R.L. DEPPMANN
Serving the industry since 1927

20929 Bridge Street, Southfield, MI 48033
4121 Brockton Drive SE, Grand Rapids, MI 49512
6200 Baron Drive, Bridgeport, MI 48722
6910 Treeline Drive, Suite A, Brecksville, OH 44141

Phone: (800) 589-6120 - Fax: (248) 354-3710
www.deppmann.com

August 20th 2012

By Bob Van Goor

The objective of water treatment is to:

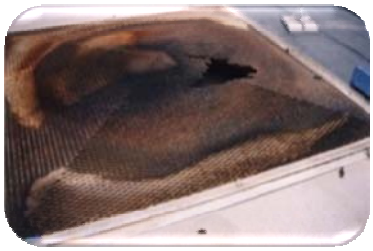
***INHIBIT CORROSION,** prevent mineral scale & control bacteria, biofilm & legionella.

In this Monday Morning Minute, we will discuss the technology and the effect that pulse technology via the Griswold Wave product provides specific to corrosion inhibition.

"What is Pulse Technology?" and "Why We Use it to Affect Water Quality."

When talking about corrosion in a heating or cooling system, our concern centers around two types. The first type of corrosion is "Uniform" corrosion. This corrosion is more likely to affect all surfaces evenly in a closed system and is rarely a concern in a cooling system. Normal design standards aimed at thickness of pipe and product wall thickness normally address this.





The second type of corrosion is "Local" corrosion which can be very harmful to a cooling system as shown above. The Wave allows system operation at mineral concentration levels above the saturation of calcium carbonate, thus providing the protection of a microscopic layer of CaCO3 as an effective natural corrosion inhibiter against "local" corrosion.

THIS GUARANTEES: < 0.3 MPY corrosion on copper and < 5 MPY corrosion on steel.

The Wave™ eliminates the conditions that cause the types of corrosion that threaten equipment life and system performance.

- "Microbial Influenced Corrosion (MIC)" is impossible due to low bacteria counts and the absence of biofilm.
- "Chloride Pitting" is easily controlled by an appropriate conductivity setting on the blowdown, but high chlorides in the makeup water could limit water savings.
- Chemically induced corrosion from misapplied or malfunctioning chemical additions are avoided.

Next week we will start our series introducing ASHRAE 90.1 changes and opportunities.