

### STANDARD FEATURES:

- Single Unit Flows up to 925 gpm
- FDA Approved Epoxy Lined Steel Tanks with 100 psig Design Pressure
- Top Mounted Manway
- Schedule 80 PVC Hub and Lateral Distributors
- Factory Assembled Diaphragm Valve Nest
- Steel External Piping
- Meter Initiated Regeneration
- Automatic Brine Float Valve
- Backwash Flow Controller

### ADVANTAGES:

- Materials and Coatings Selected to Withstand Corrosive Environments
- Reliable, Low Restriction Valves
- Non-Clogging Distributors Allow Operation Over Wide Flow Rate Range and for Even Distribution
- Standard Designs Reduce Cost and Delivery Time
- Simple Operation Reduces Operator Training Requirements

### OPTIONS:

- ASME Code Vessel
- Butterfly Valves
- Stainless Steel or Fiberglass Pressure Tanks
- Salt Silo and Bulk Brining System
- Stainless Steel, Copper, PVC, or Galvanized External Piping
- Stainless Steel Internal Piping and Distributors
- Pre-piped and Wired Systems Mounted on Skid
- Interconnecting Piping Between Multiple Units
- Manual Unit Isolation Valves
- Allen Bradley PLC

**For Options Not Listed Here  
Please Contact Res-Kem**

Res-Kem Zeo-Tech Softeners are available in a wide range of self-contained packages configured in single, double, and multiple unit systems to remove calcium and magnesium hardness from your water. Res-Kem Zeo-Tech Softeners are used for municipal, institutional, and industrial water softening applications. Single units are rated for flows up to 925 gpm. For larger flow rates, contact Res-Kem to determine whether larger or multiple units would be appropriate. Both options are available from Res-Kem.

Economical and efficient, Res-Kem Zeo-Tech Softeners can be equipped for manual, semi-automatic, or full-automatic operation. Regardless of the configuration, only limited technical expertise is required for operation. Res-Kem Zeo-Tech Softeners will integrate into a complete water treatment system without expensive custom field engineering and programming.



**Triple 48" Diameter Softener System with Optional  
Stainless Steel Butterfly Valves, Piping, and Instrumentation**

### Why use an Industrial Water Softener?

Calcium and magnesium are hard scale forming minerals that build up on piping, heat exchangers, water heaters, boilers, and any steam equipment. This buildup results in costly repairs, increased energy consumption, plugged heat exchangers and boiler tubes.

The following facilities are examples of ideal applications for water softening equipment:

- |                          |                          |
|--------------------------|--------------------------|
| • Beverage Plants        | • Municipal Water Plants |
| • Boiler Feedwater       | • Hospitals              |
| • Laundries              | • Manufacturing Plants   |
| • Food Processing Plants | • Institutions           |



## FEATURES AND SPECIFICATIONS

Model  Prefix	Vessel Diameter  inches	Flow Rate Range  gpm	Resin Quantity  cubic feet	Capacity Range		Inlet/Outlet Pipe Size Range inches	Brine Tank Diameter x Height  inches	Approximate Dimensions L x D x H inches
				grains				
<b>ZSO-20</b>	20	26-54	5-7	150,000	210,000	1 to 1 ½	24x54	56x32x94
<b>ZSO-24</b>	24	37-75	7-10	210,000	300,000	1 ½ to 2	24x54	60x36x94
<b>ZSO-30</b>	30	59-118	11-16	330,000	480,000	2 to 2 ½	30x60	72x42x98
<b>ZSO-36</b>	36	85-170	16-24	480,000	720,000	2 to 3	39x48	87x48x98
<b>ZSO-42</b>	42	115-230	21-32	630,000	960,000	2 ½ to 3	50x60	104x54x101
<b>ZSO-48</b>	48	150-225	28-42	840,000	1,260,000	2 ½ to 4	50x60	110x60x101
<b>ZSO-54</b>	54	190-380	36-53	1,080,000	1,590,000	3 to 4	60x46	126x66x110
<b>ZSO-60</b>	60	235-470	44-65	1,320,000	1,950,000	3 to 4	72x46	144x72x110
<b>ZSO-66</b>	66	285-570	53-79	1,590,000	2,370,000	3 to 4	72x46	150x78x110
<b>ZSO-72</b>	72	340-680	64-94	1,920,000	2,820,000	4 to 6	84x46	168x84x110
<b>ZSO-78</b>	78	400-795	75-111	2,250,000	3,330,000	4 to 6	Not Included	174x90x110
<b>ZSO-84</b>	84	460-925	87-128	2,610,000	3,840,000	4 to 6	Not Included	180x96x110

Specification Bases: (For your specific water source, contact Res-Kem for estimates)

Flow Rate Range: Minimum Flow 12 gpm/ft2 to Maximum Flow 24 gpm/ft2

Resin Quantity: Bed Depth 27 – 40 inches

Capacity Range: Regeneration Level is 15lbs NaCl /ft3

Features	Standard	Optional
<b>System Design and Operation</b>		
Steel Pressure Tank with Epoxy Lining	◆	
Steel Pressure Tank with High Temperature Epoxy, or Baked Phenolic Lining		◆
Stainless Steel or Fiberglass Pressure Tank		◆
ASME Code Vessel Construction		◆
PVC Hub and Lateral Distribution and Internal Piping	◆	
Stainless Steel Internal Piping and Distributors		◆
Cast Iron Diaphragm Valves	◆	
Stainless Steel, Bronze, or PVC Valves		◆
Steel External Piping	◆	
Copper, PVC, Galvanized Steel, or Stainless Steel External Piping		◆
Manual System Isolation Valves		◆
Brine Tank and Brine Float Valve Up to 72" diameter vessels	◆	
Interconnecting Piping to Brine System		◆
Salt Silo and Bulk Brining System		◆
Parallel or Alternating Operation for Multiple Units		◆
Skid Assembly for Multiple Units		◆
Interconnecting Piping between Multiple Units		◆
<b>Instrumentation and Controls</b>		
Time Clock Stager Controller in NEMA 1 Enclosure		◆
Manual, Semi-Automatic, or Full-Automatic Controls	◆	
Totalizing, Signal Register, Auto Reset, or Flow Sensor Meters/Sensors	◆	
Inlet and Outlet Pressure Gauges	◆	
Outlet Sampling Valve	◆	
NEMA 4XFG Electrical Enclosure	◆	
Allen Bradley Programmable Logic Controller		◆

## ZEO-TECH SOFTENER MODEL NUMBERING GUIDE

