



Air Injection Oxidation

Does your water smell like rotten eggs? Do your sinks & toilets have orange staining? The Nelsen Water Solutions (NWS) Signature Series AIO® Air Injection Oxidation Filter System may be the answer to your water problems. The NWS Signature Series AIO, as a single tank system, is an efficient and cost effective solution.

NELSEN™
WATER SOLUTIONS
Signature Series

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Benefits of a Nelsen Water Solutions System

Reduce Iron Staining

Iron staining is a common problem in homes today. It causes orange staining on fixtures, as well as dingy clothes and sometimes can have negative effects on both hair and skin.

Reduce Sulfur Smell

Sulfur is easily detected by the presence of a “rotten egg” odor, and is sometimes associated with yellow staining.

Protect your Appliances

By reducing the iron and sulfur buildup in your water your appliances will last longer. Rust and slime buildup make your appliances work harder and less efficiently, requiring more maintenance or replacement.

Efficient and Chemical Free

The need for additional equipment...air tanks, feed pumps, or harsh chemicals (like those used in Manganese Greensand Systems) is virtually eliminated!

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.

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Nelsen Water Solutions Signature Series AIO®

Not all air systems are alike!

The Nelsen Water Solutions Signature Series AIO features a unique patented process. Most systems purge the air pocket in the tank violently during the regeneration process potentially damaging plumbing and creating an excessive amount of noise. Our patented-process slowly releases the air pocket during regeneration before replenishing the tank with a fresh pocket of air. Additionally, our system will delay the regeneration process and air release if water is being used in the home or business. Once water flow stops, the regeneration process begins slowly releasing the air from the system. On some competitive systems, water use will prevent the release of air due to the internal design limitations of the control valve or violently release the air once water flow stops. Your Professional Water Treatment Dealer can explain the important advantages of the NWS Signature Series AIO with Control Flow Technology.

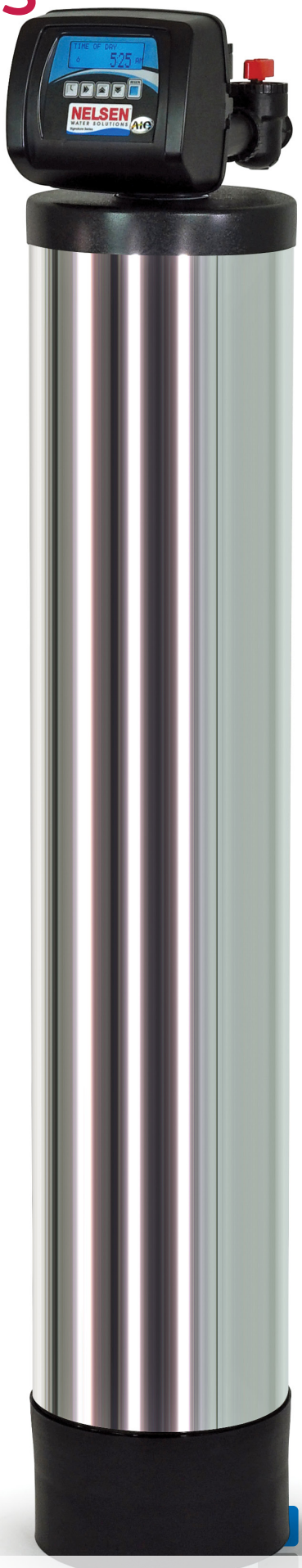
Removes Iron and Sulfur

Iron, Manganese and Sulfur, naturally occurring elements, can be removed using nature's own process of oxidation. The Signature Series AIO with Control Flow Technology maintains an "air pocket" in the top of the tank while the system is in service. As water passes through the air pocket, these elements are oxidized. The NWS AIO media bed then filters the oxidized iron, manganese and sulfur from the water. Additionally, dissolved oxygen is added to the water.

The AIO System can remove up to 7 ppm Iron and up to 8 ppm Sulfur.
A daily backwash will remove accumulated iron and re-oxidize the filter media bed. The regeneration process also adds a fresh air pocket to the system.

By reducing the iron and sulfur buildup in your water your appliances will last longer. Appliances that use iron-laden water, such as hot water heaters, dish or clothes washers, work harder, less efficiently and wear out faster than those using treated water.

