

# SIMPLE, SAFE & RELIABLE

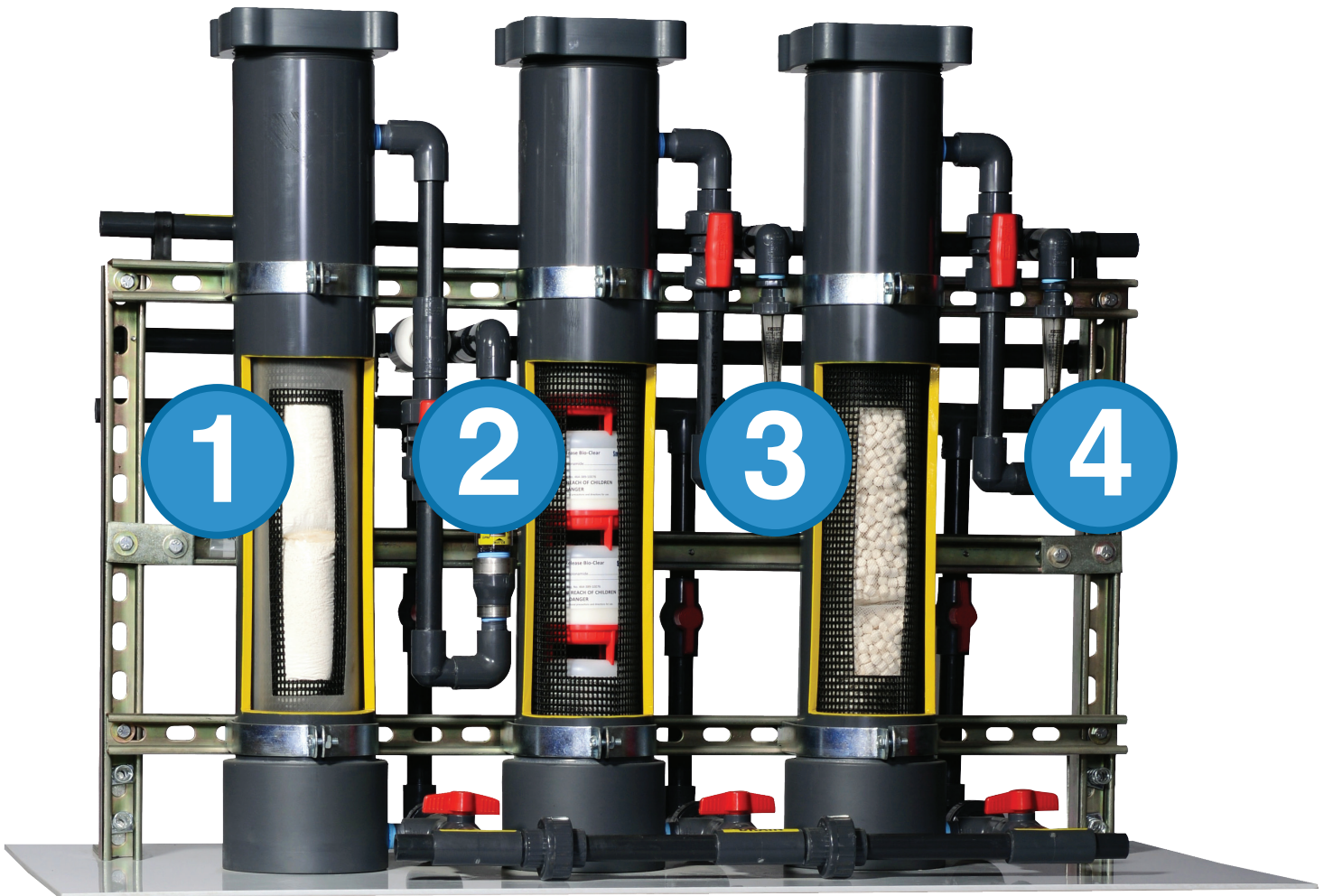
## SOLID-FEED WATER TREATMENT SYSTEM



**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

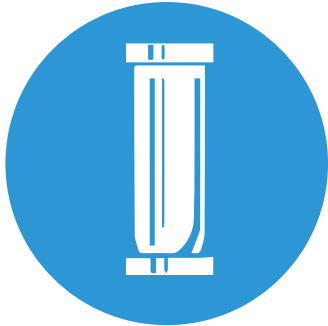
## **EQUIPMENT**

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 CO<sub>2</sub>

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](https://GoSolidWithSRT.com/getstarted)

