

## Single-Tank Water Softeners

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<sup>TM</sup> 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, Chandler Systems** provides the design and engineering support to ensure the most effective treatment solution for each installation. For a standalone 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
- **d** 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
- **d** Condominiums
- Car/Truck Wash
- Corporate Campus
- **d** Hospitals



# **Product Specifications**

### **Commercial Water Softener Specs**

	GPM FLOW RATES				PIPE SIZE		GRAINS EXCH CAP	RESIN TANK		BRINE TANK		
Model No.	SER	/ICE	PEAK		NPT		@ LBS SALT	CU.FT. RESIN		SALT CAPACITY		H F
	15 PSI Loss	8 PSI Loss	25 PSI Loss	BACK WASH	SERVICE	DRAIN	MAXIMUM MINIMUM	DIA X HT		DIA X HT	LBS	OVERALL HEIGHT
CTS60-10WS	21	15	28	4.2	1"	3/4"	60,000 GR @ 30 # 40,000 GR @ 12 #			18" x 40"		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"		14" x 65"	2		300 -	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"						73"
CTS90-12WS	25	18	34	4.2	1-1/4"	3/4"	90,000 GR @ 45 # 60,000 GR @ 18 #	14" x 65"	3	18" x 40"	300	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"						73"
CTS120-12WS	26	19	35	5.3	1-1/4"	3/4"	120,000 GR @ 60 # 80,000 GR @ 24 #	16" x 65" 4	4	4 24" x 50"	700	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"						76"
CTS150-12WS CTS150-15WS	40	29	54	7.5	1-1/4"	3/4"	150,000 GR @ 75 # 100,000 GR @ 30 #	18" x 65"		5 24" x 50"	700	75"
CTS150-20WS		39	69		2"				5			
CMS150-20WS	53 27	20	35	7.5 7.5	1-1/4"	3/4" 3/4"						76" 76"
		-			-							-
CMS150-15WS CMS150-20WS	39	28	53	7.5	1-1/2"	3/4"						75"
	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 50"	1000	86"
CTS450-30WS	144	105	186	20	3"	1-1/2"		30" x 72"	15			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				94"
CTS600-30WS	172	126	222	30	3"	1-1/2"			42" x 60"	2900	97"	
CMS600-20WS	89	65	114	30	2"	1-1/2"					2000	94"
CMS600-30WS	163	119	210	30	3"	1-1/2"						97"
CTS900-30WS	187	137	242	40	3"	2"	900,000 GR @ 450 # 600,000 GR @ 180 #	42" x 72" 30	50" x 60"	4100	109"	
CMS900-30WS	175	128	227	40	3"	2"		74 814	30	30 X 00	4100	109"
CTS1200-30WS	194	142	251	50	3"	2"	1,200,000 GR @ 600 #	48" x 72"	2" 40	50" x 60"	4100	106"
CMS1200-30WS	181	132	234	50	3"	2"	800,000 GR @ 240 #	40 X 12	40	30 X 00	4100	106"

### Operating Information For use on Potable Water Only

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 35° – 110°F Ambient Air Temperature Range 35° – 120°F Operating Pressure Range 20 – 125 psi

Electronic Requirements110v/60HzInfluent Turbidity5 NTUInfluent Chlorine1 ppm max.Iron/Manganese< 5 ppm</td>

### **Committed to Innovation**

**Chandler Systems** 

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