SIMPLE, SAFE & RELIABLE
SOLID-FEED WATER TREATMENT SYSTEM

Smart Release Technology
COOLING TOWER WATER TREATMENT

1. **OXIDIZING BIOCIDE**
   Solid BCDMH used to control problems in the system caused by microorganisms.

2. **NON-OXIDIZING BIOCIDE**
   Solid DBNPA used to control problems in the system caused by microorganisms.

3. **CORROSION & SCALE CONTROL**
   Advanced chemistries formulated to prevent scale build-up and corrosion.

4. **EQUIPMENT**
   Complete your solid-feed water treatment system with equipment available in different sizes that fit your needs.

A Total Solid-Feed Treatment System
**ELIMINATE LIQUID CHEMISTRY**

**GO SOLID! HERE’S WHY...**

**SIMPLE**

*Water in, Water out*

**Simple Installation**
- Supply tower water to feeder and back to tower
- Small footprint required
- No pumps necessary

**SAFE**

*Safer for the Environment, Safer for your Employees*

**Safe to Handle**
- No risk of liquid spills or splashing
- No drum or pail disposal
- Non-hazardous inhibitor package per OSHA guidelines
- Ergonomically friendly: packaging is easy to carry, even in hard to reach locations

**RELIABLE**

*Proven Chemistries, Validated Application*

**Reliable Results**
- Used by thousands of locations throughout the world
- Hospitals, universities, data centers, commercial buildings, manufacturing facilities and many more all depend on Smart Release® Technology

**LOWER CO₂**

Smart Release products are delivered in recyclable cardboard boxes. Our high active concentration reduces shipping weight and our carbon footprint.

**REDUCED WATER USAGE**

Good treatment allows for higher cycles of concentration. Smart Release lowers water usage by using proven chemistries.

**ELIMINATE DISCHARGE OF HARMFUL CHEMICALS**

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

Learn more: GoSolidWithSRT.com/getstarted
CONVERT TO SOLIDS
IN 4 STEPS

Determine the size of the system you need.
Use our online calculator at www.GoSolidWithSRT.com/calculator

Select your chemistry

Select your equipment

Installation & Monitoring

We’re here to help! Contact us at www.GoSolidWithSRT.com/getstarted
STEP 1: SELECT THE SIZE OF YOUR SYSTEM

Smart Release® Technology uses concentrated chemistries which require fewer pounds of product per system than traditional liquids. Simply calculate the required pounds of each product and the corresponding feed equipment required based upon the cooling system’s annual gallons of blowdown.

www.GoSolidWithSRT.com/calculator

Alternatively, use the table below or our product sheets to determine the estimated annual usage of each product based upon the system size.

<table>
<thead>
<tr>
<th>Gallons of Blowdown per Year</th>
<th>Scale &amp; Corrosion Inhibitor</th>
<th>Oxidizing Biocide Usage</th>
<th>Non-Oxidizing Biocide Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>125,000 gallons</td>
<td>25lbs</td>
<td>12lbs</td>
<td>5lbs</td>
</tr>
<tr>
<td>250,000 gallons</td>
<td>50lbs</td>
<td>24lbs</td>
<td>10lbs</td>
</tr>
<tr>
<td>500,000 gallons</td>
<td>100lbs</td>
<td>48lbs</td>
<td>21lbs</td>
</tr>
<tr>
<td>1,000,000 gallons</td>
<td>200lbs</td>
<td>95lbs</td>
<td>42lbs</td>
</tr>
<tr>
<td>1,500,000 gallons</td>
<td>300lbs</td>
<td>143lbs</td>
<td>63lbs</td>
</tr>
<tr>
<td>&gt;1,500,000 gallons</td>
<td>Please consult with a Smart Release® representative for proper sizing.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For more specific intermediate system sizes, use the following conversions to estimate annual chemical usage:

- 1lb Scale and Corrosion Inhibitors = 5,000 gallons of blowdown
- 1lb Oxidizing Biocide = 10,500 gallons of blowdown
- 1lb Non-Oxidizing Biocide = 25,000 gallons of blowdown

Size the system for peak monthly usage. Do this by dividing the total gallons of blowdown for this peak month by the amount of blowdown that is treated by 1lb of chemistry. Then, select the number of feeders needed to accommodate the required chemical usage.
**STEP 2: SELECT YOUR CHEMISTRY**

**CHEMICAL PRODUCT SELECTION**

We offer solid controlled release tablets to prevent scale and corrosion in your cooling application.

