

## 'MRG' Series Water Softener Systems



### Overview

The Marlo 'MRG' Series water softener system offers a corrosion resistant alternative for commercial & industrial applications. Equipped with FRP resin tanks and external control valve manifold, it achieves higher service flow rates than traditional top-mount, multi-port valve configurations. All systems are completely factory skid mounted, pre-piped, pre-wired, and pre-tested for minimal installation time and cost. Standard designs available for twin and triple tank configurations.

### Standard Features

- Composite FRP resin tank with tri-pod base
- Aquamatic diaphragm style control valves
- Volume and/or time initiated regeneration cycle
- Polyethylene brine tank assembly
- Air or water actuated control valves
- High capacity, cation exchange resin
- Tank isolation valves & system bypass valve
- Inlet/Outlet tank sampling valves
- Factory Hydro-tested at 100 psig

### Materials of Construction

- Resin Tanks: FRP
- Exterior Piping: Sch 80 PVC
- Internal Distributors: Sch 80 PVC / ABS
- Control Valves: Noryl Thermoplastic
- Skid: Painted, Carbon Steel

### Instrumentation / Controls

- Marlo MX-II electronic system controller
- Alternating or parallel progressive flow control
- NEMA-4X electrical enclosures
- Signet paddle-type flow sensors
- Inlet/Outlet tank pressure gauges

### Operating Parameters

- Inlet Pressure: 30-100 psig
- Electrical: 120VAC, 1-Ph, 60 Hz.
- Temperature: 35-110°F

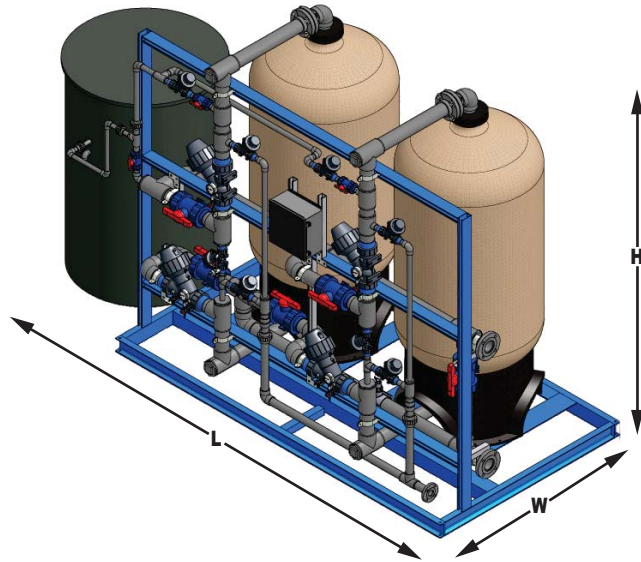
### Options Available

- ASME rated resin tanks
- Allen-Bradley PLC systems
- Brine pump systems
- CPVC exterior piping
- Butterfly control valves (air-operated)
- Alternate ion exchange resins
- Online hardness monitor
- Polyurethane skid painting
- 'SRS' Salt Recycling Systems

