

## 'MCP' Series Condensate Polisher Systems



### Overview

The Marlo 'MCP' Series condensate polisher system offers a sound solution for removing impurities such as iron, copper, and hardness from returned steam condensate resulting in improved boiler feedwater quality and lower operating costs. Using sodium-cycle, cation exchange resin, they operate similar to water softeners requiring only salt for regeneration material. The system is fully automatic as standard and all valves and controls are completely factory pre-piped, pre-wired, and pre-tested for minimal installation time and cost. Multiple tank systems in alternating or parallel configurations, to achieve higher service flow or continuous supply of treated condensate are also available.

### Standard Features

- 304 Stainless steel resin tanks
- Air-Operated butterfly style control valves
- Automatic timer initiated regeneration cycle
- Polyethylene brine tank assembly
- High capacity, High cross-link exchange resin
- Cold water backwash/regeneration supply water
- Automatic raw water bypass valve
- Inlet/Outlet tank sampling valves

### Materials of Construction

- Resin Tanks: 304SS
- Exterior Piping: 304SS
- Internal Distributors: 304SS
- Control Valve Body: Cast Iron

### Controls / Instrumentation

- Allen-Bradley PLC controller
- Simplex, alternating or parallel flow control
- NEMA-4X electrical enclosure
- Inlet/Outlet tank pressure gauges

### Operating Parameters

- Inlet Pressure: 30-100 psig
- Electrical: 120VAC, 1-Ph, 60 Hz.
- Temperature: 100-230°F
- Air Source: 80-100 psig (Dry, oil-free)

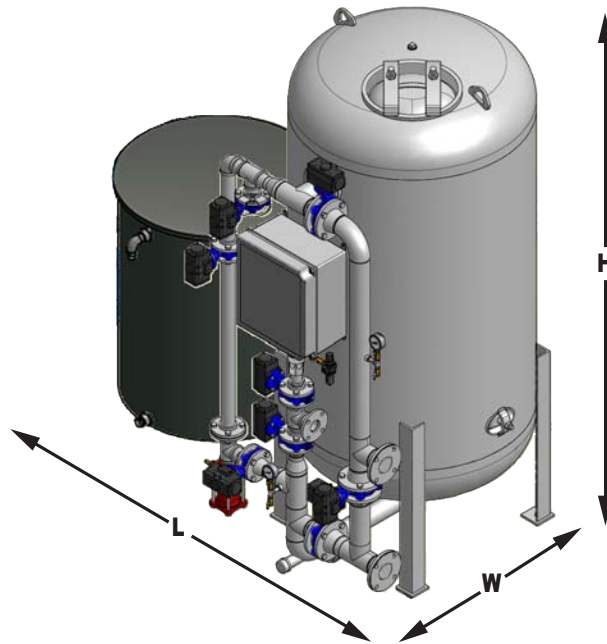
### Available Options

- ASME rated resin tanks
- 316 stainless steel construction
- Sub-surface wash distributor
- Water meter and totalizer
- Differential pressure switch
- Brine pump systems
- Alternate ion exchange resins
- Manually operated design
- Skid mount design for multi-tanks

## 'MCP' Series Specifications

MODEL NUMBER	CAPACITY (Grains) SALT DOSAGE (LBS.) ❶	FLOW RATES (PER TANK)			PIPE SIZE		RESIN CU. FT.	TANK SIZES		OVERALL DIMENSIONS (LxWxH, INCHES) ❺	SHIPPING WEIGHT (LBS.) ❻
		SERVICE		BACKWASH	SERVICE	DRAIN		SOFTENER	BRINE ❷		
		CONT. GPM ❷	PEAK GPM ❸	GPM	INCHES	INCHES		INCHES	INCHES		
MCP-150-2	150,000 75	45	65	10	2	1	5	20x54	24x50	50x33x72	830
MCP-210-2	210,000 105	60	95	15	2	1	7	24x54	24x50	54x37x74	1,050
MCP-300-2	300,000 150	100	150	20	2	1	10	30x54	24x60	60x45x77	1,570
MCP-600-3	600,000 300	140	210	30	3	1-1/2	20	36x60	39x60	81x53x90	2,790
MCP-900-3	900,000 450	190	285	45	3	1-1/2	30	42x60	42x60	90x60x94	3,860
MCP-1200-3	1,200,000 600	250	375	60	3	2	40	48x60	50x60	120x72x99	6,250
MCP-1500-4	1,500,000 750	315	475	80	4	2	50	54x60	66x46	140x78x101	7,530
MCP-1800-4	1,800,000 900	390	585	100	4	3	60	60x60	72x46	152x84x102	8,380
MCP-2700-6	2,700,000 1,350	565	850	140	6	3	90	72x60	82x60	174x96x107	12,300

## 'MCP' Series Dimensions



### Notes

- ❶ Salt dosage equal to 15 lbs. per cu. ft. resin for maximum exchange capacity.
- ❷ At a pressure drop not exceeding 15 psig.
- ❸ At a pressure drop not exceeding 25 psig.
- ❹ Brine tanks designed for a salt storage of at least 4 regeneration cycles.
- ❺ Dimensions are estimate only. Actual dimensions may vary depending on options selected.
- ❻ Shipping weights are estimate only. Weights include resin and gravel.