Eco-friendly solution for scale control due to hard water conditions

PVI AquaSolve Anti-Scale Systems are suitable for commercial applications and have flow rates up to 75 gpm (284 lpm) per tank for the reduction of scale formation caused by hard water. Operation of the system may be 24 hours per day 7 days per week because there is no backwashing or regeneration process.

Operation of the System
Water containing dissolved calcium and magnesium bicarbonate hardness passes through a bed of proprietary media inside AquaSolve systems. The media transforms the dissolved hardness into microscopic nano-crystals. These nano-crystals are inert and pass through the plumbing system without attaching to internal plumbing surfaces. There is no need for backwashing because the system operates in an up flow direction.

Media
AquaSolve is powered by AquaSolve high performance scale control media. It is certified by WQA to NSF/ANSI standard 61. The media is proven to reduce the formation of calcium and magnesium bicarbonate scale in plumbing systems, water heaters, and on water heating elements. Our media does not require salt or chemicals, or waste water from regeneration and has up to three year life cycle before replacement is necessary.

Tanks
All models feature non-corrosive fiberglass tanks with a thermoplastic inner liner. All tanks are certified by WQA or NSF to NSF/ANSI standards.

Plumbing Connections
All plumbing connection components of the AquaSolve system are constructed of durable polymers. Systems 12” in diameter and smaller have a tank head with 1” FNPT inlet and outlet connections. Systems 14” and 16” in diameter have a 2” FNPT inlet and outlet connections constructed of robust machined Stainless Steel.

Standards
Independent scientific testing has confirmed Template Assisted Crystallization (TAC) technology provides scale reduction of over 95+. Testing was conducted under protocol based on DVGW W512 test to access control of scale formation.

Systems are certified through WQA against NSF/ANSI Standard 372 for Lead Free compliance.

WARNING
Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.
### Specifications

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>TANK SIZE (IN.)</th>
<th>DISTRIBUTOR TYPE</th>
<th>LITERS OF MEDIA</th>
<th>SERVICE FLOW RATE</th>
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</thead>
<tbody>
<tr>
<td>M8408-COM</td>
<td>8 x 44</td>
<td>Standard</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>M8410-COM</td>
<td>10 x 54</td>
<td>Standard</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>M8414-COM</td>
<td>14 x 65</td>
<td>Standard</td>
<td>12.5</td>
<td>50</td>
</tr>
<tr>
<td>M8416-COM</td>
<td>16 x 65</td>
<td>Standard</td>
<td>19</td>
<td>75</td>
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</table>

### Ordering Information

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>DESCRIPTION</th>
<th>PIPE SIZE</th>
<th>SPACE REQUIRED WxDxH (IN.)</th>
<th>WEIGHT LBS.</th>
<th>KGS</th>
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<tbody>
<tr>
<td>M8408-COM</td>
<td>12 gpm Scale Prevention System</td>
<td>1&quot;</td>
<td>9 x 9 x 49</td>
<td>36</td>
<td>16</td>
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<tr>
<td>M8410-COM</td>
<td>20 gpm Scale Prevention System</td>
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<tr>
<td>M8414-COM</td>
<td>50 gpm Scale Prevention System</td>
<td>2&quot;</td>
<td>20 x 20 x 85</td>
<td>124</td>
<td>56</td>
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<tr>
<td>M8416-COM</td>
<td>75 gpm Scale Prevention System</td>
<td>2&quot;</td>
<td>20 x 20 x 85</td>
<td>145</td>
<td>66</td>
</tr>
</tbody>
</table>

### Feed Water Chemistry Requirements

- **pH**: 6.5 to 8.5
- **Hardness (maximum)**: 30 grains for residential and commercial applications
- **Water Pressure**: 15 psi to 150 psi (1 bar to 10.34 bar)
- **Temperature**: 40°F to 100°F (5°C to 38°C)
- **Chlorine**: < 2 ppm
- **Iron (maximum)**: 0.3 mg/l
- **Manganese (maximum)**: 0.05 mg/l
- **Copper**: 1.3 ppm*
- **Oil & H2S**: Must be removed prior to AquaSolve
- **Silica (maximum)**: 20 ppm**
- **TDS**: 500 mg/l****

**NOTICE**

Water known to have heavy loads of dirt and debris may require pre-filtration prior to AquaSolve.

*Avoid applying excess flux on the inner surfaces of the pipe and use a low-corrosivity water soluble flux listed under the ASTM B813 standard.

**AquaSolve does not reduce silica scaling. Silica can act as a binder that makes water spots and scale residue outside the plumbing system difficult to remove. This 20 ppm limitation is for aesthetic purposes.

****Hardness Maximum for AquaSolve scale prevention operation is 514 mg/l as Calcium Carbonate. All other minerals and metals that contribute to TDS, when combined, must not exceed the 500 mg/l Maximum Contaminant Level (MCL) for Total Dissolved Solids as set by the USEPA Safe Drinking Water Act (SDWA). Minerals and Metals must not exceed their individual MCLs established by the USEPA SDWA. Specific Mineral and Metal MCLs, identified in Watts’ published Feed Water Chemistry Requirements, supersede the USEPA SDWA.

### Proven Results!

Lab tests conducted at the PVI test facility, located in San Antonio, Texas indicate AquaSolve systems control new scale formation and aid in the reduction of existing scale. Tests were conducted in water temperatures to 120°F and hardness levels of 17 grains per gallon. Photos (below) show scale formation in untreated water and no scale in the treated water.

AquaSolve systems helps control hard scale formation inside the plumbing system at influent harness levels of 30 grains per gallon of calcium carbonate and less.

Aquatase is not a water softener or a chemical additive (like anti-scalants or sequestrants). It is a scale prevention solution with proven third party laboratory test data and years of successful residential and commercial applications. AquaSolve is the intelligent scale solution and is a great alternative to water softening (ion exchange) or scale sequestering devices.

For additional information, access on-line literature ES-M8408-COM/M8410-COM and ES-M8414TM-COM/M8416TM-COM