

PRODUCT GUIDE

SCALE RX™

ION POLARIZATION SCALE REDUCTION SYSTEM

12 YEAR WARRANTY

- Prevents lime-scale buildup on water heater elements
- No maintenance, No power or filter replacements
- Eliminates up to 75% of scale deposits
- IAPMO Certified
- Provides reliable protection for your water heater
- Patented TGP® Technology (Turbulent Galvanic Polarization)
- Saves energy and money



A WATER HEATER'S **ULTIMATE** DEFENSE



ScaleRX™ Origins

ScaleRX is the result of a collaboration between American Valve and Swiss Aqua Technologies. Together, our two companies have developed a cost-effective way to reduce and prevent scale on water heater elements.

What Is Scale?

When water comes from areas high in calcium or magnesium carbonate, hard water leaves mineral deposits commonly known as “lime scale” on plumbing components.



Why Is It Bad?

Scale buildup can block pipes and faucet aerators and cause components to fail. It's unsightly, leaves white deposits on clothes and dishes and is a constant nuisance for end-users.

More significantly, scale build-up on water heater elements reduces the overall efficiency and drives up energy bills. Conditioned water saves more than 50% of operating costs over the lifetime of a water heater and help new tank and tankless water heaters to run even more efficiently.*

Why Is Scale Bad for a Water Heater?

- Restricts Flow
- Slows Transfer of Heat
- Decreases Efficiency
- Damages Heating Elements
- Decreases Water Pressure
- Shortens Life Span
- Requires Frequent and Costly Maintenance



Water heater with scale and sediment buildup decreasing both the efficiency, water pressure and lifespan of this water heater.

* Retrieved from Water Quality Association website:
www.wqa.org/learn-about-water/perceptible-issues/scale-deposits

What Makes ScaleRX™ Better?

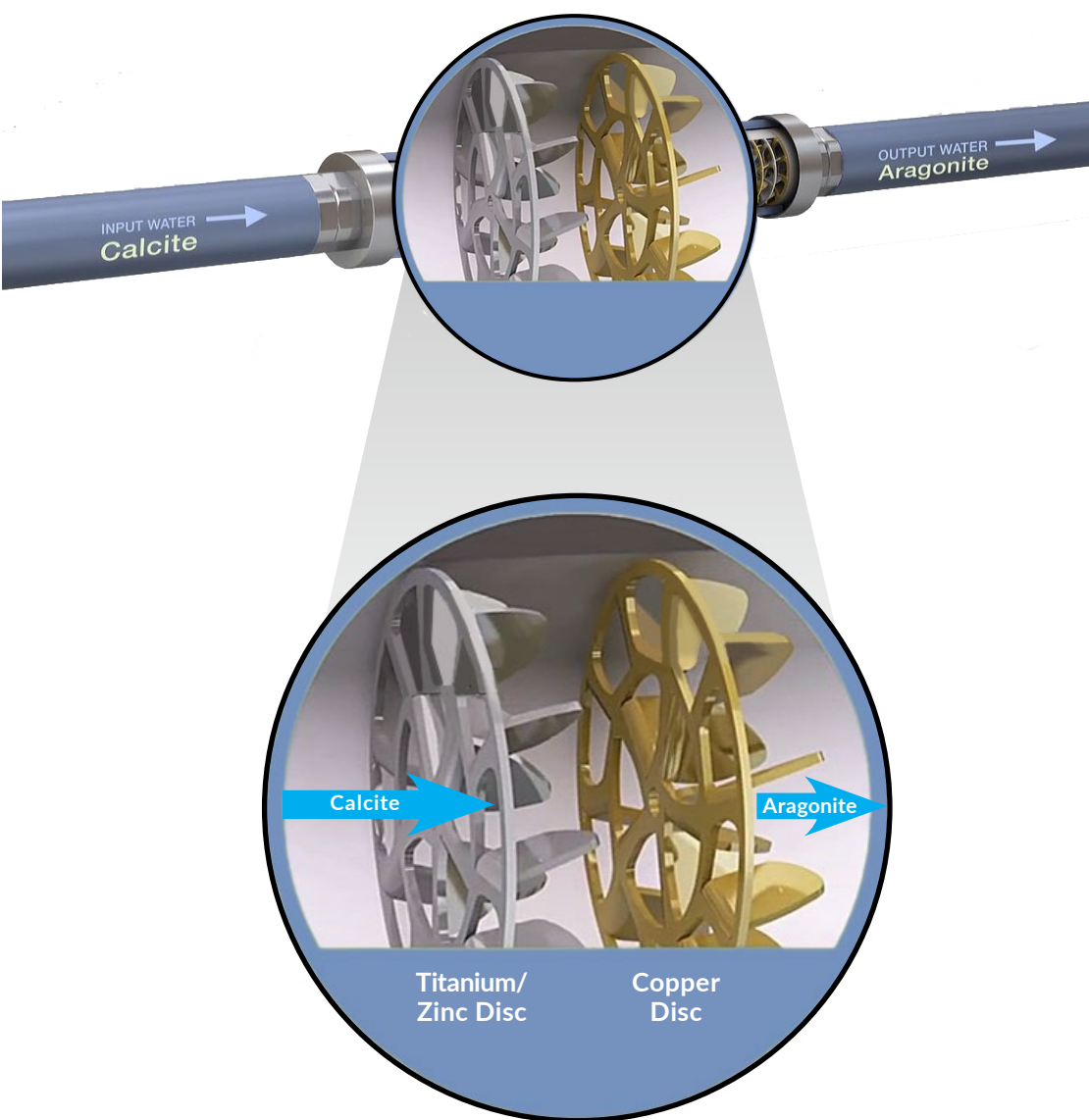
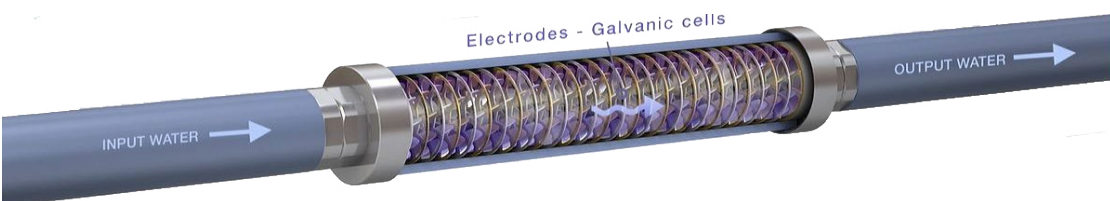
ScaleRX has been shown in tests conducted by IAPMO to be **76.3%** effective at removing lime-scale deposits on copper heating elements. In side-by-side comparison testing it was **four times** more effective than the leading electronic scale reduction device. The patented Turbulent Galvanic Polarization (TGP®) electrode design creates a swirling water flow within ScaleRX to maximize effectiveness.

