

## 'MATD' Series Dealkalizer Systems



### Overview

The Marlo 'MATD' chloride-cycle dealkalizer system effectively reduces the incoming alkalinity in feed water resulting in lower blowdown rates, lower condensate return corrosion, and a more effective chemical treatment program for your boiler system.

All systems are twin-alternating to provide a continuous supply of dealkalized water. Standard models with treat up to 50-GPM.

### Standard Features

- Fiberglass reinforced polyester (FRP) resin tanks
- High capacity, strong-base anion resin in chloride form (Type II)
- Water meter initiated regeneration cycle
- Top-mounted, twin-tank control valve with integral brine injector
- Brine tank assembly with salt shelf and safety overflow valve
- Caustic injection system with metering pump, pump stand, and control panel

### Materials of Construction

- Resin Tanks: FRP
- Pump Body: PVC
- Internal Distributor: PVC/ABS
- Brine Tank: Polyethylene
- Pump Stand: Painted carbon steel
- Control Valve Body:  
Fleck 9100, Noryl thermoplastic (3/4" and 1")  
Fleck 9500, Bronze (1-1/2")

### Instrumentation / Controls

- Fleck 'XT' digital display electronic timer
- Resettable water usage totalizer
- Attached turbine-type water meter
- Pulsafeeder Series A+ metering pump
- Pre-wired caustic pump outlet with adjustable relay timer

### Operating Parameters

- Feedwater Source: Softened Water (<1 gpg)
- Inlet Pressure: 30-125 psig
- Electrical: 120VAC, 1-Ph, 60 Hz.
- Temperature: 40-100°F

### Options Available

- Skid mounted, pre-piped, pre-loaded system
- Alternate ion exchange resins
- Alternate chemical pumps
- 220 VAC/50Hz electrical power

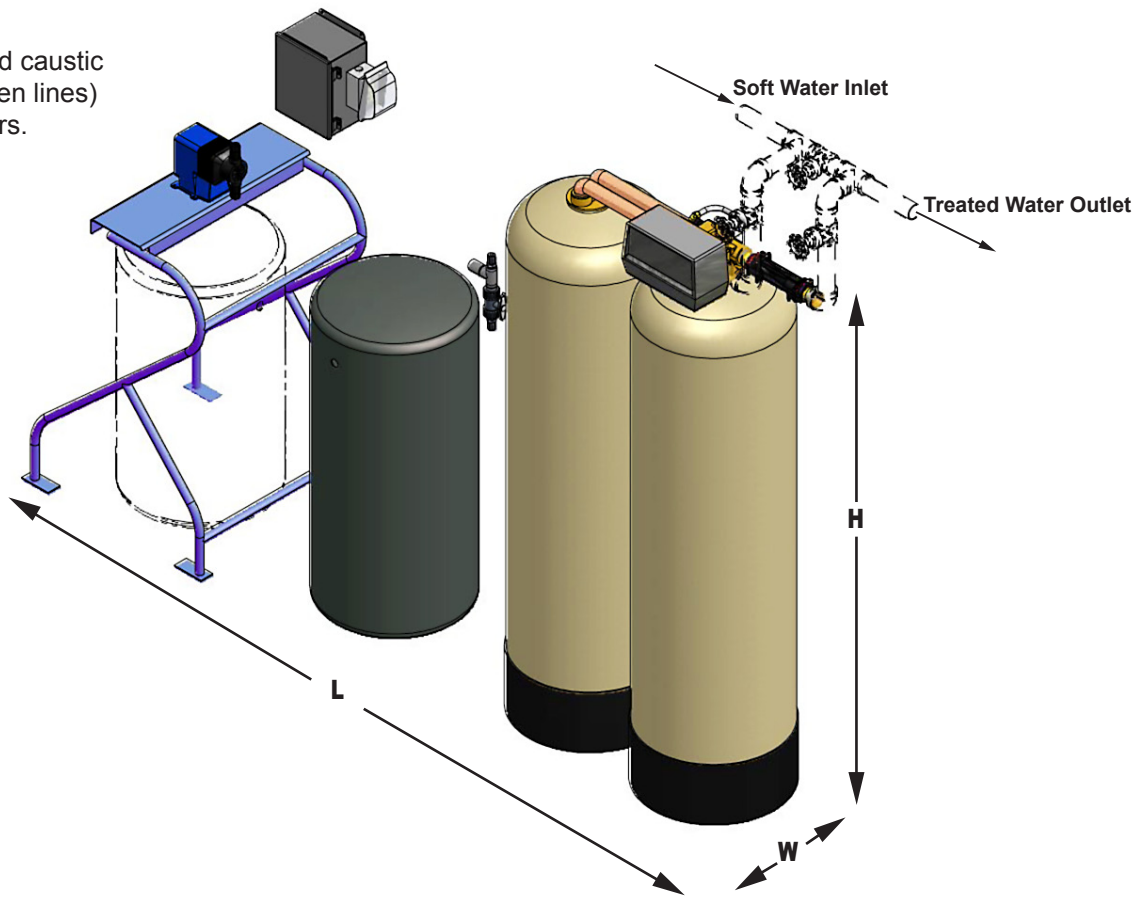
## 'MATD' Series Specifications

MODEL NUMBER	GRAIN CAPACITY ①	SALT DOSAGE PER REGENERATION	CAUSTIC DOSAGE PER REGENERATION	PIPE & METER SIZE	SERVICE FLOW RATE		BACKWASH FLOW RATE	ANION RESIN PER TANK	TANK SIZES		SALT STORAGE	OVERALL DIMENSIONS (INCHES) ④			APPROX. SHIPPING WEIGHT
	GRAINS PER TANK	LBS.	LBS.		INCHES	GPM			SOFTENER	BRINE		LBS.	LENGTH	WIDTH	
				CONT. ②		PEAK ③	GPM	CU. FT.	INCHES	INCHES					
MATD-10-3/4	10,000	5	0.33	3/4	2.5	5	1.1	1	9x48	18x33	300	72	24	56	210
MATD-20-3/4	20,000	10	0.66	3/4	5	10	2	2	12x52	18x33	300	79	24	60	400
MATD-30-1	30,000	15	1.00	1	7.5	15	3	3	14x65	18x33	300	84	24	73	625
MATD-40-1	40,000	20	1.33	1	10	20	3.5	4	16x65	18x40	325	88	24	73	830
MATD-50-1-1/2	50,000	25	1.65	1.5	12.5	25	5	5	18x65	18x40	325	96	24	75	1150
MATD-60-1-1/2	60,000	30	2.00	1.5	15	30	6	6	21x62	18x40	325	102	24	72	1270
MATD-80-1-1/2	80,000	40	2.65	1.5	20	40	8	8	24x72	24x40	550	114	24	82	1640
MATD-100-1-1/2	100,000	50	3.33	1.5	25	50	12	10	30x72	24x40	550	132	24	82	2230

## 'MATD' Series Dimensions

### NOTE:

Installation piping and caustic drum (shown in broken lines) are provided by others.



## Notes

- ① Capacity based on 10,000 grains per cubic foot of resin when regenerated with 5 lbs. salt and 0.33 lbs. caustic. Capacity decreases as chloride levels exceed 10% of the total anions.
- ② At a pressure loss not exceeding 15-PSI.
- ③ At a pressure loss not exceeding 25-PSI.
- ④ Includes space requirements for 50-gallon drum of 50% caustic soda.