

HydroxR™ Treatment System



With "WS" Series Control Valves



Our **HydroxR™ Treatment System** combines aggressive aeration technology with the oxidation power of hydrogen peroxide for treatment of virtually unlimited levels of iron, manganese and sulfur gas. At the same time, bacteriological forms of these constituents are controlled without the creation of chemical byproducts, contact tanks or the on going maintenance of rebedding carbon filters. The included chemical feed pump package is equipped with a Degas head for self-priming operation. Only the highest quality controls and materials are used. Our motor-driven piston control valve is the most reliable under even severe water conditions and resists common adversaries such as dirt, iron and turbidity. Designed for use in commercial, industrial or domestic water applications.

As we remain **Committed to Innovation**, **CSI** provides the design and engineering support to ensure the most effective treatment solution for each installation. For a stand-alone installation or a new construction project, replace or integrate new equipment into an existing process, we have the proper system options available to meet your needs.



CSI WATER TREATMENT SYSTEMS – Commercial Division
710 Orange Street, Ashland Ohio USA 44805
Toll-Free 1-888-363-9434 • Phone 419-281-6829 • Fax 419-281-2375
www.csih2o.com

Standard Features

- Combines Aggressive Pressurized Aeration with the Oxidation Power of Hydrogen Peroxide (H₂O₂)
- Treats Extreme Levels of Iron, Manganese & Sulfur
- Disinfection Properties to Treat Iron, Manganese & Sulfur Bacteria
- Catalog Systems to 105 gpm
- Catalog Models for Pressure Systems (traditional 3450 rpm Submersible Pumps)
 - or- Clean Water Backwash Systems (Installed Ahead of Atmospheric Tank)
 - or- Pressure Variable Speed System (Constant Pressure, Jet Pumps or Other Low Inlet Pressure Applications)
- Maximum Operating Pressure – 125 psi/110° F
- Clack™ Control Valves
- Aeration Manifold Assembly Machined from Solid PVC Barstock
- Automatic Self-Regulating Air Volume Control
- Filter-Ag Plus® Filter Media
- No Raw Water Bypass
- Chemical Feed Pump & Solution Tank
- Electronic Control Valves

Options

- 2750, 2850, or 3150 Top-mount Control Valves
- Multiple Aeration Tank Sizes
- Extra Chemical Injection Ports on Aeration Manifold
- Side-mount Control Valves
- Flow Management with Motorized Ball Valves or Staged Diaphragm Valves
- Water Quality Monitor Initiated Regeneration
- Custom Designed Systems, for Higher Flow Rates
- Various Filter Medias
- Steel and ASME Rated Pressure Vessels

Typical Use:

- Large Scale Irrigation
- Public Water Systems
- Dairy Operations
- Industrial Pre-treatment
- Hotels/Motels
- Apartments/Condos
- Nursing Home/ Assisted Living
- Laundry Facilities
- Food/Beverage Mfg.
- Livestock Operations
- Schools
- Hospitals

Product Specifications

Commercial HydroxR™ Treatment System

MODEL NUMBERS		Service GPM		Backwash Flow GPM	Pipe Size NPT		Filter Tank		Cu.Ft. Media Per System
PRESSURE SYSTEMS	VARIABLE SPEED SYSTEMS	Continuous Flow Rate	Peak Flow Rate		Ctrl Valve Conn Size	Drain Line	Tank Size	Tank Qty	
CUTP25-102-WS	CUTP25-102VS-WS	9	14	13.5-15	1"	3/4"	13" x 54"	2	5
CUTP40-102-WS	CUTP40-102VS-WS	14	20	20	1"	3/4"	16" x 65"	2	8
CUTP50-102-WS	CUTP50-102VS-WS	18	22	25	1"	3/4"	18" x 65"	2	10
CUTP40-103-WS	CUTP40-103VS-WS	21	24	20	1"	3/4"	16" x 65"	3	12
CUTP50-103-WS	CUTP50-103VS-WS	27	30	25	1"	3/4"	18" x 65"	3	15
CUTP70-153-WS	CUTP70-153VS-WS	36		35	1 1/2"	1 1/4"	21" x 62"	3	21
CUTP100-153-WS	CUTP100-153VS-WS	45		45	1 1/2"	1 1/4"	24" x 72"	3	30
CUTP100-154-WS	CUTP100-154VS-WS	60		45	1 1/2"	1 1/4"	24" x 72"	4	40
CUTP140-203-WS	CUTP140-203VS-WS	75		70	2"	2"	30" x 72"	3	42
CUTP140-204-WS	CUTP140-204VS-WS	100		70	2"	2"	30" x 72"	4	56
CUTP180-203-WSH	CUTP180-203VS-WSH	105		105	2"	2"	36" x 72"	3	54

Manganese Removal

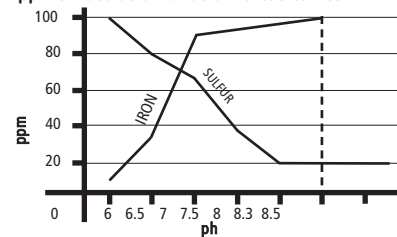
HydroxR™ capability to remove Manganese from water is critically dependent on the Iron and pH levels as shown below:

If the Iron to Manganese ratio is:	Then the pH must be at least:
5:1	7.0
1:1	7.8
0:1	8.3

- For "Pressure System" models, at rated GPM, the inlet PSI at the HydroxR™ Tank must be at least 25 PSI higher than max PSI at service. If supply pump cannot achieve this pressure, then use "Variable Speed Systems"
- If needed, pH can be increased by injecting soda ash or caustic into the HydroxR™ Tank Manifold

Iron and Sulfur Removal

For effective Iron and Sulfur removal, your ppm's must be on or below these curves



Operating Information

For use on Potable Water Only
Do not use on microbiologically unsafe or unknown quality water
Installation must comply with state and local plumbing/electrical codes
Tank warranty void if subject to vacuum

Water Temperature Range 35° – 110°F
Ambient Air Temperature Range 35° – 110°F
Operating Pressure Range 20 – 125 psi
Electronic Requirements 110v/60Hz

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