



THE BENEFITS OF AN AQUA OTTER WATER SOFTENER



IN THE BATHROOM

Your soap and shampoo will lather better. Your hair and skin will feel noticeably cleaner, softer and not as dry. Additionally, there will be no soap scum or mineral deposits to clean off sinks, showers, tubs and toilets.

Uses LESS water & salt than any other system in the industry!



IN THE KITCHEN

Dishes will clean up more easily, and be spot-free, without the gray film glass gets when etched by mineral laden wear. Plus skin will feel softer and look better.



IN THE LAUNDRY

Clothes will be softer, cleaner, and brighter, and last longer. Using soft water and pure soap products increases the life of clothing, towels and linens up to 33%. Without hard water service issues, washing machines will last longer, too.



PLUMBING AND APPLIANCES

Appliances that use water will last longer and run better. Why? Because water heaters, washing machines and dishwashers using hard water can wear out 30% faster.

Hard Water



AQUA OTTER RESIDENTIAL WATER SOFTENERS

You and your family deserve the highest quality water available. Soft water you can feel each time you shower or feel the softness of the towel when drying after that shower. Each Water Conditioner is designed to specifically address the water quality issues that are unique to your home providing your family with outstanding water. Your investment will reward you with quality water at every faucet in your home.



Aqua Otter Water Systems

Common Water Issues

Municipal, rural or private well water supplies can contain hardness minerals (calcium and magnesium), iron, rust, sediment and a variety of other contaminants. These minerals form a scale and create problems in water heaters, washing machines, dishwashers, coffee makers, humidifiers and plumbing systems. Aqua Otter Water conditioners and drinking water systems are designed to reduce these unwanted contaminants providing your family with a refreshing difference, saving you money now and in the years to come.

The Process of ION exchange

A water softener works using the process of ion exchange, exchanging the hardness mineral ions, (calcium and magnesium), with the softening ions of the resin. After the system has used all the softening ability it will automatically regenerate, restoring the systems ability to soften. During the regeneration process, a salt solution from the brine tank flushes the hardness ions off the resin recharging the system with sodium, an exchange of ions, before being sent to the drain.

Residential WATER softeners

The control valve has been engineered to provide years of trouble-free service. The key to the exceptional quality of the control is in the state-of-art design. By using a patented one piece expanding seal spacer stack assembly and a patented linearly reciprocating piston operation, the control valve design provides optimum service and backwash rates. The valve is one of the most advanced controls available.



System shown with Electronic Meter Control, Brine Tank, optional Tank Jacket and Deluxe Brine Tank Cover



Hard Water



Professional Series Control Valve

- Water use is monitored for peak efficiency (Meter Controls)
- Built in backup of settings during power outages
- Simple diagnostics and design provide for easy maintenance
- Control prevents regeneration if water usage is detected within 10 minutes prior to the start of regeneration
- Two relays to control additional equipment

- Proportional brining

SYSTEM FEATURES AND OPTIONS

- The control features solid state microprocessors with easy access front panel settings
- Three modes of operation meter immediate, meter delayed, or time clock delayed
- Treated water brine tank refill
- Proportional brining available, provides for optimum efficiency and salt savings
- Double backwash feature, offers optimum regeneration, cleaning ability, and efficiency
- Days override - 1 - 28 day's available
- Softener systems up to 21" diameter tanks
- Down-flow or up-flow regeneration
- Stores system configuration and operation data in non-volatile memory
- Capacitor back-up with two-hour power carry over
- 15 VDC transformer provides safe and easy installation
- Control valve design provides optimum service and backwash rates
- Back-lit display
- Optional stylish tank covers help reduce condensation on the mineral tank

The arrows show the flow of water through the system as it's softened.

Residential Softener System Specifications

Grains Capacity	32,000	48,000	64,000	80,000
Grains Capacity/Capacity₂	30K/24K	45K/36K	60K/48K	75K/60K
Cubic Ft. Material	1.00	1.50	2.00	2.50
Pounds Material	50	75	100	125
Service Flow Rate, GPM*	9	12	13	18
Approximate Dimensions (in.)	33W x 57H x 19D	34W x 63H x 19D	36W x 57H x 19D	37W x 63H x 19D
Approximate Weight	98#	124#	152#	219#
Mineral Tank Size	9" x 48"	10" x 54"	12" x 48"	13" x 54"
Backwash Flow₃	2.0	2.4	3.5	4.0

OTHER SIZES AVAILABLE IN ADDITION TO WHAT IS SHOWN ABOVE.

