

As the valley began to grow we realized that we need to develop a process to give new homeowners a sample of soft water – effectively and affordably (circa 1996). At this time the population in the Phoenix Metro area of Arizona was 1.1 million people (<http://www.city-data.com/city/Phoenix-Arizona.html>). Therefore, we designed a simple installation method to solve hard water problems immediately.

This is a brochure of our flagship product:

 **SS-MODEL**
Exchange Service Softener

Models SS-45, SS-61

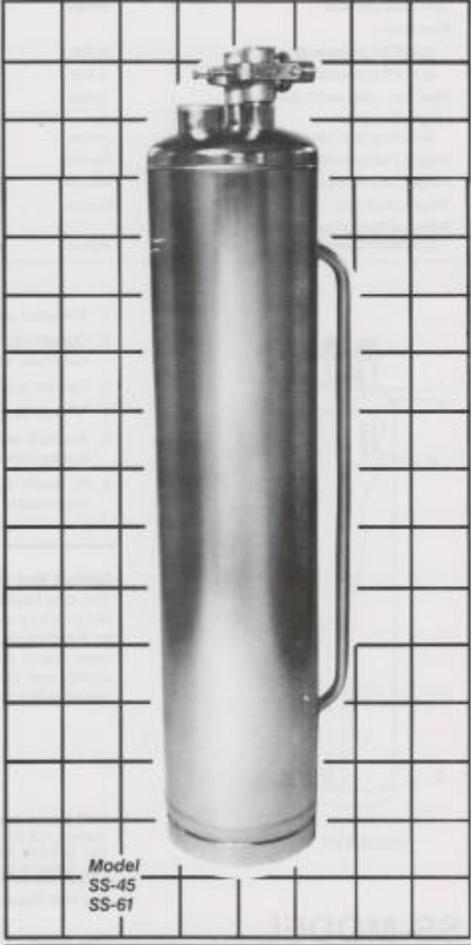
Application
For providing soft water service to the customer on a regular exchange basis. This portable softener can be used in a variety of installations for domestic and commercial applications. It can be installed individually or in groups of two or more—either in series for higher capacity in extreme hardness areas, or parallel for greater flow rate.

General Description
The SS-Model Softener is compact and portable. It is a down-flow design with no moving parts. The tank is constructed of T-304 stainless steel of low carbon content with heli-arc welded top and bottom and fusion seam-welded shell. The top has three openings: one 1½" threaded hole for filling the tanks and two 1" threaded holes in the top of the inlet and outlet tank connectors.

The complete SS-Model assembly includes:
two 1" tank connectors; two plastic distributors*—one short (inlet), one long (outlet); one outlet distributor seal ring; two distributor springs; two 1" plugs with "O" rings; one 1½" plug with "O" ring; two ¾" yoke assemblies with "O" rings.
*Brass distributors (short and long) are available for hot water applications.

Features

- ¾" flow tank connectors
- Heavy-duty construction
- Stainless steel construction
- "O" ring seals
- High flow rate
- Compact
- Quick disconnect fittings
- Plastic distributors can be easily removed from top to facilitate cleaning
- Handbar for ease of handling



Exchange Service Softener

Model
SS-45
SS-61

Rayne—Providing Water Conditioning for 50 Years.

We call this product our portable exchange soft water tank service.

This tank is designed to stand upright. However, standing this tank upright is not always the most accommodating to aesthetics. Therefore, our product development team went to work to design an affective solution. We came up with the portable exchange cradles and covers concept.

This picture represents a portable exchange tank laying on cradles:



This picture represents the portable exchange tank cover resting over the portable exchange tank (which is laying on the cradles).



This installation method is efficient and affordable. The standard installation costs is \$75.00. One person can receive this soft water service each month for \$39.00/month plus tax. A family of two can receive this service for \$43.00/month plus tax.

These next two pictures represent tank covers that are ready to be delivered.







This picture represents stacks of cradles ready to solve hard water problems in Arizona. We are ready to take action when you need a soft water solution for your hard water problems. Boyett's Family Rayne Water Conditioning solves hard water problems in Arizona.

Boyett's Family portable exchange tank soft water cradles and cover solution is an exclusively service designed and developed by our company. This is a world wide invention on process and design.

A typical installation for a Portable Exchange soft water delivery tank

Portable Tank Systems

Description – A class of water conditioning equipment that uses portable mineral tanks to reduce the levels of various water contaminants. Portable exchange systems are comprised of a mineral tank with inlet and outlet ports and flexible connections for coupling the tank to the water lines. The exhausted mineral tanks are removed and returned to a regeneration plant for regeneration. A brine tank and backwashing valve are not used. The media in the tank may be cation or anion resin or other material, depending on the contaminants to be removed.

Pretreatment Requirements – Exchange tank systems seldom require pretreatment. If the raw water has a high level of suspended solids, these may need to be removed by particulate filtration prior to entering the exchange tank. The presence of organic substances may tend to foul the media of some exchange tank systems. Consult the manufactures recommendations on pretreatment. If the exchange tank contains both cation and anion resins (mixed bed), a water softener should be installed ahead of the exchange tank to prevent fouling the bed.

Installation Requirements – Portable exchange tanks do not require electricity or a drain. The tanks should be located in an area easily accessible for removal and installation of tanks. Maintaining a minimum water pressure is usually not a problem with these systems. The maximum operating pressure for exchange tanks is normally 100 to 125 psi. If operating pressures exceed the maximum limit, a pressure reducing valve should be installed ahead of the exchange tanks.

Water Temperature – 33 degrees F. – 150 degrees F. cation, 33 degrees F. – 120 degrees F. anion maximum

Installation Guidelines

Step 1: Determine best location for tank(s) installation, and review installation plans. (See installation diagram, Fig. 14.)

Step 2: Shut off water supply.

Step 3: Open faucets at all levels of building to promote drainage and relieve pressure.

Step 4: cut existing water lines at site of installation using bucket or pan to catch draining water

Step 5: Install shutoff valves and appropriate fittings to both ends of pipe. Shutoff valves will stop water flow when tanks are exchanged. Fittings will allow tanks to be connected to existing pipes using flexible hose or tubing. Consult manufacturer for type of fittings required.

Step 6: Using flexible tubing approved for use with potable water and with the proper pressure rating, connect the exchange tank(s) to the existing water lines. Be sure inlet and outlet of tanks(s) are properly connected to the plumbing system. If connected backwards, the system will not function properly

Step 7: close faucets previously opened to facilitate drainage.

Step 8: Slowly open water supply valve.

Step 9: Open a faucet slowly to allow trapped air to escape. When water is flowing freely to drain (no air escaping) open other faucets to bleed air from all lines.

Step 10: Check for leaks and repair any found.

Step 11: Clean up work area.

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We are finding our portable exchange soft water tank delivery service is popular with people who have septic tanks. A kind lady called yesterday and ordered our portable exchange soft water service because they do not want to increase the water amount that goes into their septic tank. With our exchangeable soft water tanks; there is no water waste; there is no electricity required. There is no salt required with our soft water delivery service. We perform the heavy lifting.