# 'MFG-SM' Series Water Filter Systems



### **Overview**

The 'MFG-SM' Series is the corrosion resistant alternative to the 'MFS' Series of media based water filters. These filter systems are equipped with FRP resin tanks and side-mounted Sch 80 PVC exterior piping and valves. All 'MFG-SM' systems are factory skid mounted, pre-piped, pre-wired for ease of installation. Pre-engineered standard designs available for twin and triple tank configurations for the following filtration technologies:

### 'MZA' Natural Zeolite Filters

An alternative, single media approach to traditional multi-media filters that achieves a finer filtration to 3-5 micron with longer service run times.

#### 'ACA' Carbon Filters

Granular Activated Carbon (GAC) is designed for the reduction of chlorine, taste, odor, and dissolved organic material from municipal and industrial water supplies.

### **Materials of Construction**

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

### **Standard Equipment / Features**

- Marlo MX-III Electronic System Controller
- Motorized Stagers for Automatic Operation
- Timer Initiated Backwash Cycle
- Aquamatic Diaphragm Style Control Valves (Hydraulically Operated)
- NEMA-4X Electrical Enclosures (FRP)
- Inlet/Outlet Tank Pressure Gauges & Sample Valves

# **Operating Parameters**

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

# **Options Available**

- ASME Rated Media Tanks
- Allen-Bradley PLC/HMI Systems
- Differential Pressure Initiated Backwash Cycle
- Separate Source Backwash Water Supply
- CPVC Exterior Piping
- Butterfly or Ball Control Valves (Air or Electric Operated)
- Multi-Media Layers (Anthracite, Sand, Garnet)
- Greensand Filter Media for Iron Removal
- Catalytic Carbon Media for Chloramine Removal

# 'MFG-SM' Series Specifications

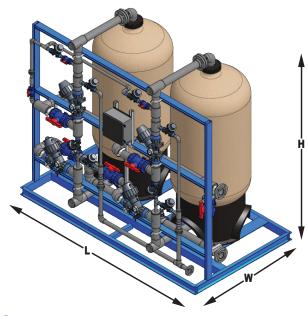
#### **Natural Zeolite Filters**

MODEL NUMBER	FLOW RATES					FILTER	TANK SIZES	PIPE SIZE		SKID HEADER SIZES 4		OVERALL DIMENSIONS		SHIPPING WEIGHT	
	SERVICE (PER TANK)		BACKWASH	TOTAL SYSTEM FLOW		MEDIA	DIAMETER x HEIGHT	TANK SERVICE	DRAIN	TWIN TRIPLE		(LxWxH, INCHES) <b>⑤</b>		(LBS.) <b>6</b>	
	CONT. GPM	PEAK GPM	GPM	TWIN GPM	TRIPLE GPM	CU. FT.	INCHES	INCHES	INCHES	INCHES	INCHES	TWIN	TRIPLE	TWIN	TRIPLE
MZA-24G-SM	30	45	45	60-90	90-135	10	24x72	2	2	2.5	2.5	100x52x102	150x52x102	2,650	4,000
MZA-30G-SM	50	75	75	100-150	150-225	15	30x72	2	2.5	3	3	104x58x102	154x58x102	3,730	5,510
MZA-36G-SM	70	105	105	140-210	210-315	20	36x72	3	3	4	4	104x64x103	154x64x103	4,790	7,160
MZA-42G-SM	100	145	145	200-290	300-435	30	42x72	3	3	4	6	112x70x110	172x70x110	7,355	10,920
MZA-48G-SM	125	190	190	250-380	375-570	40	48x72	3	4	4	6	118x76x110	176x76x110	9,275	14,100

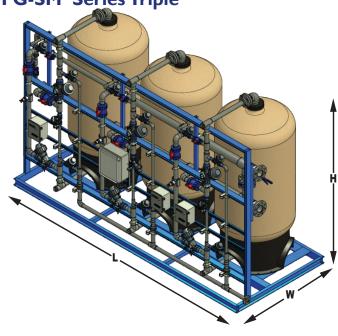
#### **Activated Carbon Filters**

MODEL NUMBER	FLOW RATES						TANK SIZES	PIPE SIZE		SKID HEADER SIZES 4		OVERALL DIMENSIONS		SHIPPING WEIGHT	
	SERVICE (PER TANK)		BACKWASH	TOTAL SYSTEM FLOW		FILTER MEDIA	DIAMETER x HEIGHT	TANK SERVICE	DRAIN	TWIN TRIPLE		(LxWxH, INCHES) <b>⑤</b>		(LBS.) <b>6</b>	
	CONT. GPM	PEAK GPM	GPM	TWIN GPM	TRIPLE GPM	CU. FT.	INCHES	INCHES	INCHES	INCHES	INCHES	TWIN	TRIPLE	TWIN	TRIPLE
ACA-24G-SM	20	30	30	40-60	60-90	10	24x72	2	1.5	2	2.5	100x52x102	150x52x102	2,210	3,340
ACA-30G-SM	30	50	50	60-100	90-150	15	30x72	2	2	2.5	2.5	104x58x102	154x58x102	3,070	4,520
ACA-36G-SM	40	70	70	80-140	120-210	20	36x72	2	2	2.5	3	104x64x103	154x64x103	3,910	5,840
ACA-42G-SM	60	100	100	120-200	180-300	30	42x72	3	2.5	4	4	112x70x110	172x70x110	6,050	8,970
ACA-48G-SM	80	125	125	160-250	240-375	40	48x72	3	3	4	4	118x76x110	176x76x110	7,550	11,490

# 'MFG-SM' Series Twin



# 'MFG-SM' Series Triple



### **Notes**

- Continuous Service Flow is based on 10 gpm/ft<sup>2</sup> surface loading for Zeolite Filters. Expected pressure drop less than 5 psig (clean bed).
- 2 Continuous Service Flow is based on 2 gpm/ft<sup>3</sup> volumetric loading for Carbon Filters. Expected pressure drop less than 5 psig (clean bed).
- 3 Peak Service Flow is recommended for intermittent usage only.
- Main service headers indicated for parallel flow applications. Header sizes may change depending on options selected.
- **5** Dimensions are estimate only. Actual dimensions may differ dependent on options selected.
- **6** Shipping weights are estimate only. Weights include media and gravel that is shipped separately on pallets.

