

# AAA BestWater Co.

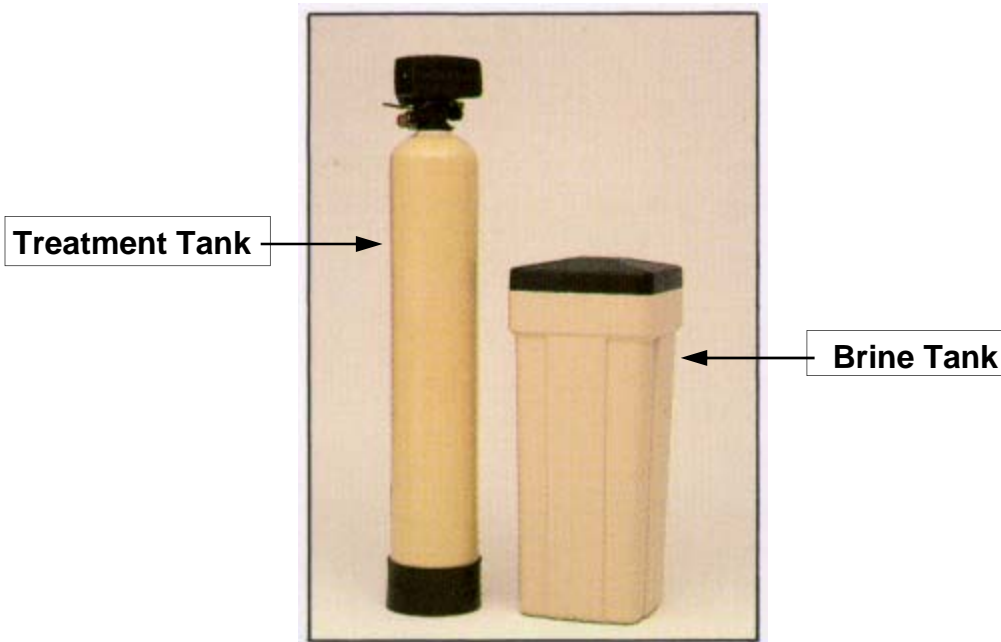
*A Kama`aina Company Since 1983*



## AAA-Soft Whole-House Water Softener/Conditioner System

- **Fully Automatic**
- **Metered-** (Demand Initiated)
- Contains **NON-SOLVENT** Water Softening **RESIN**:  
**FDA** regulation CFR21 173.25 **Compliant**
- Manufacturer **Lifetime Warranty**
- **Includes:** One Hundred Sixty (160) Pounds of Rock Salt,  
or One Hundred Sixty (160) Pounds of Potassium Chloride

