



The Culligan Side Mount (CSM™) Series Heavy-Duty Water Softener System



EXAMPLES OF MARKETS SERVED:

CLINICS
EDUCATIONAL FACILITIES
ENERGY & POWER
FOOD & BEVERAGE PRODUCTION
FOOD SERVICE/RESTAURANTS
GROCERY
HEALTHCARE/HOSPITALS/BIO-PHARMACEUTICAL
HOSPITALITY/LODGING
MANUFACTURING
MUNICIPAL DRINKING WATER
OIL & GAS

Efficient and Scalable Heavy-Duty Water Treatment System

Use Culligan equipment to help meet the highest standard of water quality at your facility. The Culligan Side Mount heavy-duty softener reduces hard water contaminants*, even for large flow volume applications, reducing scale buildup that can affect equipment performance. The Culligan-exclusive Smart Controller allows you to efficiently set up and manage your water treatment. Using optional accessories, monitor water usage data, such as the flow rate and volume, and regenerate the system as needed, saving resources and money.

The CSM softener is part of the Culligan Matrix Solutions™ that combine durable and efficient equipment, systems experience, and technical experts who understand your unique requirements. From planning your system to installing your water treatment equipment, Culligan Matrix Solutions offer options that help deliver the quality of water to meet your needs. Contact Culligan today to learn more about the CSM softener system.

*contaminants are not necessarily in your water.

Culligan Matrix Solutions Advantages:

- Simple System Integration
- Global Product Platform
- Flexible Configurations
- Quick Delivery/Easy Installation
- Exclusive Culligan Advanced Electronics
 - Historical Operating Data
 - Alarm Recognitions
 - US Standard and Metric Readings
 - Remote Monitoring Options
 - Telemetry Options



**Pre-Treatment
Solutions**



**Membrane
Solutions**



**Deionization
Solutions**



**Storage
Solutions**



**Distribution
Solutions**

Warranty

Culligan's CSM water softeners are backed by a limited 1-year warranty against defects in material, workmanship and corrosion. In addition, softener tanks are warranted for a period of 5 years.†

† See printed warranty for details. Culligan will provide a copy of the warranty upon request. Some localities have corrosive water. A softener cannot correct this condition, so its printed warranty disclaims liability for corrosion of plumbing lines, fixtures, or water-using equipment. If you suspect corrosion, your independently operated Culligan dealer has equipment to help control the problem.

System Specifications

| Specification | US | Metric |
|-------------------------------|--|-------------|
| Inlet Pressure (dynamic) | 30–100 psig | 210–690 kPa |
| Power Voltage Frequency Phase | 120 Volts 50/60Hz | |
| Feed Water Temperature | 40–120° F | 4–49° C |
| Turbidity Chlorine Iron | 5 NTU, max. ² 1 mg/L, max. ² 5 mg/L, max. ² | |

¹ 120 Volt/24 Volt CUL/UL listed Transformer Included.
² See media specification for details.

CSM Water Softener System

| Model | Resin Qty. (ft ³ /L) | Pipe Size (in/mm) | Flow Rates (gpm/lpm) | | Tank Size*** (in/mm) | |
|-------|---------------------------------|-------------------|----------------------|--------|----------------------|---------------|
| | | | Continuous* | Peak** | Softener | Brine**** |
| 150-2 | 5 | 2 | 67 | 94 | 20 x 54 | 24 x 50 |
| | 142 | 50.8 | 253.6 | 355.8 | 508 x 1,372 | 610 x 1,270 |
| 210-2 | 7 | 2 | 76 | 102 | 24 x 54 | 24 x 50 |
| | 198 | 50.8 | 287.7 | 386.1 | 610 x 1,372 | 610 x 1,270 |
| 300-2 | 10 | 2 | 84 | 112 | 30 x 60 | 30 x 50 |
| | 283 | 50.8 | 317.9 | 423.9 | 762 x 1,524 | 762 x 1,270 |
| 300-3 | 10 | 3 | 152 | 210 | 30 x 60 | 30 x 50 |
| | 283 | 76.2 | 575.3 | 794.9 | 762 x 1,524 | 762 x 1,270 |
| 450-2 | 15 | 2 | 79 | 106 | 30 x 60 | 30 x 50 |
| | 425 | 50.8 | 299 | 401.2 | 762 x 1,524 | 762 x 1,270 |
| 450-3 | 15 | 3 | 135 | 192 | 30 x 60 | 30 x 50 |
| | 425 | 76.2 | 511 | 726.7 | 762 x 1,524 | 762 x 1,270 |
| 600-2 | 20 | 2 | 94 | 125 | 36 x 60 | 39 x 48 |
| | 566 | 50.8 | 355.8 | 473.1 | 914 x 1,524 | 991 x 1,219 |
| 600-3 | 20 | 3 | 183 | 252 | 36 x 60 | 39 x 48 |
| | 566 | 76.2 | 692.7 | 953.8 | 914 x 1,524 | 991 x 1,219 |
| 750-2 | 25 | 2 | 97 | 129 | 42 x 60 | 42 x 48 |
| | 708 | 50.8 | 367.1 | 488.3 | 1,067 x 1,524 | 1,067 x 1,219 |
| 750-3 | 25 | 3 | 201 | 267 | 42 x 60 | 42 x 48 |
| | 708 | 76.2 | 760.8 | 1010.6 | 1,067 x 1,524 | 1,067 x 1,219 |
| 900-2 | 30 | 2 | 96 | 127 | 42 x 60 | 42 x 48 |
| | 850 | 50.8 | 363.4 | 480.7 | 1,067 x 1,524 | 1,067 x 1,219 |
| 900-3 | 30 | 3 | 193 | 259 | 42 x 60 | 42 x 48 |
| | 850 | 76.2 | 730.5 | 980.3 | 1,067 x 1,524 | 1,067 x 1,219 |

