

'MHC' Series Water Softener Systems



Overview

The Marlo 'MHC' Series water softener system is designed to effectively meet the rigorous demands of institutional and industrial facilities where high flow rates and hardness capacities are required.

The standard, all-steel exterior design will be reliable for many years of service. A modular platform allows for single, twin, or triplex tank designs to be easily configured to meet the exact flow requirements matched with the incoming water quality. Numerous custom engineered options are available to meet most specifications.

Standard Features

- Carbon steel resin tanks with epoxy-lined interior
- Water actuated diaphragm style control valves (3" & 4")
- Air actuated butterfly style control valves (6" & 8")
- Volume and/or time initiated regeneration cycle
- Polyethylene brine tank assembly with injector
- Sodium form cation exchange resin
- Inlet/Outlet tank sampling valves
- Water hardness testing kit
- Factory Hydro-tested at 100 psig

Materials of Construction

- Resin Tanks: Carbon steel with Safety Blue exterior paint
- Tank Lining: NSF 61 rated epoxy coating
- Exterior Piping: Galvanized steel pipe & cast iron fittings
- Internal Distributors: Sch 80 PVC/ABS
- Control Valves: Painted cast iron body

Instrumentation / Controls

- Marlo MX-III electronic system controller
- Time or metered control with bypass for single tank
- Alternating or parallel progressive metered control for twin and triple tank units
- NEMA-4X electrical enclosures
- Signet paddle-type flow sensors
- Inlet/Outlet pressure gauges

Operating Parameters

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

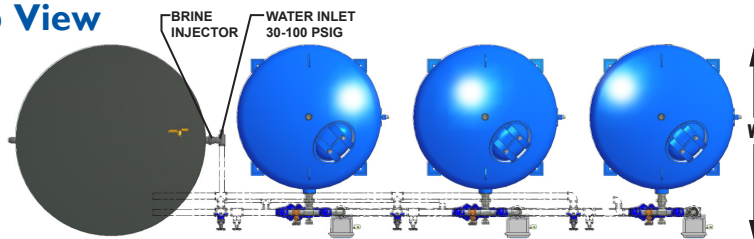
Options Available

- Skid mounted, pre-piped, pre-wired systems
- ASME code stamped resin tanks
- Allen-Bradley PLC systems
- Remote communication to BMS
- Alternate water meter types
- Brine silo and/or brine pump systems
- PVC or CPVC exterior piping
- Copper or Stainless steel exterior piping
- Stainless steel internal distributor piping
- Seismic zone rated systems
- Butterfly control valves (for 3" & 4" systems)
- 'SRS' Salt Recycling Systems
- Online hardness monitor

