AquaSolve®

Scale Control Systems

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The Eco-Friendly Scale Solution

AquaSolve is an environmentally-friendly scale control system for a wide range of commercial applications, including hospitality, restaurants, schools, healthcare, multifamily, military installations, office buildings and more. Powered by a high-performance scale-control media, AquaSolve controls the formation of scale in plumbing systems by transforming dissolved hardness minerals into harmless, passive microscopic particles without using salt or harsh chemicals like water softeners and chemical additives.

With a compact footprint and simple sizing to reduce installation time, AquaSolve increases operational efficiency and helps to reduce maintenance costs and premature equipment failure, while ensuring the longevity of your water heating system.

Features and Benefits

- Scale-control without salt or chemicals
- Simple installation with a compact footprint
- Requires no electricity, control valve or drain system
- No wastewater or backwashing
- Virtually maintenance-free
- Improves operating efficiency of water heating system
- Extends product life
- Retains beneficial minerals including Calcium and Magnesium
- Available in four tank sizes with flow rates of 12, 20, 50 and 75 GPM

Benefits of AquaSolve

Scale accumulates over time in pipes, valves, fixtures and water heating systems causing serious problems including:

- System inefficiency due to lower flow rate and pressure loss
- Premature equipment failure resulting in downtime and increased warranty/service repair costs
- Health and safety concerns

Once formed, scale deposits are highly insoluble and difficult to remove. AquaSolve not only prevents scale build-up, it also reverses existing scale problems. With AquaSolve, there are no monthly maintenance charges or additional energy costs because no electricity is required. Advanced scale control reduces labor costs and downtime and eliminates the need to store expensive bags of salt like water softeners require. By preventing and correcting scale deposits, AquaSolve:

Increases Operating Efficiency

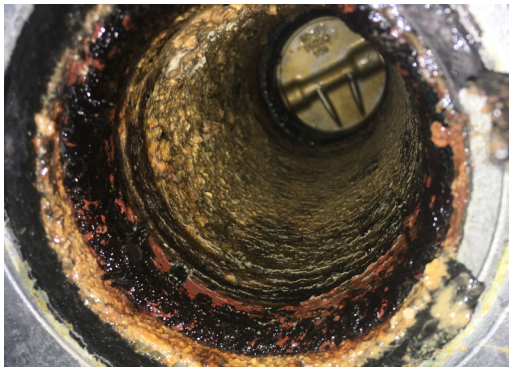
Without scale formation within internal plumbing surfaces and heating components, your system will perform with better efficiency as it was designed, reducing maintenance and premature equipment failure.

Extends Equipment Life

AquaSolve keeps your equipment performing as it should and helps to extend the life of your water heating system.

Supports Cleaner System Conditions

Scale and sediment contribute to fouling and support the formation of biofilms, which can negatively impact system hygiene and performance. By controlling scale accumulation, AquaSolve helps keep water systems cleaner and operating more efficiently.



How it Works

Media Assisted Crystallization

AquaSolve uses an innovative water treatment technology known as media assisted crystallization. AquaSolve's powerful media attracts hardness minerals, like calcium and magnesium, and converts them into harmless, crystalized particles that won't stick to pipes and components in water heating systems. Instead, the microscopic crystals break away as they grow, float freely through water and move harmlessly through pipes and the water heating system.

Environmentally-Friendly Technology

Water softeners and additives that use salt and harsh chemicals to treat scale, tend to be expensive and remove important nutrients from hard water. AquaSolve prevents the formation of scale and reduces existing scale without salt or chemical additives, saves water and energy, and preserves your water's beneficial minerals.

