

Consult with a WQA Certified Specialist about Salt Free systems

When you contact Eco Waterhouse Technologies, you can rest assured that your questions and concerns will be met with the utmost honesty, integrity and credibility from a highly qualified water specialist. Our sales and customer support staff have had many years of training and experience in the water industry. We encourage and frequently sponsor our technicians in their pursuit of additional education and certification, and many of our personnel are WQA certified specialists. At Eco Waterhouse Technologies, we believe that it is our high level of professional competence and expertise that separates us from many water companies.

Our experts have the necessary knowledge to effectively diagnose and solve your water quality problems. Please feel free to contact us at [949 485-8652](tel:9494858652) for a friendly consultation.

HOW SALT FREE SOFTENER WORKS ?

SCALE-TAC media is a catalyst with molecular patterns on the resin-plated ceramic surface. Once water contact occurs with the ceramic surface of the media, dissolved calcium & magnesium (major causes for water hardness) is transformed into a crystalline form. These crystals are harmless, neutral, water-insoluble, heat resistant, completely stable, and cannot attach to any surfaces. When the calcite crystals reach a size in the range of nano-meters, they lose their grip and detach on the resin-plated template, and are carried away by the water flow.

1) Sodium content will not increase: The traditional water softener operates on the basis of ion exchange. Ion Exchange resins remove calcium and magnesium ions from water, and replace these with sodium ions. These traditional ion exchange softeners produce salty water - Intake salty water increase risks for the cardiovascular system. Also, due to Negative impacts to the environment, many local cities have banned the use of Traditional Salt-Based systems.

2) No salt and no regeneration: When the Ion Exchanger is depleted, it requires water for backwashing and must be regenerated using salt or potassium chloride. A drain must be installed to Discharge the salty water and minerals.

Since SCALE-TAC Water Conditioner is a pure catalytic process, the water hardness is transformed into firm lime crystals. When the calcite crystals reach a size in the range of nano-meters, they detach from the resin-plated template and are carried away by the water flow. The media is not used up in the process; therefore, no regeneration or salt is needed.

3) No Control head required, so no need for periodic maintenance: Traditional ion exchange units require a control head, it is an additional ongoing maintain cost. In contrast, SCALE-TAC Water Conditioner is a simple in-out valve for water to flow.

4) No need to backwash: Because the SCALE-TAC media is continually in motion in the counter-current, and no particles are held up in granulate, a backwashing process is not required. A central control valve is therefore not needed.

5) No maintenance costs: The estimated expense to purchase and replace the salt is about \$200 to \$600 per year, and all Traditional Water Softeners use an Electronic Control Head, which will result in monthly energy expenses.

6) No slippery feeling that you have with the traditional softener: Because the water hardness was not removed or replaced with sodium ions, you will not have the slippery feel like using the traditional water softener. The water hardness is crystallized.

SCALE-TAC can be customized to treat water up to 50 grains of hardness. We just need to add more media for you, please give us a call [949 485-8652](tel:9494858652) for customization.

How SCALE-TAC media prevents scale or remove existing scale?

Negative calcium and magnesium ions in the existing scales are attracted to the neutral calcium and magnesium crystal clusters. The neutral calcium and magnesium crystals will not attach to any kind of surface. Because ions are formed into stable calcium and magnesium crystals and floating in the water from the SCALE-TAC Conditioner, existing scale is usually reduced or eliminate within 1 to 2 months.

Depending on the thickness of the existing scale, it will take some weeks to remove 100% of the scale buildup. But after this, the pipe system and the heat exchanger surfaces will be absolutely clean. During these weeks, customers may experience a salty taste or light odor in the water for a short period of time. This happens because the SCALE-TAC Water Conditioner is cleaning the pipes that may have a sodium and/or calcium build up in the pipes. This will lasts for a short time until the pipes are clean.

What is the composition of the SCALE-TAC media?

Information on ingredient of the SCALE-TAC media:

Composition/Ingredient		Weight (%)
Ceramic	Not Hazardous	15
Modified acrylic copolymer	Not Hazardous	85

No other media can be combined with the SCALE-TAC Salt-Free Anti-Scale product.

SCALE-TAC Media is certified by the **Water Quality Association (WQA)** to NSF/ANSI-61 for health effects to daily water usage.

What is the effect of using a SCALE-TAC Water Conditioner on rusted pipes?

In older pipe systems and the areas where high water hardness is a problem, significant lime deposits have often formed in the interior of water pipes. These in turn often contain rust particles and other corrosive products. When these lime deposits are broken down using the SCALE-TAC Water Conditioner, released rust can come out of water faucets and possibly plug aerators and showerheads for a while.

This problem can best be solved by occasionally cleaning these parts or replace the rusted pipes.

Is the water filtered by the SCALE-TAC Water Conditioner?

No, it's not a filter. It doesn't trap the hardness nor does it exchange anything for the hardness. The media is in constant UPWARD motion and flows from the bottom to the top as a liquid in the mineral tank, so the media cannot filter the water.

The media in the SCALE-TAC system stays in a suspended state when the water is flowing. All the hardness enter the system and transformed into crystallization of ions, attach to the media for a short time until they grow to sub micron size and break free from the media, and pass along with the water.

Do microorganisms accumulate in the catalyst and must be regularly be disinfected?

No. The media does not demonstrate any filtration effects. When in service, the media is always suspended in the water and therefore microorganisms are repressed. The continuous backwash is the best action to keep the media clean; therefore, disinfecting the media granulate in most cases is not required.

What is the maximum flow rate/filter rate for use with SCALE-TAC Water Conditioner?

A contact time of 4 seconds is sufficient for a complete conversion of the temporary hardness into calcite crystals at 25 grains of hardness. Because we create a fluid bed due to the travel from bottom to top, the flow rate is limited by the height of the mineral tank.

What is the maximum operating temperature of the SCALE-TAC media?

This material of the media is considered stable under specified conditions of usage. The SCALE-TAC media will tolerate feed water temperature in between 41-120° F.

pH Range: What is the pH range of the media?

The Media works in a range of 6 to 9 pH, and is highly recommended to be used at that range to avoid any malfunction to the system.

However, we also found that it works at 5.5 pH as well. (We always recommend that you do a pilot to find out if your water is below 6 pH).

How can I test the media? What results tell me that the system is working?

Depending on the flow rate (and the contact time) the pH may decrease by 0.5 units and the TDS value is reduced significantly. When hardness is falling out of solution into a hard crystal form, you get the lower TDS reading. We had a TDS reduction between 10 to 20% depending on the contact time and depending on the original TDS value.

You can witness a convincing result by trying the following method. First, you need to prepare two saucepans and place them on a heater. Fill one Saucepan with the untreated water and the other Saucepan with water treated by the SCALE-TAC Water Conditioner. As the water boils down the untreated water, water will build a hard scum on the side of the saucepan. The saucepan with treated water will have no hardness scum on the side. You may see a circulation of hardness crystals on the bottom of the pan just before the water is boiled out. The residual white spot can easily be wiped off with a towel.

You can also observe the heating equipment and appliances that were already covered with scales. A few days after installing the SCALE-TAC Water Conditioner, you will notice that any existing white scale will begin to disappear, and appliances will soon be free of new scale buildup.



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