

Single-Tank Water Softener



With "WS" Series Control Valves



Automatically reduce hardness (calcium/magnesium) and dissolved iron/manganese along with their unpleasant side-effects. Only the highest quality resin, controls and materials are used in Chandler Systems Commercial Water Softeners. Our motor-driven piston control valve is the most reliable under even severe water conditions and resists common adversaries such as hardness and iron. Meanwhile, our hub and lateral style or Vortech™ distribution systems within the corrosion resistant tanks maximize flow while reducing pressure loss through the units. 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.

Standard Features

- High Flow Control Valves thru 3" – Flow Rates 200+ gpm
- Up to 1.2 Million Grain Tank Capacity per Tank
- Maximum Operating Pressure – 125 psi/110° F
- Clack™ Control Valves
- Time Clock or Electronic Meter Regeneration
- Premium Cation Resin – 30K grains/cu.ft.
- Hard Water Bypass
- Brine Tank – HDPE material, Salt Grid Plate or Gravel Underbed, Safety Brine Valve (30" & smaller diameter), Air Check and Overflow

Options

- Clean Water Backwash
- No Hard Water Bypass
- 2750, 2850, 2900, or 3900 Top-mount Control Valves
- Electro-Mechanical Control Valve
- Steel and ASME rated Pressure Vessels
- Mechanical Flow Meter
- Side-mount Control Valves
- Flow Management with Motorized Ball Valves or Staged Diaphragm Valves
- Water Quality Monitor Initiated Regeneration
- High Capacity Resin

Typical Use:

- Boiler Feed
- Cooling Tower
- Schools
- Light Industrial
- Hotels/Motels
- Apartments
- Nursing Home/ Assisted Living
- Condominiums
- Car/Truck Wash
- Corporate Campus
- Hospitals



CSI WATER TREATMENT SYSTEMS – Commercial Division
710 Orange Street, Ashland Ohio USA 44805
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Product Specifications