SCALERX™

- ✓ Is not a water softener and doesn't remove anything from or add anything to water.
- ✓ Is less expensive, easier to install, maintenance-free, and more effective than anything else on the market.
- ✓ Extends the life and efficiency of new and existing water heaters.
- ✓ Works with any type of water heater.
- ✓ Eliminates the need to de-scale tankless heaters.
- ✓ Doesn't restrict household water pressure.
- ✓ Connects directly to copper, CPVC or PVC pipe.
- ✓ Adapts easily for PEX and other pipe types.
- ✓ Environmentally friendly and chemical-free.
- ✓ No electricity required.
- ✓ Easy-to-install and maintenance-free.

ScaleRX is shown here installed on a tankless water heater system. ScaleRX can be used on the water inlet of both a residential tank and tankless water heater system.





SCALERX™
A WATER HEATER'S ULTIMATE DEFENSE

How Does ScaleRX™ Work?

ScaleRX contains discs of titanium and copper that create a small galvanic current. The current disrupts the ability of scale to form calcite (CaCO_3) crystals, and allows the mineral content to flow safely through as aragonite (still CaCO_3). The closer a component sits to ScaleRX, the greater the effect.

Where Is Scale Found?

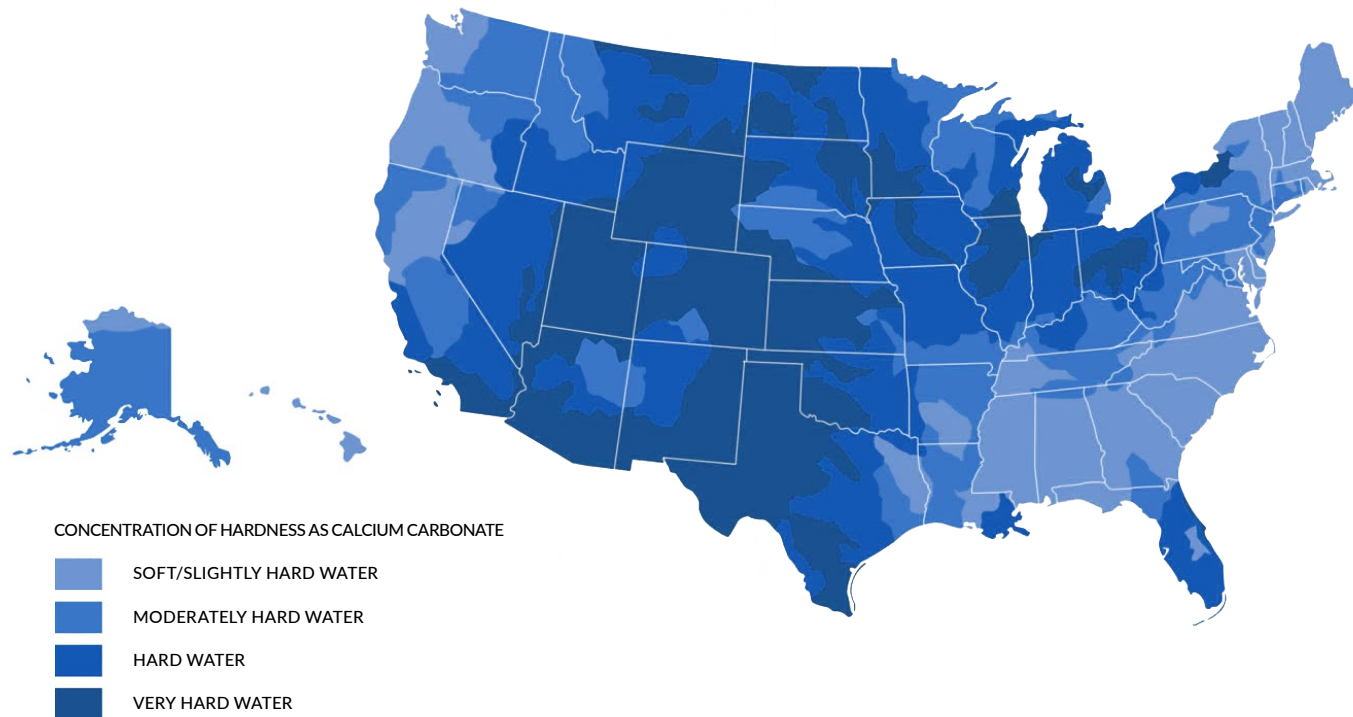


Table adapted from and prepared by the United States Geological Survey:
<https://water.usgs.gov/owq/hardness-alkalinity.html#hardness.html>

Your Best Defense Against Scale

ScaleRX is suited for both traditional tank and tankless water heaters in areas with moderate to severe hard water. It's an inexpensive way to protect a water heater investment, easy to install, and a great value. Almost **90% of America** has some degree of hard water. ScaleRX is designed to fit directly on the a 3/4" male NPT inlet of any residential water heater.

Without a ScaleRX installed, tankless heaters must be flushed and cleaned with chemicals every one to three years to function both properly and efficiently.



Local plumber descaling and flushing out a tankless water heater system costing both time and money.

FAQ

What Kind Of Water Heaters Can It Be Used On?

ScaleRX can be used on any residential water heater — tankless, tank, gas, electric, geothermal, etc.

How Long Does It Last?

There's no theoretical time limit on the ability of the titanium and copper anodes to generate galvanic current. The outer pressure-bearing components are made of durable stainless steel. ScaleRX has a 12 year warranty.

Can I Install It Outside?

Certainly! The outside components are made of durable stainless steel and made to survive in any type of environment inside or outside.

What Type Of Pipe Do I Need To Use?

ScaleRX can be used with any type of pipe. It connects directly to copper, CPVC, or PVC pipe. Brass or plastic adapters may be used to connect it to any other type of pipe.

Why Doesn't It Need An External Power Source?

ScaleRX is a flow-through body with inlet and outlet ports. In it are placed turbine-shaped electrodes (not magnets) of two different electrically conductive materials. The electrode design is patent-protected (TGP® - Turbulent Galvanic Polarization) and creates a swirling water flow that modifies the structure of minerals.

The water flowing through the body forms by means of the electrodes a galvanic wet cell with a voltage of 4.2V to 6V.

How Much Flow Restriction Is There?

ScaleRX doesn't reduce household water pressure, and has less than 1 GPM pressure drop.

- Min./max. Pressure (inlet): 4 psi/145 psi
- Min/max. (Inlet): 40°F - 210°F
- Flow rate: 14.1 gal./min.



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*ACTUAL SIZE