(1) At 15 pounds per cubic foot = 30,000 Gr. C.F. (2) At 9 pounds per cubic foot = 24,000 Gr. C.F. (3) Backwash flow with standard basket distributor
*Note - due to varying water conditions, water pressures and assembly materials the service flow rate should be used only as a guideline.
The standard resin is certified, however system media may vary based on water analysis to optimally treat specific water problems.

Hard Water Treatment



AQUA OTTER RESIDENTIAL & LIGHT COMMERCIAL TWIN SOFTENERS

You and your family deserve the highest quality water available. Softness you can feel each time you shower or feel the towel when drying after that shower. Unlike a single tank water softener, a twin tank system allows for continuous soft water 24/7. Each Water Conditioner is designed to specifically address extremely hard water issues that are unique to your home providing your family with outstanding water. Your investment will reward you with quality water at every faucet in your home.

AQUA OTTER TWIN SOFTENER

For Excessive Hard Water Treatment

COMMON WATER ISSUES

Municipal, rural and private well water supplies can contain hardness minerals (calcium and magnesium), iron, rust, sediment and a variety of other contaminants. These minerals form a scale and create problems in water heaters, washing machines, dishwashers, coffee makers, humidifiers and plumbing systems. Our Water conditioners are designed to reduce these unwanted contaminants providing your family with a refreshing difference, saving you money now and in the years to come.

THE PROCESS OF ION EXCHANGE

A water softener works using the process of ion exchange, exchanging the hardness mineral ions, (calcium and magnesium), with the softening ions of the resin. After the system has used all the softening ability it will automatically regenerate, restoring the systems ability to soften. During the regeneration process, a salt solution from the brine tank flushes the hardness ions off the resin recharging the system with sodium, an exchange of ions, before being sent to the drain.

TWIN TANK CONVENIENCE

Unlike a single tank, the twin tank system allows for continuous soft water by switching to the second tank before going into regeneration giving you soft water **24 hours a day, 7 days a week.**

The control valve has been engineered to provide years of trouble-free service. The key to the exceptional quality of the control is in the state-of-art design. By using a patented one piece expanding seal spacer stack assembly and a patented linearly reciprocating piston operation, the control valve design provides optimum service and backwash rates. The valve is one of the most advanced controls available.

