

CASE STUDY

Michael E. DeBakey VA Medical Center Houston TX USA Chiller and Cooling Tower Water Treatment



OVERVIEW

There are three main challenges for treating cooling water: Scale, Corrosion and Biogrowth.



WATER SYSTEM CHALLENGES

The traditional chemical treatment calls for chemicals to deal with these challenges. When scale is present, the condenser's ability to transfer heat is reduced, causing higher pressure and higher temperatures hence more energy. Microbial growth induced corrosion which weakens components, reduces heat transfer efficiency and causes leaks, as well as reduces life expectancy of the equipment. There is another aspect of course, which is the hazards associated with the chemicals stored in the building.



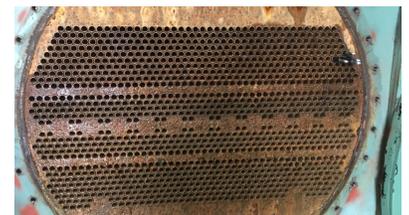
The **ScaleBuster®** technology enables the operator to reduce chemicals while maintaining the system free of scale buildup, corrosion as well as Biological growth for maximum efficiency while saving energy and reducing downtime.

EnviroTower™ CONCEPT



RESULTS

The **EnviroTower™** system based on the **ScaleBuster®** technology was installed in the mechanical room in 2008. The results of the HVAC water treatment were so good, that in 2014 another EnviroTower system was ordered to treat a 2,800 Ton HVAC system and later another (for 7,000 Ton HVAC) was added in 2015, enabling savings of chemicals, energy, water and labour. In the end of 2016 the chillers were opened for inspection and found to be clean of scale and corrosion signs, no "tube punching" was required!



ABOUT THE TECHNOLOGY

The patented **ScaleBuster®** technology completely replaces traditional chemical treatment; providing control of scale and corrosion in various water process systems to create an exceptionally clean system. This dramatically reduces energy and water consumption, while reducing or, in certain cases, eliminating toxic water discharge to the environment.