Your Professional Water Conditioning Dealer is trained and dedicated to providing the best solution for your home and your family.



NWS AIO System w/Control Flow Technology, shown with optional Chrome Tank Jacket & Bypass Valve

NELSEN™ WATER SOLUTIONS
Signature Series
AIO® Control Flow

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Professional Series Control Valve

- Patented technology provides a slow, quiet release to drain
- Control Valve delays the start of regeneration if water usage is detected
- Built in backup of settings during power outages
- Simple diagnostics and design provide for easy maintenance
- Easy to read back-lit display

Oxidation Air Pocket

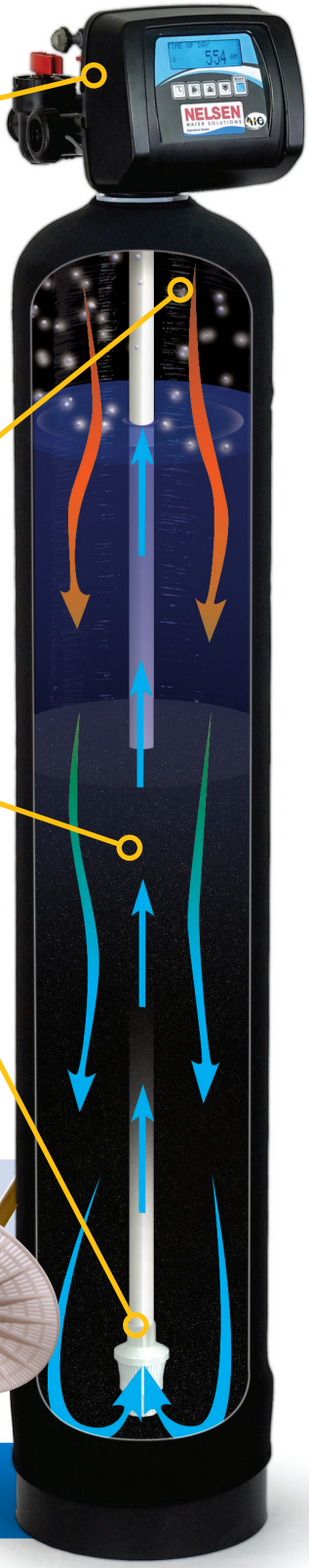
- As water passes through the air pocket, iron, sulfur and manganese are oxidized. The media bed then removes the oxidized contaminants from the water, additionally, dissolved oxygen is added to the water

Exclusive Media Bed

- Custom blends of media for efficient reduction of iron, sulfur and manganese
- Custom blend of media used for support bed of filter media

Basket Style Distribution System

- Delivers evenly distributed and high quality flows



Optional Enpress® Vortech® Plate Tank style distribution system, provides increased backwash efficiency using less water and saving money



Patent No.: US 8,691,091 B2

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

System Features and Options

- The "Signature Series" control features solid state microprocessors with easy access front panel settings
- Systems are efficient and chemical free
- Fully adjustable regeneration cycles save water
- Days override feature 1 to 28 days available
- Extended lithium ion battery backup
- Stores system configuration and operation data in non-volatile memory
- Capacitor back-up with two-hour power carry over
- Advanced history and diagnostic screens
- High quality filtration medias to target specific water problems
- 12 volt transformer provides safe and easy installation
- Control valve design provides optimum service and backwash rates
- Back-lit display
- Optional stylish tank jackets help reduce tank condensation



"Signature Series" Air Injection Oxidation System Specifications

Filter Media Capacity (cu ft)	1.25	1.5	2.0	2.5
Mineral Tank Size	10" x 44"	10" x 54"	12" x 52"	13" x 54"
Service Flow Rate - Peak	7.0 gpm	8.0 gpm	11.5 gpm	13.0 gpm
Approximate Dimensions (In.)	11W x 52H x 17D	11W x 62H x 17D	13W x 60H x 17D	14W x 62H x 17D
Approximate Weight - Pounds*	115# - 118#	120# - 167#	140# - 186#	185# - 222#

*System weights dependent on media used in the various systems, Iron, Sulfur, or Katalox systems.

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