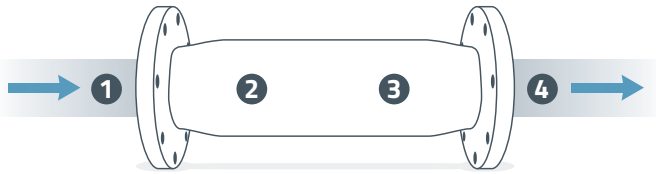
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How it works



1. Hard water enters the HWC.
2. Water is exposed to the internal surface of the HWC. The integral hydraulic design combined with the chemically-specific material of the conditioner activates an electro-chemical reaction.
3. The minerals within the hard water begin to lose their scale producing properties due to changes in their molecular arrangement.
4. 'Hard' minerals are changed from large molecules to inactive microscopic particles, which flow freely, unable to stick to surfaces and cause scaling.

Benefits

- ✓ **Installed inline within pipework** – small footprint, no tanks required
- ✓ **24/7 operation** – no backwashing or resin regeneration to interrupt treatment process
- ✓ **No added salt (sodium chloride) or other chemicals (potassium chloride)** – no health concerns or environmental damage due to high salt water content (brine)
- ✓ **Nothing is removed from water** – vital minerals for human health are maintained unlike with RO systems
- ✓ **Maintenance and power free** – no operational costs
- ✓ **Multiple models available** – to suit specific hard water conditioning needs and existing pipework size

Applications

- ✓ **Pre-treatment to protect other water treatment processes** – improve UV disinfection performance by preventing scaling on quartz thimbles/sleeves, prolong RO membrane life
- ✓ **Bore water treatment for irrigation and drinking water** – remove hardness to maintain pipe and irrigation sprinkler performance
- ✓ **Commercial appliances** – prolong the life of hot and warm water systems, heat exchanges, thermostatic mixing valves, dishwashers, instant boilers, washing machines, commercial coffee machines, air conditioners and more, whilst cleaning and removing existing scale build-up
- ✓ **Cooling towers** – prevent scaling, biofilms and dissolve existing scale
- ✓ **Mining and industrial equipment** – increase life of components and fittings (o-rings, box seals) whilst reducing maintenance – drilling machines, mining drill rigs
- ✓ **Swimming pools** – reduce chemicals required, remove scale build up on pool walls, increase life of pool pumps, reduce backwashing



Specifications

Model	Application / Average Flow Rate	Inlet / Outlet Connections	Material
UVG HWC-0.3	5 Lpm	½" female BSP	316 SS
UVG HWC-0.4	7 Lpm	½" female BSP	316 SS
UVG HWC-0.5	9 Lpm	½" female BSP	316 SS
UVG HWC-0.7	12 Lpm	½" female BSP	316 SS
UVG HWC-1	18 Lpm	¾" female BSP	316 SS
UVG HWC-1P	18 Lpm	¾" BSP PVC Pressure Fitting	PVC
UVG HWC-2	34 Lpm	¾" female BSP	316 SS
UVG HWC-2P	34 Lpm	¾" BSP PVC Pressure Fitting	PVC
UVG HWC-3	56 Lpm	1" female BSP	316 SS
UVG HWC-3P	56 Lpm	¾" BSP PVC Pressure Fitting	PVC
UVG HWC-5	90 Lpm	2" female BSP	316 SS
UVG HWC-7	122 Lpm	2" female BSP	316 SS
UVG HWC-13	220 Lpm	2" female BSP	316 SS
UVG HWC-20	335 Lpm	2 ½" Table E Flange	316 SS
UVG HWC-30	500 Lpm	3" Table E Flange	316 SS
UVG HWC-54	900 Lpm	4" Table E Flange	316 SS
UVG HWC-96	1600 Lpm	4 ½" Table E Flange	316 SS
UVG HWC-170	2840 Lpm	5" Table E Flange	316 SS
UVG HWC-240	4000 Lpm	6" Table E Flange	316 SS
UVG HWC-324	5400 Lpm	8" Table E Flange	316 SS
UVG HWC-420	7000 Lpm	10" Table E Flange	316 SS





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