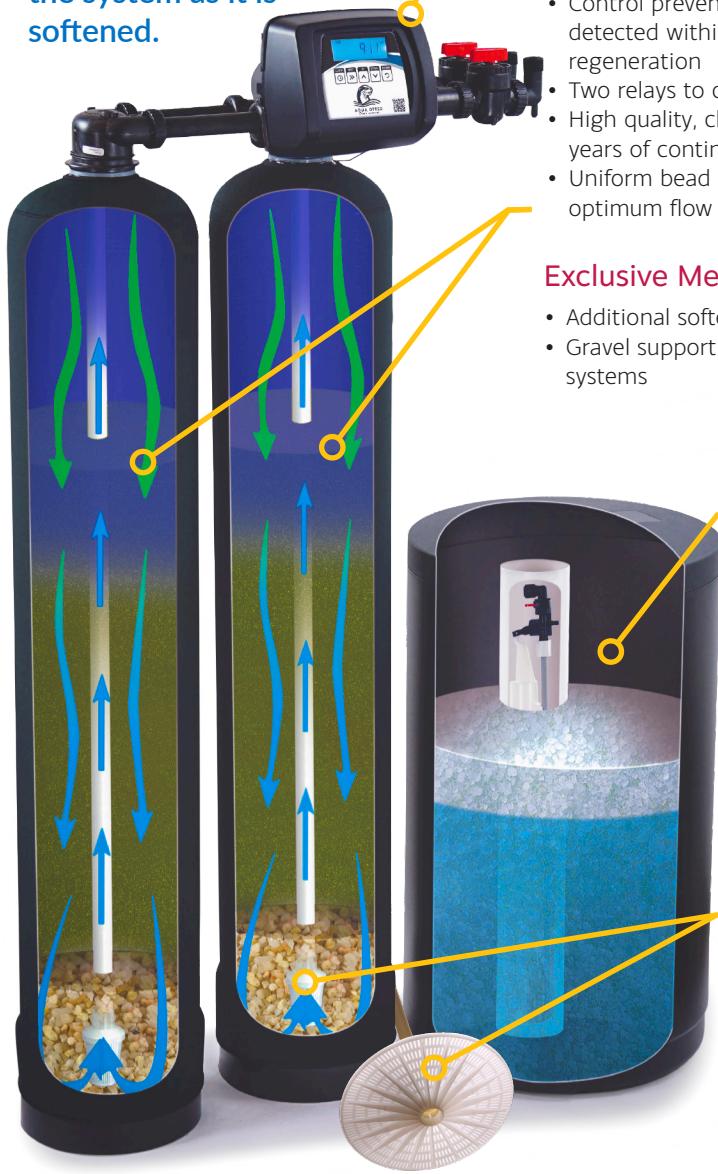


System shown with Electronic Meter Control, Brine Tank, optional Tank Jacket and Deluxe Brine Tank Cover



HARD WATER TREATMENT

The arrows show the flow of water through the system as it is softened.



Professional Series Control Valve

- Water use is monitored for peak efficiency
- Built in backup of settings during power outages
- Regenerates only when necessary saving salt and water
- Simple diagnostics and design provide for easy maintenance
- Control prevents regeneration if water usage is detected within 10 minutes prior to the start of regeneration
- Two relays to control additional equipment
- High quality, chlorine resistant media bed, for years of continuous service
- Uniform bead size and distribution for optimum flow rates

Exclusive Media Bed

- Additional softening resins available
- Gravel support bed shown used on larger systems

High Quality Brine Tank

- High quality, durable construction
- Safety float system helps prevent overflow of the brine tank
- Constructed of corrosion-free materials
- Larger brine tank sizes available

Vortech Style Distribution System

- Delivers evenly distributed and high quality flows
- Empress Vortech™ plate style tanks available, Vortech creates better backwashing and cleaning action of medias and shorter backwashing requirements resulting in water savings

SYSTEM FEATURES AND OPTIONS

- The control features solid state microprocessors with easy access front panel settings
- Double backwash feature, offers optimum regeneration, cleaning ability, and efficiency
- Days override feature 1 - 28 day's available
- Softener systems available up to 21" diameter tanks
- Down-flow or up-flow regeneration
- Stores system configuration and operation data in non-volatile memory
- Capacitor back-up with two-hour power carry over
- 12 volt transformer provides safe and easy installation
- Control valve design provides optimum service and backwash rates
- Treated water brine refill
- Back-lit display
- Optional stylish tank covers help reduce condensation on the mineral tank

Residential Twin Softener System Specifications

Grains Capacity per Tank	32,000	48,000	64,000	80,000
Grains Capacity ₁ /Capacity ₂	30K/24K	45K/36K	60K/48K	75K/60K
Cubic Ft. Material per Tank	1.00	1.50	2.00	2.50
Pounds Material per Tank	50	75	100	125
Service Flow Rate, GPM*	9	12	13	18
Approximate Dimensions	44W x 57H x 20D	46W x 63H x 20D	50W x 57H x 20D	52W x 63H x 20D
Approximate Weight	188#	230#	292#	360#
Mineral Tank Size	9" x 48"	10" x 54"	12" x 48"	13" x 54"
Backwash Flow GPM ₃	2.0	2.4	3.5	4.0

OTHER SIZES AVAILABLE IN ADDITION TO WHAT IS SHOWN ABOVE.

(1) At 15 pounds of salt per cubic foot of resin = 30,000 Grains/Cubic Foot (2) At 9 pounds of salt per cubic foot = 24,000 Gr. C.F. (3) Backwash flow rate in Gallons Per Minute with standard basket distributor
*Note - due to varying water conditions, water pressures and assembly materials the service flow rate should be used only as a guideline.
System media may vary based on water analysis to optimally treat specific water problems.