



Protect Your Boilers and Power Generation Systems While Reducing Costs.

Minimize offline softening with new patent pending failsafe water softener technology from Industrial Water Solutions.

Boiler and Power Generation Industrial Softener System

Protect your boilers and power generation systems with while reducing costs with our Failsafe industrial water softener. This patent-pending water softener sends water in series to protect your boiler and power generation systems. How? With two softeners in series, it eliminates offline softening tanks and protects water quality.

Other water softeners used for boilers work with an alternating approach – one softener tank is online while the other tank is offline. This increases operating and environmental costs, salt waste. It also has a single point of failure.

- Worker polisher tanks running in series eliminate hard water caused by one softener not functioning or failing to regenerate correctly.
- Piping and valving optimization minimizes dead legs and hardness leaching into the water.
- Lower hardness leakage & salt savings are achieved by running the softeners in a double pass worker polisher softener flow configuration.
- Hardness leakage and high efficiency are optimized with adjustable salt level settings.

STANDARD FEATURES

- Failsafe, high efficiency design
- 100% soft water uptime configuration
- Anti-fouling, high flow resin
- Distribution and controls to reduce hardness leakage
- Bi-directional flow with continuous soft water polishing
- Skid Mounted, pre-piped and pre-wired
- Parallel mode for peak flow rates
- Factory hydro-tested at 100 psig
- Systems are all NSF 61 rated

INSTRUMENTATION / CONTROLS

- Butterfly valves with air or electric actuators
- AB 1400 PLC with BMS communication
- 304 stainless steel piping and distribution
- Metered regeneration with timed override
- Inlet/Outlet pressure gauges & sample ports
- Adjustable brining settings from 4 – 15 lbs

NEW
★
PATENT
PENDING



OPERATING PARAMETERS

- Inlet pressure: 30 – 100 psig
- Electrical¹ 120 – 240 VAC, 50 - 60 Hz
- Temperature: 35 – 110 °F

OPTIONS

- Regeneration failure early detection system
- Low flow hardness elimination system
- Triple stage pressure transducer arrangement
- Premium online hardness monitor with 4-20 output
- High pressure and temperature systems
- ASME code and stamped resin tanks
- 304 and 316 Stainless steel tank construction
- Additional piping materials, including CPVC
- Fully integrated sanitization system
- Seismic zone rated tanks and systems
- Ultraviolet light and Cartridge filter system

