

Multi-Tank Water Softeners



Standard Features

- High Flow Control Valves thru 3" – Flow Rates 700+ gpm
- Up to 1.2 Million Grain Tank Capacity per Tank
- Maximum Operating Pressure – 125 psi/110° F
- Fleck™ Top-mount Control Valves
- Electronic Meter Regeneration
- Duplex – Alternating Tank Operation
- Triplex – Progressive Flow Operation
- Premium Cation Resin – 30K grains/cu.ft.
- No Hard Water Bypass
- Brine Tank – HDPE material, Salt Grid Plate or Gravel Underbed, Safety Brine Valve (30" & smaller diameter), Air Check and Overflow
- All Wetted Components are NSF Approved

Options

- Clean Water Backwash
- 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
- Clack™ Control Valves

Typical Use:

- Boiler Feed
- Hospitals
- Large Schools and Universities
- Industrial Pre-treatment
- Hotels/Motels
- Apartments/Condos
- Nursing Home/ Assisted Living
- Laundry Facilities
- Food Service
- Corporate Park

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 CSI 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 system 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.

CSI WATER TREATMENT SYSTEMS – Commercial Division
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Product Specifications

Commercial Multi-Tank Softeners

MODEL NUMBER	Service GPM		Peak	Backwash	Pipe Size NPT		Grains Exch Cap @ # Salt Maximum Minimum	Resin Tank			Brine Tank			Overall Ht
	15 PSI LOSS	8 PSI LOSS	25 PSI LOSS	Flow GPM	Ctrl Valve Conn Size	Drain Line		Resin Vol. cf / tank	Softener DIA x HT	Qty tanks	Brine DIA x HT	Salt # \ tank	Qty tanks	
CAT60-10	18	13	23	2) 5	1"	1/2"	60,000 GR @ 30 #	2 cf	14" x 65"	2	18" x 40"	300#	1	72"
CAT60-15	28	20	40	2) 5	1 1/2"	1"	40,000 GR @ 12 #						1	73"
CAT90-10	17	12	22	2) 5	1"	1/2"	90,000 GR @ 45 #	3 cf	14" x 65"	2	18" x 40"	300#	1	73"
CAT90-15	27	19	37	2) 5	1 1/2"	1"	60,000 GR @ 18 #						1	73"
CAT120-10	17	12	24	2) 7	1"	1/2"	120,000 GR @ 60 # 80,000 GR @ 24 #	4 cf	16" x 65"	2	24" x 50"	700#	1	72"
CAT120-15	29	21	40	2) 7	1 1/2"	1"							1	72"
CAT120-20NT	46	34	63	2) 7	2"	1"							2	77"
CAT150-15	33	24	44	2) 10	1 1/2"	1"	150,000 GR @ 75 #	5 cf	18" x 65"	2	24" x 50"	700#	1	75"
CAT150-20NT	50	37	66	2) 10	2"	1"	100,000 GR @ 30 #						2	80"
CAT210-15NT	35	25	45	2) 12	1 1/2"	1"	210,000 GR @ 105 #	7 cf	21" x 62"	2	24" x 50"	700#	1	75"
CAT210-20NT	59	43	76	2) 12	2"	1"	140,000 GR @ 42 #						2	79"
CAT300-20NT	66	48	89	2) 15	2"	1"	300,000 GR @ 150 #	10 cf	24" x 72"	2	30" x 50"	1000#	2	87"
CMS300-203QDNT	132	96	178	3) 15	2"	1"	200,000 GR @ 60 #			3			3	87"
CAT450-20NT	81	59	101	2) 25	2"	1"	450,000 GR @ 225 # 300,000 GR @ 90 #	15 cf	30" x 72"	2	30" x 50"	1000#	2	95"
CAT450-30NT	151	110	201	2) 25	3"	2"				2			2	96"
CMS450-203QDNT	162	118	202	3) 25	2"	1"				3			3	95"
CMS450-303QDNT	302	220	402	3) 25	3"	2"				3			3	96"
CMS450-304QDNT	453	330	603	4) 25	3"	2"				4			4	96"
CAT600-20NT	86	63	106	2) 35	2"	1"	600,000 GR @ 300 # 400,000 GR @ 120 #	20 cf	36" x 72"	2	42" x 60"	2900#	2	97"
CAT600-30NT	176	129	236	2) 35	3"	2"				2			2	98"
CMS600-203QDNT	172	126	212	3) 35	2"	1"				3			3	97"
CMS600-303QDNT	352	258	472	3) 35	3"	2"				3			3	98"
CMS600-304QDNT	528	387	708	4) 35	3"	2"				4			4	98"
CAT900-30NT	186	136	248	2) 50	3"	2"	900,000 GR @ 450 # 600,000 GR @ 180 #	30 cf	42" x 72"	2	50" x 60"	4100#	2	110"
CMS900-303QDNT	372	272	496	3) 50	3"	2"				3			3	110"
CMS900-304QDNT	558	408	744	4) 50	3"	2"				4			4	110"
CAT1200-30NT	196	143	257	2) 70	3"	2"	1,200,000 GR @ 600 # 800,000 GR @ 240 #	40 cf	48" x 72"	2	50" x 60"	4100#	2	107"
CMS1200-303QDNT	392	286	514	3) 70	3"	2"				3			3	107"
CMS1200-304QDNT	588	429	771	4) 70	3"	2"				4			4	107"

Duplex CAT-series - Twin Demand Alternating Tank Operation, 24v electronic timer and turbine meter

(One tank is in operation and one tank is in standby/regeneration at all times)

- 1" One Valve/One Meter with hard pipe connection to off-tank manifold
- 1-1/2" One Valve/One Meter with hard pipe connection to off-tank manifold
- 2" One Valve per Tank/One Meter per system with Electronic Interconnect
- 3" One Valve per Tank/One Meter per system with Electronic Interconnect

Triplex/Quad - "QDNT" Progressive Flow Electronic Phased Operation, 24v electronic timer and turbine meter

Electronic timers on up to 4 softeners can be linked and programmed for optimal treatment over highly variable and high flow rate applications. Systems operators program the flow rates at which each tank enters/leaves service mode. System is interlocked, allowing only one tank to regenerate at a time (immediate regeneration). Flow rates shown are assuming one tank is off-line for regeneration.

(1, 2, 3, or 4 tanks in operation depending on flow rate and regeneration status)

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/24v 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

Electronic Requirements

Influent Turbidity

Influent Chlorine

Iron/Manganese

35° – 110°F

35° – 120°F

20 – 125 psi

110v/60Hz

5 NTU

1 ppm max.

< 5 ppm

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