

Multi-Tank Water Softeners



With 2900, 3900, 9000, 9500 Series Control Valves



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
- Top-mount Control Valves
- Meter Regeneration
- Duplex – Alternating Tank Operation
- Triplex & Quadplex – 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

Options

- Clean Water Backwash
- Electro-Mechanical Control Valve
- Steel and ASME Rated Pressure Vessels
- 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
710 Orange Street, Ashland Ohio USA 44805
Toll-Free 1-888-363-9434 • Phone 419-281-6829 • Fax 419-281-2375
www.csih2o.com

Product Specifications

Commercial Multi-Tank Softeners

| Model No. | GPM FLOW RATES | | | | PIPE SIZE NPT | | GRAINS EXCH CAP @ LBS SALT (PER RESIN TANK) | RESIN TANK | | | BRINE TANK | | | OVERALL HEIGHT |
|-----------------|----------------|------------|-------------|-----------|---------------|--------|---|-------------------------|-----|----------|----------------------------|------|---|----------------|
| | SERVICE* | | PEAK* | BACK WASH | SERVICE | DRAIN | | CU.FT. RESIN (Per TANK) | | | SALT CAPACITY LBS Per TANK | | | |
| | 15 PSI Loss | 8 PSI Loss | 25 PSI Loss | | | | MAXIMUM | DIA X HT | QTY | DIA X HT | QTY | QTY | | |
| CAT60-10 | 18 | 13 | 23 | 4 | 1" | 1/2" | 60,000 GR @ 30 # 40,000 GR @ 12 # | 14" x 65" | 2 | 2 | 18" x 40" | 300 | 1 | 72" |
| CAT60-15 | 28 | 20 | 40 | 4 | 1-1/2" | 3/4" | | | | | | | | 73" |
| CAT90-10 | 17 | 12 | 22 | 4 | 1" | 1/2" | 90,000 GR @ 45 # 60,000 GR @ 18 # | 14" x 65" | 3 | 2 | 18" x 40" | 300 | 1 | 72" |
| CAT90-15 | 27 | 19 | 37 | 4 | 1-1/2" | 3/4" | | | | | | | | 73" |
| CAT120-10 | 17 | 12 | 24 | 6 | 1" | 1/2" | | | | | | | 1 | 72" |
| CAT120-15 | 29 | 21 | 40 | 6 | 1-1/2" | 3/4" | 120,000 GR @ 60 # 80,000 GR @ 24 # | 16" x 65" | 4 | 2 | 24" X 50" | 700 | 1 | 72" |
| CAT120-20NT | 46 | 34 | 63 | 6 | 2" | 3/4" | | | | | | | 2 | 78" |
| CAT150-15 | 33 | 24 | 44 | 7 | 1-1/2" | 3/4" | | | | | | | 1 | 75" |
| CAT150-20NT | 50 | 37 | 66 | 7 | 2" | 3/4" | 150,000 GR @ 75 # 100,000 GR @ 30 # | 18" x 65" | 5 | 2 | 24" x 50" | 700 | 2 | 80" |
| CMS150-203QDNT | 100 | 74 | 132 | 7 | 2" | 3/4" | | | | | | | 3 | 80" |
| CMS150-204QDNT | 150 | 111 | 198 | 7 | 2" | 3/4" | | | | | | | 4 | 80" |
| CAT210-15 | 35 | 25 | 45 | 10 | 1-1/2" | 1" | | | | | | | 1 | 75" |
| CAT210-20NT | 59 | 43 | 76 | 10 | 2" | 1" | 210,000 GR @ 105 # 140,000 GR @ 42 # | 21" x 62" | 7 | 2 | 24" x 50" | 700 | 2 | 80" |
| CMS210-203QDNT | 118 | 86 | 152 | 10 | 2" | 1" | | | | | | | 3 | 80" |
| CMS210-204QDNT | 177 | 129 | 228 | 10 | 2" | 1" | | | | | | | 4 | 80" |
| CAT300-20NT | 66 | 48 | 89 | 12 | 2" | 1" | | | | | | | 2 | 87" |
| CMS300-203QDNT | 132 | 96 | 178 | 12 | 2" | 1" | 300,000 GR @ 150 # 200,000 GR @ 60 # | 24" x 72" | 10 | 3 | 30" x 50" | 1000 | 3 | 87" |
| CMS300-204QDNT | 198 | 144 | 267 | 12 | 2" | 1" | | | | | | | 4 | 87" |
| CAT450-20NT | 81 | 59 | 101 | 20 | 2" | 1" | | | | | | | 2 | 96" |
| CAT450-30NT | 138 | 101 | 179 | 20 | 3" | 1-1/2" | | | | | | | 2 | 96" |
| CMS450-203QDNT | 162 | 118 | 202 | 20 | 2" | 1" | 450,000 GR @ 225 # 300,000 GR @ 90 # | 30" x 72" | 15 | 3 | 30" x 50" | 1000 | 3 | 96" |
| CMS450-204QDNT | 243 | 177 | 303 | 20 | 2" | 1" | | | | | | | 4 | 96" |
| CMS450-303QDNT | 276 | 202 | 358 | 20 | 3" | 1-1/2" | | | | | | | 3 | 96" |
| CMS450-304QDNT | 414 | 303 | 537 | 20 | 3" | 1-1/2" | | | | | | | 4 | 96" |
| CAT600-20NT | 86 | 63 | 106 | 30 | 2" | 1" | | | | | | | 2 | 98" |
| CAT600-30NT | 163 | 119 | 210 | 30 | 3" | 1-1/2" | | | | | | | 2 | 98" |
| CMS600-203QDNT | 172 | 126 | 212 | 30 | 2" | 1" | 600,000 GR @ 300 # 400,000 GR @ 120 # | 36" x 72" | 20 | 3 | 42" x 60" | 2900 | 3 | 98" |
| CMS600-204QDNT | 258 | 189 | 318 | 30 | 2" | 1" | | | | | | | 4 | 98" |
| CMS600-303QDNT | 326 | 238 | 420 | 30 | 3" | 1-1/2" | | | | | | | 3 | 98" |
| CMS600-304QDNT | 489 | 357 | 630 | 30 | 3" | 1-1/2" | | | | | | | 4 | 98" |
| CAT900-30NT | 175 | 128 | 227 | 40 | 3" | 2" | | | | | | | 2 | 110" |
| CMS900-303QDNT | 350 | 256 | 454 | 40 | 3" | 2" | 900,000 GR @ 450 # 600,000 GR @ 180 # | 42" x 72" | 30 | 3 | 50" x 60" | 4100 | 3 | 110" |
| CMS900-304QDNT | 525 | 384 | 681 | 40 | 3" | 2" | | | | | | | 4 | 110" |
| CAT1200-30NT | 181 | 132 | 234 | 50 | 3" | 2" | | | | | | | 2 | 107" |
| CMS1200-303QDNT | 362 | 264 | 468 | 50 | 3" | 2" | 1,200,000 GR @ 600 # 800,000 GR @ 240 # | 48" x 72" | 40 | 3 | 50" x 60" | 4100 | 3 | 107" |
| CMS1200-304QDNT | 543 | 396 | 702 | 50 | 3" | 2" | | | | | | | 4 | 107" |

*Flow rates shown are minimum possible at all times (they're assuming one tank is off-line for regeneration).

Duplex CAT-series - Twin Demand Alternating Tank Operation

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

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

Committed to Innovation

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