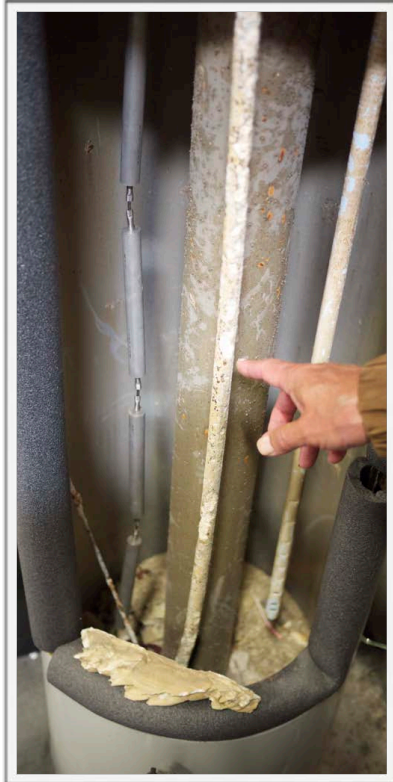
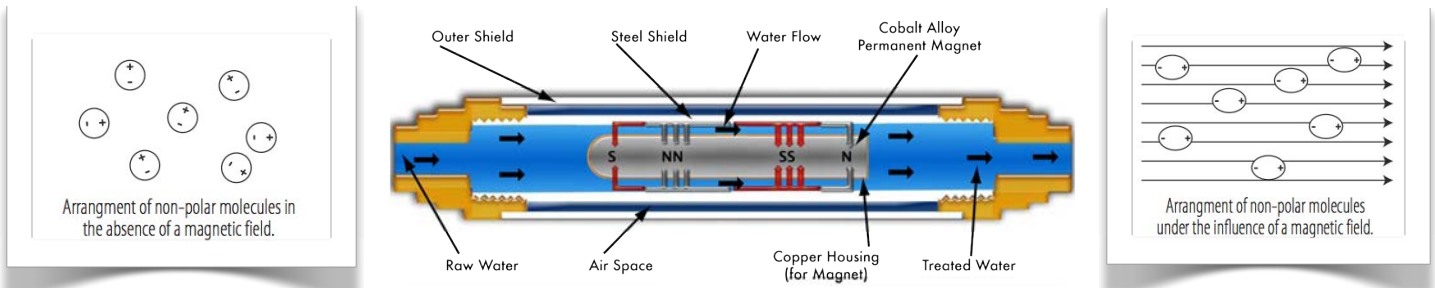


# ARAGONITE is your friend



## Magnetic Water Conditioning - Explained



When water is subjected to temperature change ( $\Delta T$ ), pressure change ( $\Delta P$ ), friction and turbulence, dissolved minerals, primarily calcium carbonate ( $\text{CaCO}_3$ ) and magnesium carbonate ( $\text{MgCO}_3$ ), will precipitate out of solution and deposit on heat transfer surfaces of plumbing systems and equipment in the form of a rock-like buildup, commonly called lime/scale.

At the molecular level, the negatively and positively charged ions of these minerals are attracted to and bond tightly together with one another, thus forming the lime/scale deposit known as calcite. These mineral deposits act as a great insulator and require more energy to heat or cool water in many different types of residential, commercial, institutional, and industrial applications.

As water passes through the HALO ION's treatment chamber, it is subjected to a series of reversing-polarity, permanent magnetic fields, which interrupts the natural scale forming characteristics of  $\text{CaCO}_3$  and  $\text{MgCO}_3$  by temporarily *altering their ionic charge identity*.

Instead of being attracted to one another, the molecules are caused to act like ions of similar charges and repel one another as they precipitate out of solution.

This leaves the molecules in a physical state of suspension known as aragonite (an amorphous mud-like or powdery form), which will flow through a plumbing system or drop to a low area within equipment so that it can easily be blown down or bled off.

Aragonite can also be removed by other physical means such as centrifugal separation and filtration equipment.

Since chemicals are unnecessary in this type of treatment, the purity of the water is not effected in any way, and it can be safely and legally discharged to a sanitary sewer or even to the environment, where allowed.

The presence of aragonite in the water provides an additional benefit in terms of corrosion protection. A thin film of the soft aragonite will adhere to all wetted surfaces of the plumbing system and equipment, keeping free oxygen and other corrosive properties in the water from reaching and attacking the metallic components, thus preventing corrosion.