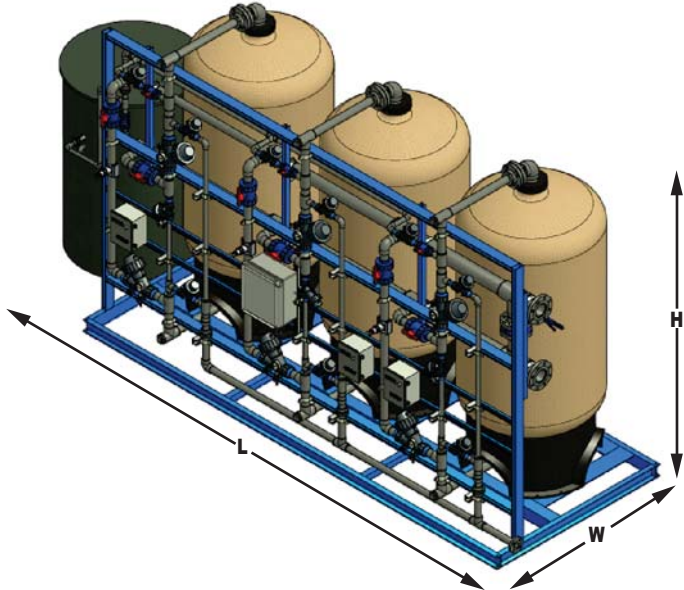
# 'MRG' Series Specifications

| MODEL NUMBER  | CAPACITY (Grains)    |     | FLOW RATES (PER TANK) |            |          | PIPE SIZE |        | RESIN   | TANK SIZES |         | OVERALL DIMENSIONS (LxWxH, INCHES) ⑤ |            | SHIPPING WEIGHT (LBS.) ⑥ |        |
|---------------|----------------------|-----|-----------------------|------------|----------|-----------|--------|---------|------------|---------|--------------------------------------|------------|--------------------------|--------|
|               | SALT DOSAGE (LBS.) ① |     | SERVICE               |            | BACKWASH | SERVICE   | DRAIN  |         | SOFTENER   | BRINE ④ | TWIN                                 | TRIPLE     | TWIN                     | TRIPLE |
|               | MAX.                 |     | CONT. GPM ②           | PEAK GPM ③ | GPM      | INCHES    | INCHES | CU. FT. | INCHES     | INCHES  |                                      |            |                          |        |
| MRG-150-1-1/2 | 150,000              | 75  | 55                    | 78         | 10       | 1-1/2     | 1      | 5       | 18x65      | 24x50   | 116x40x96                            | 150x40x96  | 1,590                    | 2,335  |
| MRG-150-2     | 150,000              | 75  | 69                    | 97         |          | 2         | 1      |         |            |         |                                      |            |                          |        |
| MR-210-1-1/2  | 210,000              | 105 | 64                    | 86         | 12       | 1-1/2     | 1      | 7       | 21x62      | 24x50   | 122x42x98                            | 159x42x98  | 2,030                    | 2,970  |
| MRG-210-2     | 210,000              | 105 | 80                    | 110        |          | 2         | 1      |         |            |         |                                      |            |                          |        |
| MRG-300-2     | 300,000              | 150 | 82                    | 115        | 15       | 2         | 1      | 10      | 24x72      | 24x60   | 130x46x101                           | 170x46x101 | 2,710                    | 3,965  |
| MRG-300-3     | 300,000              | 150 | 140                   | 190        |          | 3         | 1      |         |            |         |                                      |            |                          |        |
| MRG-450-2     | 450,000              | 225 | 92                    | 125        | 20       | 2         | 1      | 15      | 30x72      | 30x60   | 150x52x106                           | 196x52x106 | 3,830                    | 5,620  |
| MRG-450-3     | 450,000              | 225 | 165                   | 230        |          | 3         | 1      |         |            |         |                                      |            |                          |        |
| MRG-600-2     | 600,000              | 300 | 110                   | 150        | 30       | 2         | 1-1/2  | 20      | 36x72      | 39x60   | 170x58x106                           | 222x58x106 | 4,950                    | 7,250  |
| MRG-600-3     | 600,000              | 300 | 175                   | 250        |          | 3         | 1-1/2  |         |            |         |                                      |            |                          |        |
| MRG-750-2     | 750,000              | 375 | 135                   | 185        | 45       | 2         | 2      | 25      | 42x72      | 39x60   | 182x64x108                           | 240x64x108 | 7,090                    | 10,370 |
| MRG-750-3     | 750,000              | 375 | 195                   | 285        |          | 3         | 2      |         |            |         |                                      |            |                          |        |
| MRG-900-3     | 900,000              | 450 | 188                   | 279        | 45       | 3         | 2      | 30      | 42x72      | 42x60   | 185x64x108                           | 243x64x108 | 7,620                    | 11,200 |
| MRG-1200-3    | 1,200,000            | 600 | 215                   | 300        | 60       | 3         | 2      | 40      | 48x72      | 50x60   | 205x70x112                           | 268x70x112 | 9,840                    | 14,500 |
| MRG-1500-3    | 1,500,000            | 750 | 235                   | 325        | 110      | 3         | 3      | 50      | 63x86      | 66x46   | 250x85x113                           | 330x85x113 | 15,250                   | 22,600 |

## 'MRG' Series Twin



## 'MRG' Series Triple



## Notes

- ① Salt dosage equal to 15 lbs. per cu. ft. resin for maximum exchange capacity.
- ② At a pressure drop not exceeding 15 psig.
- ③ At a pressure drop not exceeding 25 psig.
- ④ Brine tanks designed for a salt storage of at least 4 regeneration cycles.
- ⑤ Dimensions are estimate only. Actual dimensions depend on service header size and brine tank location.
- ⑥ Shipping weights are estimate only. Weights include resin and gravel.