

## SOFTENED WATER AND WATER SOFTENERS

### WHAT IS A WATER SOFTENER?

Simply put, a water softener is sometimes referred to as a water conditioner. It does just as the name implies. A water softener conditions water with excessive minerals in it. When these are removed it feels softer. The water does not leave minerals or scale behind, which is why you can get away with using much less soap on your skin, laundry or surfaces requiring soap products to clean. There are actually no hard minerals left for the soap to surround and cling to.

### RESIN MEDIA

Resin media is made up from very small beads that are coated with sodium ions which attract the calcium and magnesium ions found in hard water. The hard water ions swap places with the sodium ions, replacing them on the resin beads which in turn release the sodium ions in your water. Basically, the water flows through the resin media and an ion exchange occurs.

Eventually the resin media will run out of sodium ions. It is at this time that regeneration is required. Adding salt (sodium chloride) regenerates the resin beads. It will also make your water very salty. This salt water must be flushed out of the softener (about 25 – 50 gallons) during the regeneration process. New sodium ions have now attached themselves to the resin beads and the softening process begins again.

### WHAT A WATER SOFTENER WILL DO

A water softener will save you a great deal of money when it comes to soap and detergent use. Often, as much as 50% savings can be realized depending on the hardness of your water or non conditioned water.

It will prevent stains on porcelain, gelcoat, stainless and plastics, as well as clothing during the laundering process. You can also say goodbye to mineral or scale build-up in tea kettles, dishwashers, pipes, hot water heaters and any other appliances utilizing hot water. It will prevent water spots on washed surfaces such as cars, windows, boats, RV's, etc. Typically the water spots left on a just washed and drying surface are scaly mineral deposits. With softened or conditioned water, a much reduced amount of soap is required and is less inclined to adhere to just washed surfaces. You can also do your part by reducing the amount of detergents released into the environment.

### WHAT A WATER SOFTENER WILL NOT DO

A water softener will not, and is not a filter. It will not remove bacteria, nitrates or tannins. It will not filter out sediment or make your water healthier to drink.