Commercial Water Softener Specs

Model No.	GPM FLOW RATES				PIPE SIZE NPT		GRAINS EXCH CAP @ LBS SALT	RESIN TANK		BRINE TANK		OVERALL HEIGHT
	SERVICE		PEAK	BACK WASH	SERVICE	DRAIN		CU.FT. RESIN	SALT CAPACITY			
	15 PSI Loss	8 PSI Loss	25 PSI Loss				MAXIMUM		DIA X HT	DIA X HT	LBS	
CTS60-10WS	21	15	28	4.2	1"	3/4"	60,000 GR @ 30 # 40,000 GR @ 12 #	14" x 65"	2	18" x 40"	300	73"
CTS60-12WS	27	20	35	4.2	1-1/4"	3/4"						73"
CTS60-15WS	36	26	46	4.2	1-1/2"	3/4"						73"
CMS60-10WS	20	15	27	4.2	1"	3/4"						73"
CMS60-12WS	26	19	35	4.2	1-1/4"	3/4"						73"
CMS60-15WS	35	26	45	4.2	1-1/2"	3/4"						73"
CTS90-10WS	20	15	27	4.2	1"	3/4"	90,000 GR @ 45 # 60,000 GR @ 18 #	14" x 65"	3	18" x 40"	300	73"
CTS90-12WS	25	18	34	4.2	1-1/4"	3/4"						73"
CTS90-15WS	33	24	44	4.2	1-1/2"	3/4"						73"
CMS90-10WS	19	14	26	4.2	1"	3/4"						73"
CMS90-12WS	24	18	33	4.2	1-1/4"	3/4"						73"
CMS90-15WS	32	24	43	4.2	1-1/2"	3/4"						73"
CTS120-10WS	21	15	28	5.3	1"	3/4"	120,000 GR @ 60 # 80,000 GR @ 24 #	16" x 65"	4	24" x 50"	700	73"
CTS120-12WS	26	19	35	5.3	1-1/4"	3/4"						73"
CTS120-15WS	36	26	50	5.3	1-1/2"	3/4"						73"
CTS120-20WS	47	34	60	5.3	2"	3/4"						74"
CMS120-10WS	20	15	27	5.3	1"	3/4"						73"
CMS120-12WS	25	18	34	5.3	1-1/4"	3/4"						73"
CMS120-15WS	35	26	49	5.3	1-1/2"	3/4"	73"					
CMS120-20WS	46	34	59	5.3	2"	3/4"	74"					
CTS150-12WS	28	20	37	7.5	1-1/4"	3/4"	150,000 GR @ 75 # 100,000 GR @ 30 #	18" x 65"	5	24" x 50"	700	76"
CTS150-15WS	40	29	54	7.5	1-1/2"	3/4"						75"
CTS150-20WS	53	39	69	7.5	2"	3/4"						76"
CMS150-12WS	27	20	35	7.5	1-1/4"	3/4"						76"
CMS150-15WS	39	28	53	7.5	1-1/2"	3/4"						75"
CMS150-20WS	52	38	68	7.5	2"	3/4"						76"
CTS210-15WS	43	31	58	10	1-1/2"	1"	210,000 GR @ 105 # 140,000 GR @ 42 #	21" x 62"	7	24" x 50"	700	75"
CTS210-20WS	66	48	85	10	2"	1"						76"
CMS210-15WS	42	31	56	10	1-1/2"	1"						75"
CMS210-20WS	65	47	83	10	2"	1"						76"
CTS300-15WS	45	33	60	13	1-1/2"	1"	300,000 GR @ 150 # 200,000 GR @ 60 #	24" x 72"	10	30" x 50"	1000	82"
CTS300-20WS	73	53	94	13	2"	1"						83"
CMS300-15WS	44	32	58	13	1-1/2"	1"						82"
CMS300-20WS	71	52	91	13	2"	1"						83"
CTS450-20WS	84	61	109	20	2"	1"	450,000 GR @ 225 # 300,000 GR @ 90 #	30" x 72"	15	30" x 50"	1000	86"
CTS450-30WS	144	105	186	20	3"	1-1/2"						89"
CMS450-20WS	81	59	105	20	2"	1"						86"
CMS450-30WS	138	101	179	20	3"	1-1/2"						89"
CTS600-20WS	93	68	119	30	2"	1-1/2"	600,000 GR @ 300 # 400,000 GR @ 120 #	36" x 72"	20	42" x 60"	2900	94"
CTS600-30WS	172	126	222	30	3"	1-1/2"						97"
CMS600-20WS	89	65	114	30	2"	1-1/2"						94"
CMS600-30WS	163	119	210	30	3"	1-1/2"						97"
CTS900-30WS	187	137	242	40	3"	2"	900,000 GR @ 450 #	42" x 72"	30	50" x 60"	4100	109"
CMS900-30WS	175	128	227	40	3"	2"	600,000 GR @ 180 #	42" x 72"	30	50" x 60"	4100	109"
CTS1200-30WS	194	142	251	50	3"	2"	1,200,000 GR @ 600 #	48" x 72"	40	50" x 60"	4100	106"
CMS1200-30WS	181	132	234	50	3"	2"	800,000 GR @ 240 #	48" x 72"	40	50" x 60"	4100	106"

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

120v/12vac (10WS-20WS), 20vac (20WSH-30WS) CUL/UL listed transformer

included with electronic meter systems

Tank warranty void if subject to vacuum

Low flow channeling – less than .5 gpm/cu. ft. resin – may cause hardness leakage

Water Temperature Range

Ambient Air Temperature Range

Operating Pressure Range

35° – 110°F

35° – 120°F

20 – 125 psi

Electronic Requirements

Influent Turbidity

Influent Chlorine

Iron/Manganese

110v/60Hz

5 NTU

1 ppm max.

< 5 ppm

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