





Smart Release® uses proven
water treatment chemistries
and applies them in a simple and
more reliable way in order to
protect your valuable cooling
systems while also benefiting your
employees and the environment.

# What is Smart Release® Technology?

Water treatment chemicals are designed to protect your valuable assets. With proper treatment and great service, your assets will be protected. That is why first and foremost, Smart Release® was created with robust, proven water treatment formulas.

The next step was thinking about how this treatment could be applied in a way that is better for the environment, for people in and around the facility, and for



the systems being treated. The result is Smart Release® Technology.

Smart Release® Technology is designed to use proven solid water treatment chemistries in a simple and more reliable way.

# AVOID DISCHARGE OF HARMFUL CHEMICALS

Unlike traditional liquid chemistries that require stabilizers to keep raw materials in solution, Smart Release® contains at least 97% active as the salts. This prevents additional discharge of many harmful chemicals into the waterways.

#### REDUCE WATER USAGE

Good treatment allows for higher cycles of concentration. This in turn lowers water usage. Smart Release® uses robust and proven chemistries to do just that.

#### REDUCE ENERGY USAGE

No pumps required equates to less energy usage.

#### • LOWER CO2

Smart Release® products are delivered in recyclable cardboard boxes and the high active concentration reduces shipping weight, thus lowering CO<sub>2</sub> emissions.



## **PROVEN RESULTS**

A large university was using a traditional liquid chemistry to treat their cooling water system. While there were no performance issues with this treatment program, the university was concerned about the hazards associated with the handling of these products and the ongoing costs associated with this program.

ChemTreat utilized Smart Release® Technology, a program that eliminated the liquid chemical products and chemical pumps. The customer noticed an immediate improvement on the first set of coupons 30 days after initial startup. Each time the chillers were removed for service, the tubes and tube sheet were exceptionally clean. Since switching to Smart Release®, the system has had zero upsets and improved performance.

# Scale/Corrosion Inhibitors

Smart Release® scale and corrosion products are delivered in safe-to-handle tablets. The patented coated tablet controls release and provides for safe handling. As a result, Smart Release® ships as non-regulated according to DOT guidelines. Unlike liquids that require stabilizers to keep the product in solution, Smart Release® tablets contain over 97% active as the salts.

Smart Release® Technology combines proven water treatment chemistries into a tablet and coats the tablet with a patented polymer coating. As the cooling tower runs, the flow generates osmotic pressure within the Smart Release® feeder, gradually diffusing the chemistry into the system over a 30-day period.

## **Biocides**

Smart Release® Biocide Technology consists of both oxidizing and non-oxidizing biocides. By utilizing Smart Release® Technology, solid biocides can be delivered in a simple and more reliable way than traditional liquid biocides.

An oxidizing and non-oxidizing biocide program provides a robust solution for control of microbial growth. Smart Release® Technology controls the release of biocides through the use of patent-pending membranes. Every biocide has a different natural solubility that can be matched to a membrane porosity and area to provide the desired controlled release for 30 days.

Just like the scale and corrosion inhibitor tablets, the biocides work on the principles of osmosis.

# Benefits of Smart Release® Technology

- Asset Protection
- Convenient Use
- Ideal for Commercial/Industrial Accounts with Smaller Cooler Towers (< 500 Tons)</li>
- Low Carbon Footprint
- Low Toxicity



- Eliminates Liquid Chemical Handling
- Reduces Freight Costs
- Great for hard-to-reach Cooling Towers
- Meets Cooling Tower Institute & ASHRAE Recommendations for Continuous Halogen