BOILER AND POWER GENERATION INDUSTRIAL SOFTENER SYSTEM

| CATALOG NUMBER | EXCHANGE CAPACITY/(Grains) SALT DOSAGE/(Pounds) SALT USAGE/(Pounds) MAX. MIN. | | FLOW RATES | | | PIPE SIZE | | RESIN CU. FT. | TANK SIZES | | SALT STORAGE LBS |
|----------------|--|------------|------------|----------|----------|-----------|-------|------------------|------------|---------|---------------------|
| | | | SERVICE | | BACKWASH | SERVICE | DRAIN | | SOFTENER | BRINE | |
| | | | CONT. GPM | PEAK GPM | | | | | | | |
| | | | | | | | | | | | |
| LC-150-1 | 150,000/ | 100,000/ | 21 | 64 | 10 | 1 | 1 | 5 | 20 x 54 | 24 x 50 | 700 |
| 1-1/4 | 75/ | 30/ | 28 | 86 | | 1-1/4 | 1 | | | | |
| 1-1/2 | 75/ | 30 | 36 | 110 | | 1-1/2 | 1 | | | | |
| 2 | | | 46 | 138 | | 2 | 1 | | | | |
| LC-210-1-1/4 | 210,000/ | 140,000/ | 27 | 82 | 15 | 1-1/4 | 1 | 7 | 24 x 54 | 24 x 50 | 600 |
| 1-1/2 | 105/ | 42/ | 42 | 128 | | 1-1/2 | 1 | | | | |
| 2 | 105 | 42 | 53 | 160 | | 2 | 1 | | | | |
| 2-1/2 | | | 76 | 230 | | 2-1/2 | 1 | | | | |
| LC-300-1-1/2 | 300,000/ | 200,000/ | 45 | 136 | 20 | 1-1/2 | 1 | 10 | 30 x 54 | 24 x 60 | 600 |
| 2 | 150/ | 60/ | 61 | 184 | | 2 | 1 | | | | |
| 2-1/2 | 150 | 60 | 92 | 280 | | 2-1/2 | 1 | | | | |
| 3 | | | 109 | 330 | | 3 | 1 | | | | |
| LC-450-1-1/2 | 450,000/ | 300,000/ | 42 | 126 | 20 | 1-1/2 | 1 | 15 | 30 x 60 | 30 x 60 | 1000 |
| 2 | 225/ | 90/ | 54 | 164 | | 2 | 1 | | | | |
| 2-1/2 | 225 | 90 | 79 | 240 | | 2-1/2 | 1 | | | | |
| 3 | | | 92 | 280 | | 3 | 1 | | | | |
| LC-600-1-1/2 | 600,000/ | 400,000/ | 48 | 144 | 30 | 1-1/2 | 1-1/2 | 20 | 36 x 60 | 39 x 60 | 1900 |
| 2 | 300/ | 120/ | 73 | 220 | | 2 | 1-1/2 | | | | |
| 2-1/2 | 300 | 120 | 92 | 280 | | 2-1/2 | 1-1/2 | | | | |
| 3 | | | 116 | 350 | | 3 | 1-1/2 | | | | |
| LC-750-2 | 750,000 | 500,000/ | 59 | 180 | 30 | 2 | 1-1/2 | 25 | 36 x 72 | 39 x 60 | 1700 |
| 2-1/2 | 375/ | 150/ | 92 | 280 | | 2-1/2 | 1-1/2 | | | | |
| 3 | 375 | 150 | 106 | 320 | | 3 | 1-1/2 | | | | |
| LC-900-2 | 900,000 | 600,000/ | 69 | 210 | 45 | 2 | 2 | 30 | 42 x 60 | 42 x 60 | 1900 |
| 2-1/2 | 450/ | 180/ | 99 | 300 | | 2-1/2 | 2 | | | | |
| 3 | 375 | 180 | 124 | 376 | | 3 | 2 | | | | |
| LC-1050-2 | 1,050,000/ | 700,000/ | 63 | 190 | 45 | 2 | 2 | 35 | 42 x 72 | 50 x 60 | 2300 |
| 2-1/2 | 525/ | 210/ | 96 | 300 | | 2-1/2 | 2 | | | | |
| 3 | 525 | 210 | 124 | 346 | | 3 | 2 | | | | |
| LC-1200-2-1/2 | 1,200,000/ | 800,000/ | 106 | 320 | 60 | 2-1/2 | 2 | 40 | 48 x 60 | 52 x 60 | 2600 |
| 3 | 600/ | 240/ | 142 | 430 | | 3 | 2 | | | | |
| 4 | 600 | 240 | 205 | 620 | | 4 | 2 | | | | |
| LC-1500-2-1/2 | 1,500,000/ | 1,000,000/ | 109 | 330 | 80 | 2-1/2 | 2 | 50 | 54 x 60 | 66 x 46 | 3300 |
| 3 | 750/ | 300/ | 149 | 450 | | 3 | 2 | | | | |
| 4 | 750 | 300 | 267 | 620 | | 4 | 2 | | | | |
| LC-1950-2-1/2 | 1,950,000/ | 1,300,000/ | 111 | 336 | 100 | 2-1/2 | 2-1/2 | 65 | 60 x 60 | 60 x 66 | 4000 |
| 3 | 975/ | 390/ | 155 | 470 | | 3 | 2-1/2 | | | | |
| 4 | 975 | 390 | 294 | 890 | | 4 | 2-1/2 | | | | |
| LC-2400-3 | 2,400,000/ | 1,600,000/ | 162 | 490 | 120 | 3 | 3 | 80 | 66 x 72 | 66 x 72 | 5800 |
| 4 | 1,200/ | 480/ | 317 | 960 | | 4 | 3 | | | | |
| 6 | 1,200 | 480 | 429 | 1300 | | 6 | 3 | | | | |
| LC-3000-3 | 3,000,000/ | 2,000,000/ | 168 | 510 | 140 | 3 | 3 | 100 | 72 x 72 | 82 x 60 | 7300 |
| 4 | 1,500/ | 600/ | 330 | 1000 | | 4 | 3 | | | | |
| 6 | 1,500 | 600 | 462 | 1400 | | 6 | 3 | | | | |
| LC-3600-4 | 3,600,000 | 2,400,000/ | 343 | 1040 | 165 | 4 | 3 | 120 | 78 x 72 | 82 x 60 | 6000 |
| 6 | 1,800/ | 720/ | 495 | 1500 | | 6 | 3 | | | | |
| 8 | 1,800 | 720 | 627 | 1900 | | 8 | 3 | | | | |
| LC-4200-4 | 4,200,000 | 2,800,000/ | 356 | 1080 | 190 | 4 | 3 | 140 | 84 x 72 | 90 x 60 | 7500 |
| 6 | 2,100/ | 840/ | 515 | 1560 | | 6 | 3 | | | | |
| 8 | 2,100 | 840 | 660 | 2000 | | 8 | 3 | | | | |
| LC-4800-4 | 4,800,000/ | 3,200,000/ | 396 | 1200 | 220 | 4 | 4 | 160 | 90 x 72 | 90 x 60 | 6500 |
| 6 | 2,400/ | 960/ | 528 | 1600 | | 6 | 4 | | | | |
| 8 | 2,400 | 960 | 700 | 2120 | | 8 | 4 | | | | |
| LC-5400-4 | 5,400,000/ | 3,600,000/ | 446 | 1350 | 250 | 4 | 4 | 180 | 96 x 72 | 96 x 60 | 7700 |
| 6 | 2,700/ | 1,080/ | 581 | 1760 | | 6 | 4 | | | | |
| 8 | 2,700 | 1,080 | 769 | 2300 | | 8 | 4 | | | | |

Non-chemical and chemical water treatment systems can be packaged with the Boiler and Power Generation Industrial Softener System to optimize water purity and chemistry for your organization. Consulting for current and planned water treatment systems and services are also available.

NON-CHEMICAL AUXILIARY WATER TREATMENT SYSTEMS

- RO & Nanofiltration Systems
 - IX/EDI Deionization Systems
 - Backwashable Filter Systems
- Ultrafilter (UF) Systems
 - Microfiltration Systems
 - Dissolved Gas Removal Systems



For more information please contact us at
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