### Whole-House Water Softening/Conditioning System



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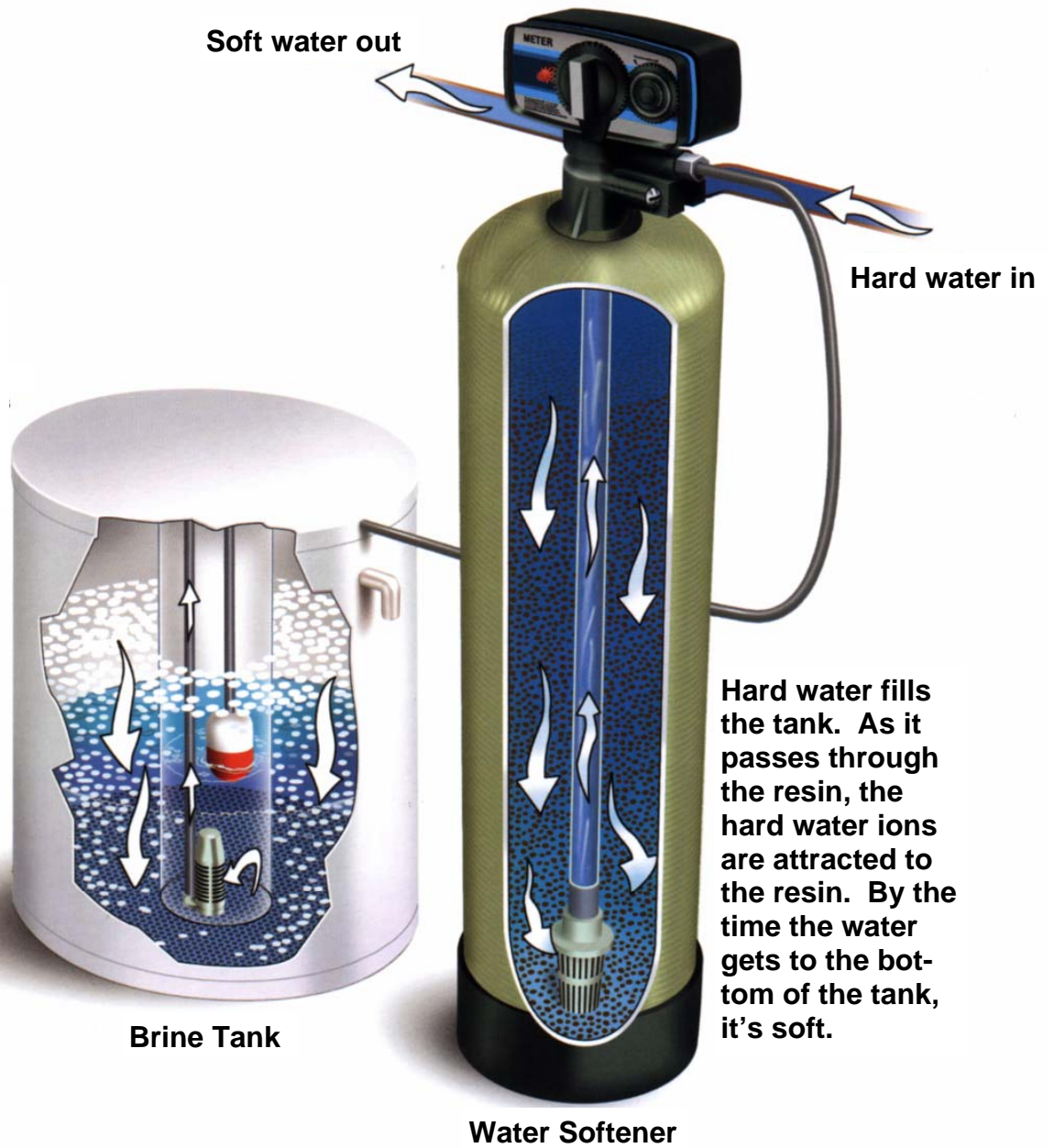
Comes with Manufacturer **LIFETIME WARRANTY\***

**NON-SOLVENT Softening RESIN: LIFETIME WARRANTY**  
**MINERAL CONTAINER (RESIN TANK): LIFETIME WARRANTY**  
**SALT STORAGE CONTAINER (BRINE CABINET): LIFETIME WARRANTY**  
**VALVE BODY: LIFETIME WARRANTY**  
**ELECTRICAL PARTS: LIFETIME WARRANTY**

\*See Manufacturer Warranty for details.

# *"How does a water softener work?"*

To wash off hard water minerals from the resin, brine water is injected into the softener.





## Softening water is a 4-step process.

- 1) The body of a water softener is a tank filled with resin beads. These beads are covered with sodium ions-(If you use Salt-{Sodium Chloride} to make a brine solution), or, covered with potassium-(If you use Potassium Chloride to make a brine solution). [NOTE: Any Water Softener can use either Salt-{Sodium Chloride} OR, Potassium Chloride.] As hard water passes through, the resin beads act like a magnet, attracting the calcium and magnesium ions (hardness) in exchange for either the sodium or potassium ions-(depending if you use either Salt-{Sodium Chloride} OR, Potassium Chloride).
- 2) Eventually the resin beads become saturated with mineral ions and have to be “re-charged.” This process is called regeneration, and is conducted by the control valve on the top of the tank. The control valve is the brain of the system.
- 3) During regeneration, a strong brine solution is flushed through the resin tank, bathing the resin beads in a stream of sodium or potassium ions-(depending if you use either Salt-{Sodium Chloride} OR, Potassium Chloride), which replace the accumulated calcium and magnesium ions (hardness).
- 4) The brine solution, carrying the displaced calcium and magnesium ions, is then flushed down the drain by fresh water. The regenerated resin beads can be used again and again.



