

Smart Release®

Solid Treatment Technology Streamlines Large Cooling Tower System

Background

A leading global technology company that manages a 278,000 square foot, LEED- Gold Certified Green building was using a traditional water treatment program feeding out of a chemical mix tank and drums. ChemTreat was called in to this facility to take care of the water treatment systems in this building, which included a cooling tower for the two 350 ton chillers. ChemTreat utilized Smart Release Technology for the cooling tower inhibitor program to support their Green initiatives. The facility was able to automate the Smart Release feed system to save chemicals, time and energy by interfacing it with the computerized building management system.

Smart Release® Program

Smart Release® inhibitor was setup with three 10-pound canisters that were each filled with (4) 2.5-pound bags of dry inhibitor. The benefits of Smart Release® Technology immediately became apparent to the customer:

- Ease of transport by personnel when heavy liquid drums are replaced by a 5-lb box
- Safe handling of non-hazardous chemicals
- Significant decrease in the required frequency of on-site treatment testing
- Prevention of additional discharge of hazardous chemicals
- Reduction of energy usage by eliminating chemical feed pumps
- Lower carbon footprint due to recycled cardboard packaging

After one year with the Smart Release® Program, ChemTreat helped the customer interface feed solenoids on the feed canisters with their computerized building management system. They programmed their system to utilize a sequencer control program to open and close the solenoids to each canister according to the percent total cooling load on

the system and days of run time on each of the canisters. This allowed the customer to:

- Use 100% of the chemicals in each canister
- Reduce risk of overfeeding chemicals
- Alert facility maintenance personnel when to replace Smart Release® product in feed canisters

Outcome

- 80% reduction in chemical spend on inhibitor
- Simplification of inventory control and program monitoring with text message alerts
- Increased productivity of facility personnel by minimizing the burden of testing
- Support of employee safety by maintaining a clean environment