Specifications

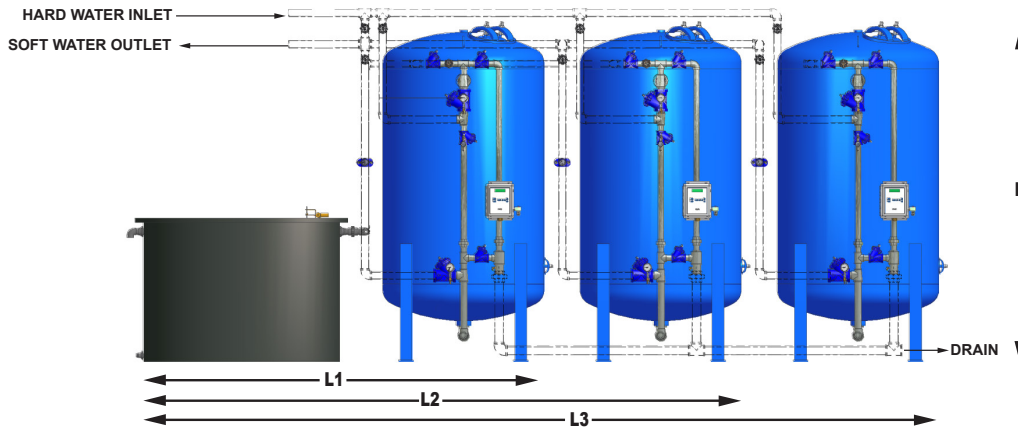
CATALOG NUMBER	EXCHANGE CAPACITY (Grains) SALT USAGE (LBS) ①		FLOW RATES		PIPE SIZE		RESIN	TANK SIZES		SALT STORAGE	REGEN PER SALT REFILL		OVERALL DIMENSIONS (INCHES) ④			SHIPPING WEIGHT (LBS) ⑤						
			CONT. GPM ②	PEAK GPM ③	BACK WASH	SERVICE		DRAIN	SOFTENER				BRINE	SINGLE			TWIN			TRIPLE		
														GPM	INCHES	INCHES	CU. FT.	INCHES	INCHES	LBS	MIN. SALT	MAX. SALT
	MAX. SALT	MIN. SALT																				
MHC-1200-3	1,200,000	800,000	215	300	60	3	2	40	48 x 60	56 x 62	3000	12	5	120x64x98	188x64x98	252x64x98	5,700	10,800	15,900			
MHC-1200-4	600	240	310	410		4	2		120x68x98	188x68x98				252x68x98	5,730	10,860	16,000					
MHC-1500-3	1,500,000	1,000,000	225	308	80	3	2-1/2	50	54 x 60	56 x 62	2700	9	4	140x70x100	214x70x100	288x70x100	6,850	13,050	19,100			
MHC-1500-4	750	300	405	600		4	2-1/2		140x74x100	214x74x100				288x74x100	6,880	13,110	19,200					
MHC-1950-3	1,950,000	1,300,000	235	325	100	3	3	65	60 x 60	74 x 64	5500	14	5	158x76x102	232x76x102	312x76x102	8,500	16,200	23,950			
MHC-1950-4	975	390	445	650		4	3		158x80x102	232x80x102				312x80x102	8,550	16,250	24,000					
MHC-2400-3	2,400,000	1,600,000	245	340	120	3	3	80	66 x 72	74 x 64	5200	10	4	170x84x114	256x84x114	342x84x114	10,700	20,500	30,300			
MHC-2400-4			480	690		4	3		170x86x114	256x86x114				342x86x114	10,750	20,600	30,500					
MHC-2400-6			650	940		6	3		170x92x114	256x92x114				342x92x114	10,800	20,700	30,700					
MHC-3000-3	3,000,000	2,000,000	255	355	140	3	3	100	72 x 72	86 x 62	7000	11	4	174x88x117	266x88x117	358x88x117	12,300	23,600	34,900			
MHC-3000-4			500	720		4	3		174x92x117	266x92x117				358x92x117	12,350	23,700	35,100					
MHC-3000-6			700	1050		6	3		174x96x117	266x96x117				358x96x117	12,400	23,800	35,300					
MHC-4200-6	4,200,000	2,800,000	780	1130	190	6	3	140	84 x 72	96 x 60	8000	7	3	194x110x120	298x110x120	402x110x120	16,250	31,200	45,900			
MHC-4200-8	2,100	1,080	1000	1450		8	3		194x118x120	298x118x120				402x118x120	16,300	31,300	46,150					
MHC-5400-6	5,400,000	3,600,000	880	1250	250	6	4	180	96 x 72	96 x 60	7500	6	2	206x122x123	322x122x123	438x122x123	21,600	41,800	61,800			
MHC-5400-8	2,700	1,080	1150	1700		8	4		206x134x123	322x134x123				438x134x123	21,700	41,950	62,950					

'MHC' Series - Top View



NOTE:
Installation piping (shown in broken lines) are provided by others.

'MHC' Series - Front View



Notes

- ① Maximum capacity based 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 estimate 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. Consult factory for dimensions on skid mounted systems.
- ⑤ Shipping weights are estimate only. Weights include resin and support gravel, which are added to the tanks after installation.