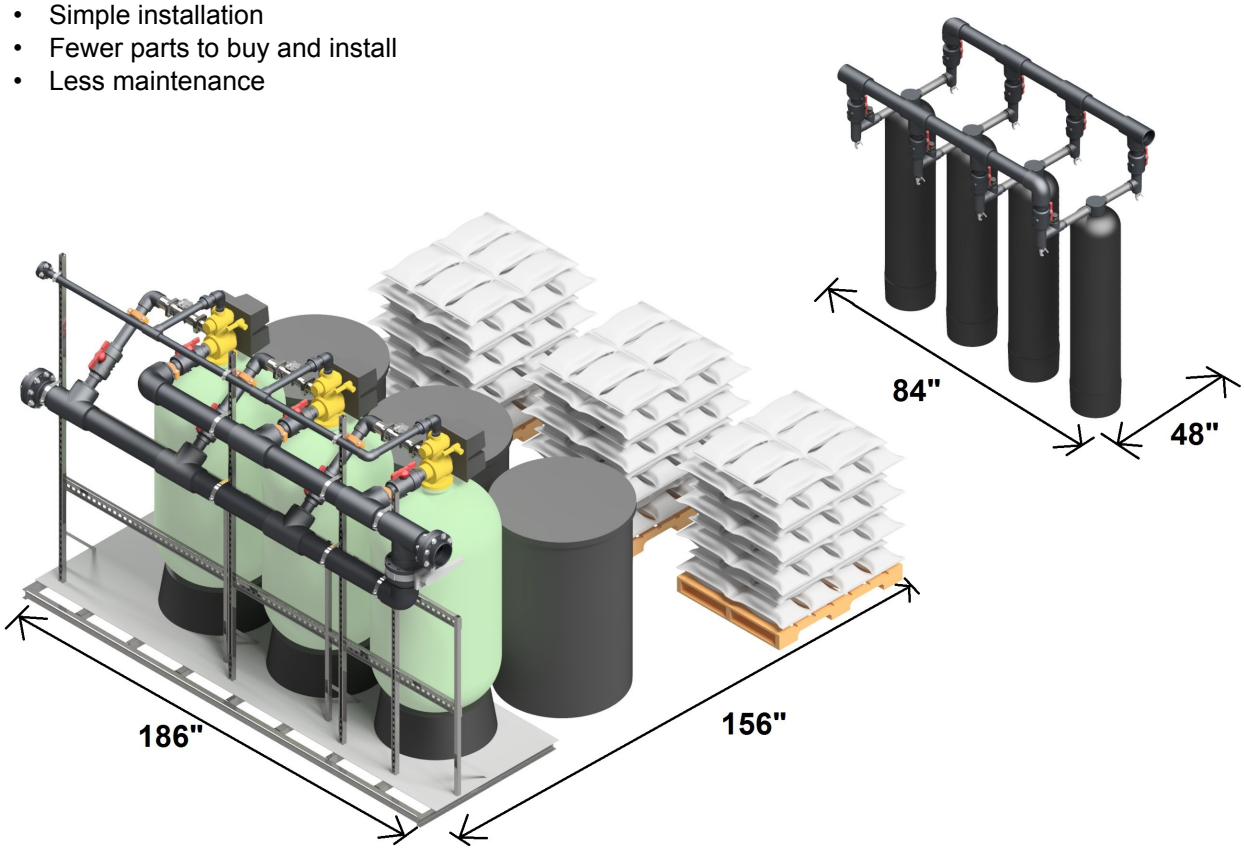
- No salt or harsh chemicals
- No electricity
- Reduces energy consumption by keeping heat transfer surfaces free from scale
- Reduces waste water discharge and water consumption
- Retains nature's beneficial minerals, including Calcium and Magnesium

Installation Advantages

Compact Footprint with Easy Installation

AquaSolve's compact footprint takes up **85% less space** vs. traditional water softening installations. Whereas typical water softeners require multiple components including a control valve, backwashing, drain line, regeneration and a brine tank to store salt, AquaSolve only requires inlet and outlet piping which simplifies installation and reduces costs. It also means there are fewer parts that need to be maintained and serviced.

- Compact footprint
- Simple installation
- Fewer parts to buy and install
- Less maintenance



Traditional Water Softener (300gpm)

- Inlet and Outlet piping
- 3 salt tanks and salt pallets
- Waste water drain line
- Electrical connection

AquaSolve (300gpm)

- Inlet and Outlet piping

The Clear Choice

Independent scientific testing by Arizona State University confirmed media assisted crystallization (referred to as TAC or Template Assisted Crystallization) technology provided better scale reduction (over 90%) and is a better solution compared to other water softening and chemical treatments.

Water Type	Treatment	Scale scraped off heating element	% Ca in scale formed	Ca in solid scale precipitate (gCa)	Scale from bath and heating element dissolved with HCL (g Ca as CaCO3)	Total calcium formed during test (g Ca as CaCO3)
Tempe, AZ Tap Water	No Treatment	-	NA	0.00	8.36	8.36
	TAC	0.00	NA	0.00	0.12	0.12
	EIP	0.68	34.88	0.24	3.60	3.84
	MAG	1.44	34.88	0.50	3.47	3.97
	CDI	0.00	NA	0.00	1.41	1.41

Untreated
Scale build-up in untreated water

Treated
No scale with treatment

Specifications and Installation

AquaSolve systems are complete, self-contained, loaded with media and ready to use. A simple inlet and outlet connection is all that is required for installation. Make sure to review operating pressures, temperatures and water chemistry limitations to ensure compatibility.

Models

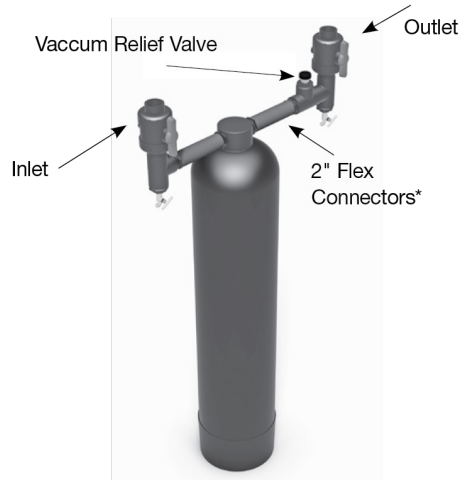
Model #	Tank size (in)	Distributor Type	Service Flow Rate
M8408-COM	8 x 44	Standard	12
M8410-COM	10 x 54	Standard	20
M8414TM-COM	14 x 65	Standard	50
M8416TM-COM	16 x 65	Standard	75

Replacement Media on all tanks should be replaced every three years

Feed Water Chemistry Requirements

pH	6.5-8.5
Hardness (max)	30 grains
Water Pressure	23 psi to 150 psi
Temperature	40-100ºF (50-60ºC)
Free Chlorine	< 2 ppm
Iron (max)	0.3 ppm
Manganese (max)	0.05 ppm
Copper (max)	1.3 ppm
Oil and H2S	Remove prior to AquaSolve
Silica (max)	20 ppm
Phosphates	< 3.0 ppm
TDS	500 or less

Typical Installation for single and multi-bank systems



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Hot Water Solutions

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