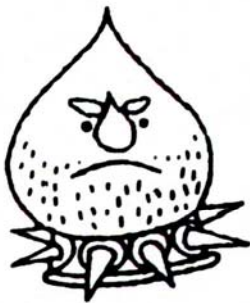
**Fleck control valves are designed to meet rigorous fatigue standards, passing 250,000 pressure cycles at up 190 psi, as well as 10,000 complete regeneration cycles. Structural fiberglass tanks offer a 10-year manufacturer's warranty, the best in the business. Plus, only Structural fiberglass tanks feature an injection-molded inlet for leak-free seals.**

# TIPS ON WATER CONDITIONERS

## Why Condition Your Water?

Water isn't always what you expect. Sometimes it is hard. Sometimes it is soft. Sometimes it tastes bad. Sometimes it is tasteless. But no matter where you get your water, it usually needs some treatment to be the kind of water you need for all the uses you will put it to.

City water is invariably safe for drinking purposes. But in order to keep water rates low, and because over 80% of city water is used for sprinkling lawns, flushing toilets, fighting fires, washing cars, and industrial use, very few communities make it of the highest quality for bathing, laundering, cleaning, cooking, or drinking. Improving water can be done simply and economically in the home at the point where it is used. Hardness, sediment, and objectionable taste are the problems most frequently encountered. If you have your own water supply, there may also be problems of iron, "sulfur", and bacterial contamination.



## Hard Water

Moderately hard to hard water (60 to 181 ppm) occurs in over half of the homes in the United States, according to the U.S. Geological Survey. Hardness is caused by invisible dissolved rock in the water, principally calcium and magnesium. These two minerals are readily removed from water by water conditioning equipment.

It is reasonably simple to detect hard water. Soap doesn't lather, or lathers scantily. Instead, it combines with water's hardness minerals to form a curd which leaves a scummy deposit on surfaces, hair or clothing.

When water is heated, minerals deposit as a rock-like scale. You have seen this scale in a teakettle. The same scale may clog plumbing pipes, heaters, shower heads, and can interfere with the operation of water-using appliances.

The rock-like deposits left by hardness minerals in water heaters act as an insulator, and you must set the heat indicator higher to get sufficient hot water. This only serves to accelerate the deposit of hardness minerals in water heaters and pipes.

To find out how hard your tap water really is, check with your water utility. The water company can tell you exactly how many grams per gallon, or parts per million of hardness it contains. Your local water softening equipment dealer can tell you its exact condition, or will test it if unknown.

Water hardness can be measured as grains per gallon (gpg). Other units of hardness measurement are parts per million (ppm), or milligrams per liter (mg/l), which are essentially the same. Here is what an analysis in grains per gallon or parts per million means to you, according to the U.S. Department of the Interior, Water Conditioning Foundation, and Water Quality Association standards.

grains per gallon	parts per million	
less than 1.0	less than 17.1	soft
1 to 3.5	17.1 to 60	slightly hard
3.5 to 7.0	60 to 120	moderately hard
7.0 to 10.5	120 to 180	hard
10.5 and over	180 and over	very hard

When water is only slightly or moderately hard, many people are not as readily aware of it, but they suffer from its damaging effects nevertheless. When a switch is made to soft water, they become aware of an improvement in water quality.

In areas where water is very hard, water utilities can partially soften the entire supply. The resulting water typically contains 5 to 6 grains per gallon, or more, of hardness — still moderately hard. A water softening appliance produces water containing less than one grain of hardness.

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HARD WATER, is caused by hardness minerals — Calcium and Magnesium in the water.

Virtually all the water on Oahu is HARD WATER.

On Oahu, the water hardness ranges from Slightly Hard to Very Hard.

**“When water is only slightly or moderately hard, many people are not as readily aware of it, but they suffer from its damaging effects nevertheless. When a switch is made to soft water, they become aware of an improvement in water quality.”**

*—Better Business Bureau, Consumer Information Series*