

## 'MST' Series Water Softener Systems



### Overview

The Marlo 'MST' water softener systems are designed to fit the requirements of many types of commercial and institutional applications. Whether it is for boiler feed or domestic supply water for a school or hotel, the MST offers a robust and efficient solution for reducing mineral scale, soap usage, and energy consumption in the plumbing and other water using equipment.

### Standard Features

- Carbon steel resin tanks with epoxy-lined interior
- Upper/Lower vessel handholes (4"x 6")
- Piston driven, multiport, top mount control valves
- Meter initiated regeneration cycle
- Brine tank assembly with safety overflow
- Sodium form cation exchange resin
- Water hardness testing kit

### Materials of Construction

- Control Valve Body: Low-lead brass
  - Fleck 2900 - 2" valve
  - Fleck 3900 - 3" valve
- Resin Tanks: Carbon steel with Safety Blue exterior paint
- Tank Lining: NSF 61 rated epoxy coating
- Internal Distributors: Sch 80 PVC/ABS
- Brine Tank: Corrosion resistant polyethylene

### Instrumentation / Controls

- Metered 'NXT' control interface
- LED Display screen, status lights
- On board diagnostics and error reporting
- Meter: 2" Noryl turbine or 3" Signet paddle-type flow totalizer

### Operating Parameters

- Inlet pressure: 30 – 100 psig
- Electrical: 24V circuitry
- 120/24 VAC, 50/60 Hz wall mount transformer
- Temperature: 35 – 100 °F

### Options Available

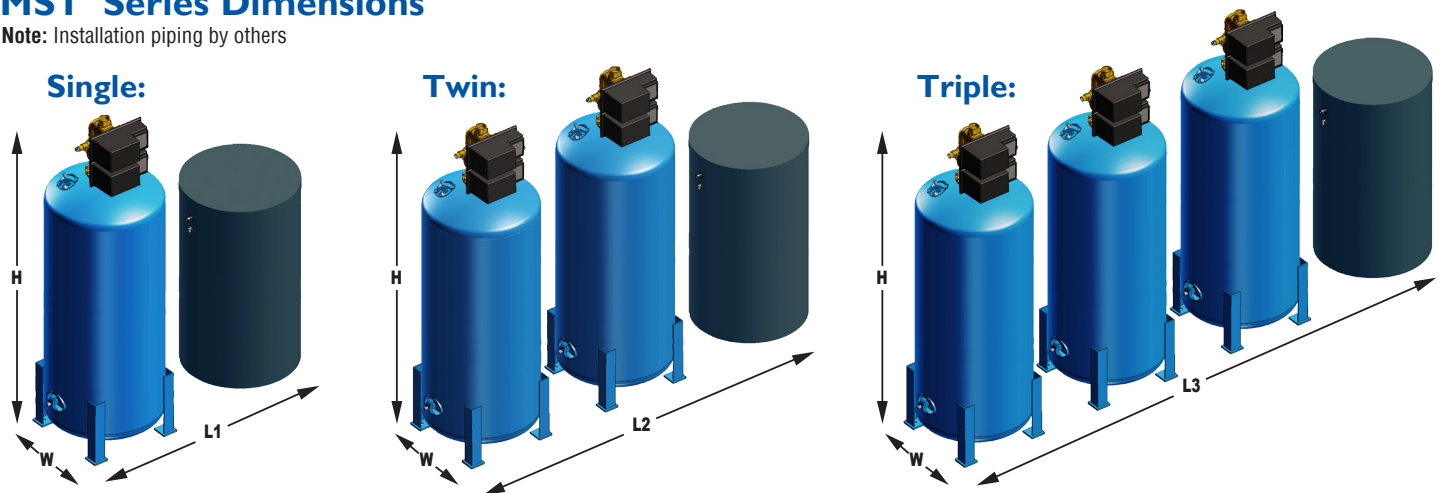
- Skid mounted and pre-piped system
  - Sch 80 PVC or Copper piping
- Multi-tank system configurations (Twin, Triple)
- Alternating or Progressive flow configurations
- Building Management System (BMS) communication
- ASME rated pressure vessels
- Seismic rated designs
- Stainless steel turbine type meters (2" and 3")
- Inlet/Outlet pressure gauges and sample valves
- Larger brine tanks
- Multiple voltage options
- Side mount control valves

## 'MST' Series Specifications

MODEL NUMBER	EXCHANGE CAPACITY (Grains) ①		FLOW RATES			PIPE SIZE	RESIN PER TANK	TANK SIZES		SALT STORAGE	OVERALL DIMENSIONS (INCHES) ④			SHIPPING WEIGHT (LBS) ⑤		
			SERVICE		BACK WASH			SOFTENER	BRINE							
	MAX.	MIN.	CONT. GPM ②	PEAK GPM ③		GPM	INCHES			CU. FT.	INCHES	INCHES	LBS	SINGLE (L1xWxH)	TWIN (L2xWxH)	TRIPLE (L3xWxH)
MST-210-2	210,000 105	140,000 42	78	100	15	2	7	24x60	24x50	540	51x24x92	84x24x92	117x24x92	805	1580	2365
MST-300-2	300,000 150	200,000 60	90	119	20	2	10	30x60	24x50	410	54x24x92	90x24x92	126x24x92	1070	2105	3150
MST-450-2	450,000 225	300,000 90	84	105	20	2	15	30x60	30x50	640	66x30x92	108x30x92	150x30x92	1505	2945	4415
MST-300-3	300,000 150	200,000 60	167	235	20	3	10	30x60	24x50	410	54x24x97	90x24x97	126x24x97	1130	2165	3210
MST-450-3	450,000 225	300,000 90	158	212	20	3	15	30x60	30x50	640	66x30x97	108x30x97	150x30x97	1565	3005	4475
MST-600-3	600,000 300	400,000 120	185	250	30	3	20	36x60	39x60	1700	81x39x107	129x39x107	177x39x107	2565	5045	7565
MST-900-3	900,000 450	600,000 180	200	268	45	3	30	42x60	42x60	1940	90x42x109	144x42x109	198x42x109	3810	7510	11,265
MST-1200-3	1,200,000 600	800,000 240	213	280	55	3	40	48x60	50x60	2800	104x50x117	164x50x117	224x50x117	4985	9830	14,735

## 'MST' Series Dimensions

Note: Installation piping by others



## Notes

- ① Maximum capacity base on 30,000 grains per cubic foot of resin when regenerated with 15 lbs. salt. Minimum capacity based on 20,000 grains per cubic foot of resin when regenerated with 6 lbs. salt.
- ② At pressure loss not exceeding 15 psi.
- ③ At pressure loss not exceeding 25 psi.
- ④ Dimensions are estimates only. Actual dimensions may vary based on job-site space limits and piping layout. Allow a minimum of 24" above height dimension for resin loading. Use of ASME rated tanks may add up to 12" of tank height.
- ⑤ Shipping weights are estimate only. Weights include resin and support gravel, which are added to the tanks after installation.