

components, features and state-of-the-art design go into every system providing you with years of high quality, conditioned water.

The Mid-Vortech® tank maximizes the media efficiency with two separate media chambers in one tank.





# BENEFITS OF A NELSEN WATER SOLUTIONS SYSTEM



#### 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.



#### 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 hands 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.

Nelsen Corporation is the largest family-owned manufacturer/ distributor of water treatment products in the United States. Headquartered in Akron, Ohio with additional distribution centers in Arizona, Texas and Florida, our company has seen substantial growth over the years. Since 1954 Nelsen Corporation has remained committed to the professional water treatment dealer, their customers and the communities that they serve. Our Signature Line of water treatment equipment incorporates the very best components from some tremendous U.S. based manufacturers. More than 65 years of experience in water treatment have been incorporated into our Signature Line of systems yielding the very best equipment for your family or your business.

# NELSEN WATER SOLUTIONS SIGNATURE SERIES

## **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. Nelsen 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.

## **DUAL MEDIA WATER CONDITIONERS**

Dual media conditioners are designed to treat chlorine, hardness, tastes and odors in the water. The Mid-Vortech™ tank maximizes the media efficiency with two separate media chambers in one tank. The lower chamber contains the media to soften your water, and the upper chamber has an activated carbon to remove objectionable tastes and odors. Your professional water treatment dealer may also utilize this chamber for an alternative filter media to treat your specific water issues.



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



# Top Media Bed

- · Activated Carbon filter media reduces chlorine levels while removing unpleasant tastes and odors. Chlorine removal may also extend the life of the softening resin
- Your water treatment professional may use an alternative filter media to treat your specific water quality issues

#### Bottom Media Bed

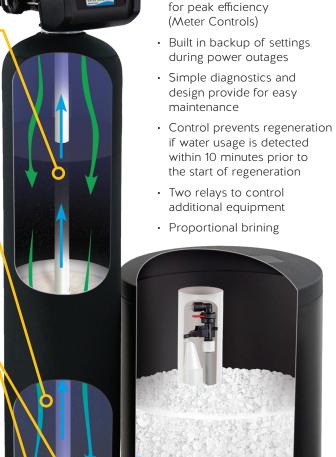
- High quality, chlorine resistant media bed for years of continuous service
- · Uniform bead size and distribution for optimum flow rates

#### Mid-Vortech® Style Distribution System

- Delivers evenly distributed and high quality flows
- Large surface area of plate yields lower pressure drop over time
- Up to 30% less water is required for backwash flow rate thus conserving water
- · High flow design maximizes today's high efficiency valve technology
- Dual media chambers keep media separate for more contact time and efficiency
- Most efficient softening regeneration, reducing salt consumption

#### Professional Series Control Valve

· Water use is monitored for peak efficiency



# SYSTEM FEATURES AND OPTIONS

- The Signature Series 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.

Signature Series Residential Softener System Specifications		
Grains Capacity	32,000	64,000
Grains Capacity¹/Capacity²	30K/24K	64K/48K
Cubic Ft. Material Top/Bottom	1/2 CF Top - 1 CF Bottom	1-1/2 CF Top - 2 CF Bottom
Pounds Material Top/Bottom	75	125
Service Flow Rate, GPM*	12	18
Approximate Dimensions (in.)	34W x 63H x 19D	37W x 63H x 19D
Approximate Weight	124#	219#
Mineral Tank Size	10" x 54"	13" x 54"
Backwash Flow <sup>3</sup>	2.4	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