



# HydroxR™ Treatment Systems

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, Chandler Systems** 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.



**Chandler Systems**

710 Orange Street, Ashland, OH 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 (H<sub>2</sub>O<sub>2</sub>)
- 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	Pipe Size NPT		Filter Tank		Cu.Ft. Media
PRESSURE SYSTEMS	VARIABLE SPEED SYSTEMS	Continuous Flow Rate	Peak Flow Rate	Flow GPM	Ctrl Valve Conn Size	Drain Line	Tank Size	Tank Qty	Per System
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:

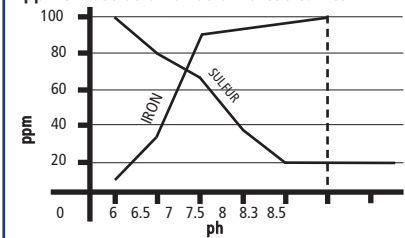
If the Iron to Manganese ratio is:	Then the pH must be at least:
5:1	7.0
1:1	7.8
0:1	8.3

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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