<table>
<thead>
<tr>
<th>PRODUCTS</th>
<th>CW211-SR</th>
<th>CW311-SR</th>
<th>CW350-SR</th>
</tr>
</thead>
<tbody>
<tr>
<td>WATER TYPE</td>
<td>Moderately Hard Water</td>
<td>Hard Water (Scaling)</td>
<td>Extremely Hard Water</td>
</tr>
<tr>
<td>LSI RANGE</td>
<td>LSI &lt; 2.2</td>
<td>LSI 2.0 - 2.8</td>
<td>LSI 2.2 - 3.0</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>Polyphosphate Orthophosphate</td>
<td>PBTC</td>
<td>PBTC</td>
</tr>
<tr>
<td></td>
<td>Polyphosphate</td>
<td>HEDP</td>
<td>HEDP</td>
</tr>
<tr>
<td></td>
<td>Orthophosphate</td>
<td>BZT</td>
<td>BZT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dual Polymer System</td>
<td>Dual Polymer System</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PTSA</td>
</tr>
<tr>
<td>DOSING</td>
<td>25 PPM</td>
<td>25 PPM</td>
<td>25 PPM</td>
</tr>
<tr>
<td>PACKAGING</td>
<td>25 lb box (10 2.5lb bags)</td>
<td>25 lb box (10 2.5lb bags)</td>
<td>25 lb box (10 2.5lb bags)</td>
</tr>
</tbody>
</table>

www.GoSolidWithSRT.com/getstarted
STEP 2:
SELECT YOUR CHEMISTRY

BIOCIDES
We offer oxidizing and non-oxidizing biocides to complete your water treatment solution.

OXIDIZING BIOCIDE
K-BROM G
K-BROM G is a broad-spectrum bromine based oxidizing biocide. This product is designed for use in open recirculating cooling water systems where a controlled-release biocide is desired. K-BROM G contains a granular form of Bromo-chloro-5,5-dimethylhydrantoin packaged in a proprietary water-soluble Smart Release bag.

- Smart Release minimizes maintenance costs - No Pumping Required
- Smart Release containers prevent human exposure to chemical
- Controls biofilm and microbiological contamination
- Reduces risk associated with water born pathogens

Packaging: 18lb Pail (Eighteen 1lb water soluble bags)

NON-OXIDIZING BIOCIDE
SMART RELEASE® BIO-CLEAR
The product is a broad spectrum, non-oxidizing biocide effective against a range of bacteria. The product contains a solid form of 2,2-Dibromo-3-nitrilopropionamide packaged in a Smart Release® membrane canister. The product is designed for use in open recirculating cooling water systems where a 30-day Smart Release® biocide treatment is desired.

- Smart Release minimizes maintenance costs - No Pumping Required
- Smart Release containers prevent human exposure to chemical
- Controls biofilm and microbiological contamination
- Reduces risk associated with water born pathogens

Packaging: 12lb Box (Twelve 1lb Canisters or Six 2lbs Canisters)
SMART FEEDERS
Smart Release Feeders are used to feed both scale and corrosion inhibitors and biocides.

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>SMALL</th>
<th>MEDIUM</th>
<th>LARGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tablet Capacity</td>
<td>5lbs</td>
<td>10lbs</td>
<td>15lbs</td>
</tr>
<tr>
<td>Membrane Biocide Capacity</td>
<td>1lb canister: 3lbs 2lb canister: 4lbs</td>
<td>1lb canister: 6lbs 2lb canister: 8lbs</td>
<td>1lb canister: 9lbs 2lb canister: 12lbs</td>
</tr>
<tr>
<td>PVA Biocide Capacity</td>
<td>4 bags</td>
<td>6-7 bags</td>
<td>8-9 bags</td>
</tr>
<tr>
<td>Feeder Height</td>
<td>21”</td>
<td>31”</td>
<td>49”</td>
</tr>
<tr>
<td>Basket Height</td>
<td>19”</td>
<td>31”</td>
<td>46”</td>
</tr>
<tr>
<td>Feeder Width</td>
<td>11” (including valve)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeder Construction</td>
<td>PVC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basket Material</td>
<td></td>
<td>HDPE &amp; UHMWPE</td>
<td></td>
</tr>
<tr>
<td>Max Pressure</td>
<td>80 PSI @ 130 F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommended Flow</td>
<td>1-3 GPM</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Feeders can be purchased individually or as a pre-assembled skid.
SMART CONSTRUCTION

The simple PVC construction not only looks good today, but will look good for years to come.

SCALE & CORROSION TABLET AND NON-OXIDIZING BIOCIDE FEEDERS

K-BROM G FEEDERS (OXIDIZER)

*PRV Required

STEP 3:
SELECT YOUR EQUIPMENT

SMALL
W00112

MEDIUM
W00086

LARGE
W00260

SMALL
W00523

MEDIUM
W00524

LARGE
W00525
MOUNTING KITS

Smart Feeders can be mounted to the floor, wall, or the cooling system. Pre-cut Unistrut® is provided in addition to all hardware and clamps for mounting.

