Frequently asked questions

Q: What are the product's limitations?

A: Our standard equipment will treat water effectively under the following parameters:

- Hardness range to 132 grains per gallon (2,250 ppm)
- Temperatures to 475° F
- Boiler operating steam pressure to 185 psi
- Silica content should not exceed 10% of the calcium content
- If silica content exceeds 10% of the calcium content, softening the water first will be beneficial

Q: Will it take the place of a water softener?

A: It depends on the application and water quality. For domestic potable water use in a residential application, if there is iron present, there will be a need for an iron filter, as the Superior Water Conditioner® will not remove iron or anything else from the water, for that matter. In a commercial or industrial setting, for use on a boiler, cooling tower, food service equipment, etc. for the control of mineral scale deposition, a Superior Water Conditioner® can be used in place of (and will most likely out-perform) a water softener.

Q: Does this actually soften water?

A: No. A water softener exchanges 2 ions of sodium for every 1 ion of calcium and magnesium, hence the process commonly referred to as ion-exchange water softening. The Superior Water Conditioner® does not add or remove anything from water, thus water purity is not affected. However, it offers a physical treatment process, which, of course, is very cost effective, safe for human consumption, non-polluting, and water and energy conserving.

Q: How does it work?

A: The Superior Water Conditioner® physically alters the molecular structure of positively and negatively charged ions of dissolved calcium and magnesium (water hardness) with the influence of multiple, reversing polarity permanent magnetic fields. This causes the dissolved minerals to respond like similarly charged particles and repel one another vs. their natural tendency to be attracted and bond tightly together, thus forming lime / scale (calcite) when heat change (delta T), pressure change (delta P), friction and turbulence take place within plumbing systems and water-using vessels.