

MAGNETIC WATER TREATMENT RESULTS

"Several thousand magnetic water conditioners are now rendering great service in buildings of all sizes, from private homes to hospitals, schools, military buildings, etc. These units will protect the whole circuit of cold and hot water as well as sanitary installations against scale formation and corrosion when placed where the water main enters the premises. It is remarkable to note that algae, such as normally grow on coolers in the open air and in swimming pools, die rapidly under the effects of the magnetic treatment.' Vermelren, T., Corrosion Technology (Belgium), July 1958, pg. 215-219. Belgian patents #460560 (1945) and #560199 (1960).

The **National Aeronautics and Space Administration NASA** tested magnetically treated water against chemically treated water for corrosion rates of steel corrosion coupons placed in the two water systems. Reported results were excellent with corrosion rates of 1 to 50 mils per year using chemical inhibitors, with four mils per year considered to be acceptable, while corrosion rates of 0.0 mils per year were recorded for the magnetic treatment.

National Aeronautics and Space Administration NASA. Kuivinen, David E., "Comparing Corrosion Rates of Steel Corrosion Inhibitors". Lewis Research Center, Cleveland, 1975

The **UNITED STATES TESTING COMPANY, INC.**, performed a test to determine the effectiveness of magnetic water treatment in preventing boiler scale build-up. Upon subsection of the residual salts from both the treated and non-treated samples to x-ray diffraction examination, a distinctive difference in the crystalline structure of the deposited residues was noted. The two samples were found to have the same chemical constituents but the x-ray diffraction analysis indicates that the dominant crystal species in the untreated sample is calcium sulfate and calcium silicate, while in the treated sample the dominant species is a calcium carbonate and calcium sulfate (non corrosive elements). The samples are therefore physically different.

United States Testing Center Inc. Schmutzer, M.A., and Hull, G.W., "Examination to Determine the Physical or Chemical Differences Between Untreated and Magnetically Treated Water". Hoboken, 1969.

"The magnetic water treatment phenomenon has been scientifically investigated extremely thoroughly throughout the world, and has been known for many years ... in nearly every case, in Great Britain, where magnetic treatment devices have been fitted, the results have been as favorable as in Europe." Diamant, R.M.E., M.Sc., Hospital Engineering (Great Britain), October, 1970, pg. 231-232.

"It was concluded that the magnetic unit used in these tests was very effective in controlling scale and corrosion in water systems, in such diverse applications as a large air conditioner condenser, syrup evaporators in a sugar mill, cooling exchangers in a large chemical processing plant in a boiler and a steam generator. Significant savings in time, cost and equipment were effected in all cases."

Raisen, E., Ph.D., The Control of Scale and Corrosion in Water Systems Using Magnetic Fields. Paper #117, CORROSION'84.

Magnetic Water Treatment - Quinn

"Based upon analyses of existing technical literature on the magnetic treatment of water and its ability to alter water properties, there are many basic areas where the utilization of this method has great practical merit, such as elimination of scale; control of encrustation; reduction of salt deposits; intensification of coagulation and crystallization; improving bactericidal function of disinfectants; acceleration of reagent diffusion; increasing the efficiency of ion-exchange resin; removal of fine particles in the purification or recycling of waste water; extraction of valuable metals from; acceleration of the solidification of cements, increasing the density and strength of casting molds, etc."

Stevovich, V.A., Liebhold, K., Hibben, S.G., Air Force Office of Scientific Research, Advanced Research Projects Agency of the United States Department of Defense, Arlington, Virginia, USA. (Unclassified, 30 JAN 73, Project Code #627OIE3FIO.)