

The Hard Facts: Water Softener Tune-ups Help Maximize Water Quality and Reduce Cost!

Water is the life blood of many industrial processes. The raw water supply coming into your facility has picked up soluble minerals such as iron, calcium, magnesium and manganese making the water hard. Softeners are a critical component to the water treatment system. They help remove these minerals to reduce scale and build-up in piping and heat transfer equipment. This improves overall system efficiency and extending the life of equipment. Having a water softener that is tuned up and working effectively provides the best quality water at the lowest cost. An efficient operating softener will minimize water, salt and sewer costs without sacrificing water quality.

Fortunately, softeners are fairly easy to maintain. By scheduling an annual evaluation and following a few basic checkpoints you can help ensure your system runs smoothly. *(continued)*



A SMOOTH RUNNING SYSTEM HAS A POSITIVE IMPACT ON:

- Maintenance costs
- Overall efficiency
- Equipment life
- Salt and water usage
- Energy conservation



PREVENTIVE WATER SOFTENER MAINTENANCE STEPS

1. **Raw Water Testing.** Test and record the raw water for total hardness and iron. Both municipal and well water quality may change over time. If your raw water contains iron, consider adding a resin cleaner each regeneration. This will help prevent the resin from fouling. If the resin is already fouled with iron a shock treatment of resin cleaner is recommended.
2. **Check the softener controller program.** It may have been modified by wandering fingers or by a professional. If you don't have a copy of the program write down the existing program.
3. **Brine tank cleaning.** It is recommended to clean the brine tank annually. All types of salt contain impurities, which should be noted on the bag. Even salt with a purity level of 99% still contains 1 pound of dirt for every 100 pounds used. Rock salt should never be used due to excessive dirt. Below are steps to follow to clean the brine tank:
 - Let the salt level run down in the brine tank before cleaning.
 - Disconnect the brine line (remove the grid, if so equipped), brine well, and brine valve and remove any old salt and debris from the system.
 - Flush out the brine tank and all components with soapy water and then rinse with clear water.
 - After rinsing, reassemble. Make sure all brine line fittings are tight to prevent an air leak. Add new salt and water.
 - Wait a few hours for the salt to dissolve before regenerating the system.
4. **Disinfect the system.** System disinfection is a good idea if the softener is used on potable water. Check with your water treatment/softener professional for recommendations and instructions.
5. **Time check.** Ensure that the time of stamp on your system is accurate.
6. **Valve check.** Check isolation valves and make sure inlet/outlet valves are open and water is flowing through the system.
7. **Meter check.** Most current softeners have a meter. Double check that the gallons remaining is working correctly and is counting down
8. **Brine elution study.** Run a brine elution study to verify proper salt dosing. Fine tune your brine draw, slow rinse and rapid rinse times based on the results. You may also need to change your injector sizes and brine line refill rate, depending on your results.
9. **Manual regeneration.** If the unit has been down for any length of time, run it through a manual regeneration. Manually step the softener through each step of regeneration observing the flow rate to drain and brine draw. Check for air leaks in the brine lines.

If not treated properly, water hardness can negatively impact your facility. Having softeners that are working properly will save on energy costs, reduce repairs and can help extend the overall life of equipment. They are a crucial part of the system and should be maintained properly.

To request a free softener evaluation or if you have any questions regarding water softeners at your facility, reach out to Watertech.

**More than a
water treatment solution.**

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