*Flow rate at a 15 psi pressure loss.
**Flow rate at a 25 psi pressure loss.
***Dimensions are diameter by tank height.
****Brine systems are optional.
Flow rates shown are per tank.
Low flow channeling (flow rates less than 0.5 gallons per minute per cubic foot of resin) may cause hardness leakage into effluent.
CSM product formerly sold under the Bruner label.

Examples of Softener Applications

- Food and Beverage—Improved taste
- Educational Facilities—Boiler and cooling tower make-up water for scale reduction and improved energy costs
- Restaurants—For dishwashing, cleaning material savings, scale reduction
- RO Softener/DI Pretreatment
- Car washes—Quality results, detergent and water heating savings, scale reduction
- Apartment buildings, assisted living facilities and hotels—Quality water for laundry, dishwashers, boilers
- Grocery/Retail—Quality water for aesthetics and help extend equipment life

- Light industry—For process and make-up water, boiler and cooling system pretreatment, general housekeeping
- Office buildings—For heating plant pretreatment, tenant convenience, general housekeeping

Standard Features

- Single, Multiple Tank Configurations — Hardness removal capacities up to 900,000 grains per tank Continuous flow rates up to 201 gpm per tank
- Culligan's Smart Controller — More control over your equipment with programming and monitoring capabilities typically found in more expensive PLC controls A variety of add-on options for advanced instrumentation and communication let you easily customize the system to help meet your needs
- Telemetric Capability
- Regeneration initiation by choice or combination of time clock, meter or Aqua-Sensor inputs
- Culligan's Multiport Valve — Guided perimeter designed diaphragm valves are smooth operating and free of water hammer All valve parts are easily accessible in the design for ease of service

- Corrosion resistant tanks — Made of low carbon steel with epoxy interior lining and finish coat painted exterior

Optional Features & Accessories

- Corrosion resistant brine system construction for long life
- Skid Mounted — fully pre-piped and wired systems for single point field utility connection of inlet, outlet, drain and power supply
- Patented Progressive Flow — Culligan's Smart Controller can monitor flow demands bringing additional softening tanks on-line or offline as flows increase or decrease
- ASME Code Tanks
- Brine Reclaim — reduces operating costs
- Patented Aqua-Sensor® Control — initiates regeneration only when needed based upon water hardness, automatically adjusts to changes in raw water hardness and water consumption
- Flow Measuring Devices — are available for direct connection to the Culligan Smart Controller for volume based regeneration initiation
- Remote Display
- RS232, RS485, Modbus PLC Output

Finally, an end-to-end solution from a single source.



Place your commercial and industrial water treatment needs in the hands of a global leader.

For over 70 years, Culligan has made better water. Our global network, comprised of 800+ dealers and international licensees in over 90 countries, is dedicated to addressing your water-related problems. As a worldwide leader in water treatment, our sales representatives and service technicians are familiar with the local water conditions in your area. Being global and local position us to deliver customized solutions to commercial and industrial water issues that affect your business and your bottom line.

www.culliganmatrixsolutions.com • 866-787-4293

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