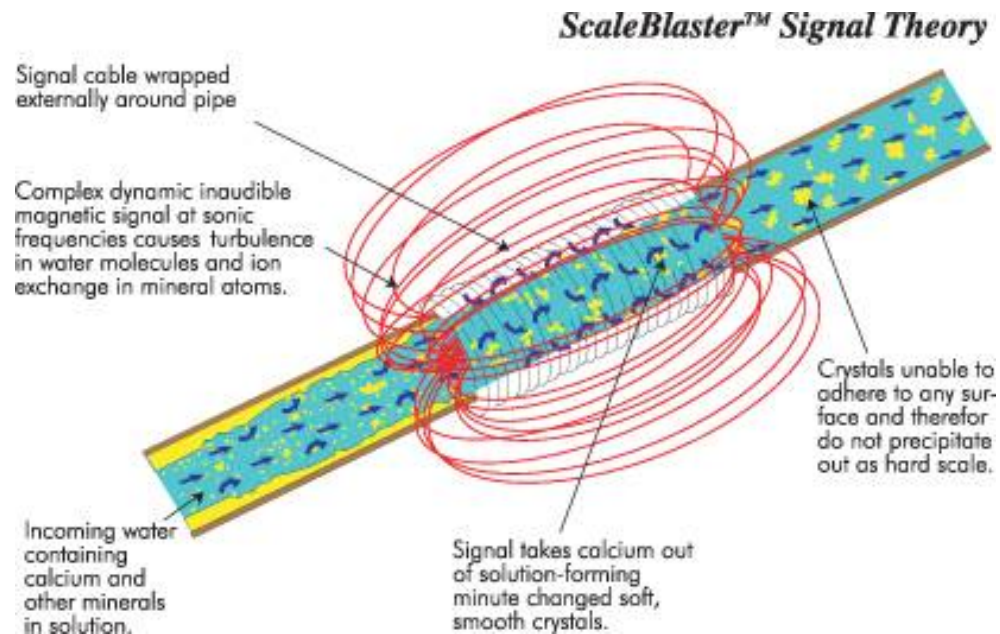


The ScaleBlaster Science

ScaleBlaster's™ compact, integrated circuitry system sends a scientifically developed signal charge to an induction coil that is simply wrapped around the pipe entering your home. These inaudible sonic pulses change the electrical and physical properties of the limescale forming calcium molecules causing them to repel, rather than adhere to water pipes and fixtures. The calcium deposits are dissolved in the water and never return again.

ScaleBlaster's™ Signal Theory:

The **ScaleBlaster's™** unit is composed of a signal cable that is wrapped several times around the pipe and an electronic unit that sends out a complex, dynamic current to produce extremely small, time-varying oscillating fields inside the pipe. The current that produces a oscillating field is known as **Ampere's Law**.



Scale Blaster's™ Molecular Theory:

ScaleBlaster's™ signal produces a unique square wave current that sweeps all the frequency responses from 2,000 - 24,000 Hz at a rate of 20 times a second. When the strength of the oscillating field varies with time and changes direction, an induced current is produced inside the pipe, a phenomenon known as **Faraday's Law of Induction**.

As the induced electric field oscillates, all particles which have an electrical charge are affected by the induced field. This causes the unstable mineral ions to precipitate or collide with each other to the point where the calcium carbonate crystals grow until they become so large that there are no more surface charges left to stick to the pipe walls. As a by-product of this "snowball" effect, freed water molecules become available to remove existing scale, molecule by molecule.