- Pre-cut Unistrut® with gold galvanized finish
- Clamps and valves

Pre-cut Kits Available:
- Single Smart Feeder Mounting Kit (WM0263)
- Dual Smart Feeder Mounting Kit (WM0264)
- Triple Smart Feeder Mounting Kit (WM0425)

*Feeders not included
STEP 3: SELECT YOUR EQUIPMENT

EXTRA SMALL SYSTEMS
375,000 gallons of blowdown per year

BASIC PRE-MOUNTED SKID
Skid Components:
- Medium Feeders (2)
- Pressure Relief Valve (80 PSI)
- Dual Discharge

PREMIUM PRE-MOUNTED SKID
Skid Components:
- Medium Feeders (2)
- Pressure Relief Valve (80 PSI)
- Dual Discharge
- WCT-600 Controller
- 3 Station Coupon Rack
- Solenoid Blowdown Valve
- White Polypro Backboard

W70010
W70020

SMALL SYSTEMS
600,000 gallons of blowdown per year

BASIC PRE-MOUNTED SKID
Skid Components:
- Medium Feeders (3)
- Pressure Relief Valve (80 PSI)
- Dual Discharge

PREMIUM PRE-MOUNTED SKID
Skid Components:
- Medium Feeders (3)
- Pressure Relief Valve (80 PSI)
- Dual Discharge
- WCT-600 Controller
- 3 Station Coupon Rack
- Solenoid Blowdown Valve
- White Polypro Backboard

W70012
W70022

Please consult with your water treatment professional before deciding on which skid will best fit your needs.
STEP 3: SELECT YOUR EQUIPMENT

MEDIUM SYSTEMS
1,000,000 gallons of blowdown per year

BASIC PRE-MOUNTED SKID
Skid Components:
- Medium Feeders (2) & Large Feeders (2)
- Pressure Relief Valve (80 PSI)
- Dual Discharge

PREMIUM PRE-MOUNTED SKID
Skid Components:
- Medium Feeders (2) & Large Feeders (2)
- Pressure Relief Valve (80 PSI)
- Dual Discharge
- WCT-600 Controller
- 3 Station Coupon Rack
- Solenoid Blowdown Valve
- White Polypro Backboard

W70014
W70024

LARGE SYSTEMS
1,500,000 gallons of blowdown per year

BASIC PRE-MOUNTED SKID
Skid Components:
- Large Feeders (4)
- Pressure Relief Valve (80 PSI)
- Dual Discharge

PREMIUM PRE-MOUNTED SKID
Skid Components:
- Large Feeders (4)
- Pressure Relief Valve (80 PSI)
- Dual Discharge
- WCT-600 Controller
- 3 Station Coupon Rack
- Solenoid Blowdown Valve
- White Polypro Backboard

W70016
W70026

Please consult with your water treatment professional before deciding on which skid will best fit your needs.
STEP 4: INSTALLATION & MONITORING

**ASSEMBLE FEEDERS**
Feeders arrive with required components (ball valves, flow meter, etc.) and assemble in no time.

**PLUMB FEEDERS TOGETHER**
Proper installation is depicted in the diagram below.

**SECURELY MOUNT**
Securely mount to ground, wall or tower.

**PROVIDE WATER SUPPLY & RETURN LINES TO COOLING SYSTEM**
Feed system uses recirculating water as supply and requires two return lines to the tower.

Options A & B available as a pre-assembled skid.

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MONITORING

Monitor Smart Release the same as you would for liquid chemistry.
It’s that easy.
If an oxidizing biocide is used, a pressure relief valve is required. This 80 PSI valve is designed to work with 130 F Smart Feeders.

Tool used for simple removal or tightening of Smart Feeder lids.

Both ‘normally open’ and ‘normally closed’ solenoid valves available.

Simple drop-in feeder design used for new construction and low visibility cooling systems. (Float ring sold separately)

Simple organic phosphonate test kit. Used to determine approximate feed rate of product.

Join our community of over 6000 installations.
CL Series products are designed for use as a closed cooling and heating loop system additive where a dry, powdered treatment is desired. The CL Series products are designed to be applied in a closed loop system pot feeder equipment.

**CL001P: Nitrite based closed loop inhibitor**

CL001P contains a formulation of sodium nitrite, borate pH buffer, yellow metal corrosion inhibitor and polymer dispersant. Product benefits include:
- Minimizes transportation and handling costs
- Eliminates drum disposal costs
- Controls system from fouling
- Minimizes corrosion in closed loop systems with mixed metals

**CL002P: Molybdate based closed loop inhibitor**

CL002P contains a formulation of sodium molybdate, borate pH buffer, yellow metal corrosion inhibitor and polymer dispersant. Product benefits include:
- Minimizes transportation and handling costs
- Eliminates drum disposal costs
- Controls system from fouling
- Minimizes corrosion in closed loop systems with mixed metals

**CL003P: Borate based closed loop inhibitor (no MoO₄ or NO₂)**

CL003P contains a formulation of borate pH buffer, yellow metal corrosion inhibitor and polymer dispersant. Product benefits include:
- Minimizes transportation and handling costs
- Eliminates drum disposal costs
- “NAPS Free” and does not contain nitrite, amine, phosphate or silicate
- Does not contain molybdate

**CL010L: Organic acid based multifunctional closed loop inhibitor**

CL010L is a proprietary blend of corrosion inhibitors based on patent pending organic acid technology. Product benefits include:
- Minimize transportation and handling costs
- Minimize corrosion in closed loop systems with aluminum alloys and mixed metals.
- Does not contain nitrite, nitrate, borate, amine, phosphate, molybdate and silicate.
TO GET STARTED USING SMART RELEASE SOLUTIONS, CONTACT YOUR WATER TREATMENT SPECIALIST OR VISIT www.GoSolidWithSRT.com/getstarted