# CONVERT TO SOLIDS IN 4 STEPS

View our videos and learn how Smart Release Technology works at [www.GoSolidwithSRT.com/video](http://www.GoSolidwithSRT.com/video)



**1**

**Determine the size of the system you need.**

Use our online calculator at [www.GoSolidWithSRT.com/calculator](http://www.GoSolidWithSRT.com/calculator)

**2**

**Select your chemistry**

**3**

**Select your equipment**

**4**

**Installation & Monitoring**

We're here to help! Contact us at [www.GoSolidWithSRT.com/getstarted](http://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](http://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.

ESTIMATED ANNUAL USAGE BY PRODUCT			
Gallons of Blowdown per Year	Scale & Corrosion Inhibitor	Oxidizing Biocide Usage	Non-Oxidizing Biocide Usage
125,000 gallons	25lbs	12lbs	5lbs
250,000 gallons	50lbs	24lbs	10lbs
500,000 gallons	100lbs	48lbs	21lbs
1,000,000 gallons	200lbs	95lbs	42lbs
1,500,000 gallons	300lbs	143lbs	63lbs
>1,500,000 gallons	Please consult with a Smart Release® representative for proper sizing.		

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.

PRODUCTS	CW211-SR	CW311-SR	CW350-SR
WATER TYPE	Moderately Hard Water	Hard Water (Scaling)	Extremely Hard Water
LSI RANGE	LSI < 2.2	LSI 2.0 - 2.8	LSI 2.2 - 3.0
CHEMISTRY	Polyphosphate Orthophosphate PBTC HEDP BZT Dual Polymer System	PBTC HEDP BZT Dual Polymer System PTSA	PBTC BZT Dual Polymer System PTSA
DOSING	25 PPM	25 PPM	25 PPM
PACKAGING	25 lb box (10 2.5lb bags)	25 lb box (10 2.5lb bags)	25 lb box (10 2.5lb bags)



[www.GoSolidWithSRT.com/getstarted](http://www.GoSolidWithSRT.com/getstarted)



# STEP 2: SELECT YOUR CHEMISTRY

## BIOCIDES

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



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

### OXIDIZING BIOCIDES 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: 12lb Box (Twelve 1lb Canisters or Six 2lbs Canisters)

### NON-OXIDIZING BIOCIDES 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-nitriopropionamide 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

# STEP 3: SELECT YOUR EQUIPMENT

## SMART FEEDERS

Smart Release Feeders are used to feed both scale and corrosion inhibitors and biocides.

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

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



## STEP 3: SELECT YOUR EQUIPMENT

# 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 BIOCIDES FEEDERS

### K-BROM G FEEDERS (OXIDIZER)

\*PRV Required



**SMALL**  
W00112

**MEDIUM**  
W00086

**LARGE**  
W00260



**SMALL**  
W00523

**MEDIUM**  
W00524

**LARGE**  
W00525

# STEP 3: SELECT YOUR EQUIPMENT

## 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



W70010

### 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



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



W70012

### 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



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



W70014

### 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



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



W70016

### 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
- Valve
- White Polypro Backboard



W70026

Please consult with your water treatment professional before deciding on which skid will best fit your needs.



# STEP 4: INSTALLATION & MONITORING

**A**

## ASSEMBLE FEEDERS

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

**B**

## PLUMB FEEDERS TOGETHER

Proper installation is depicted in the diagram below.

**C**

## SECURELY MOUNT

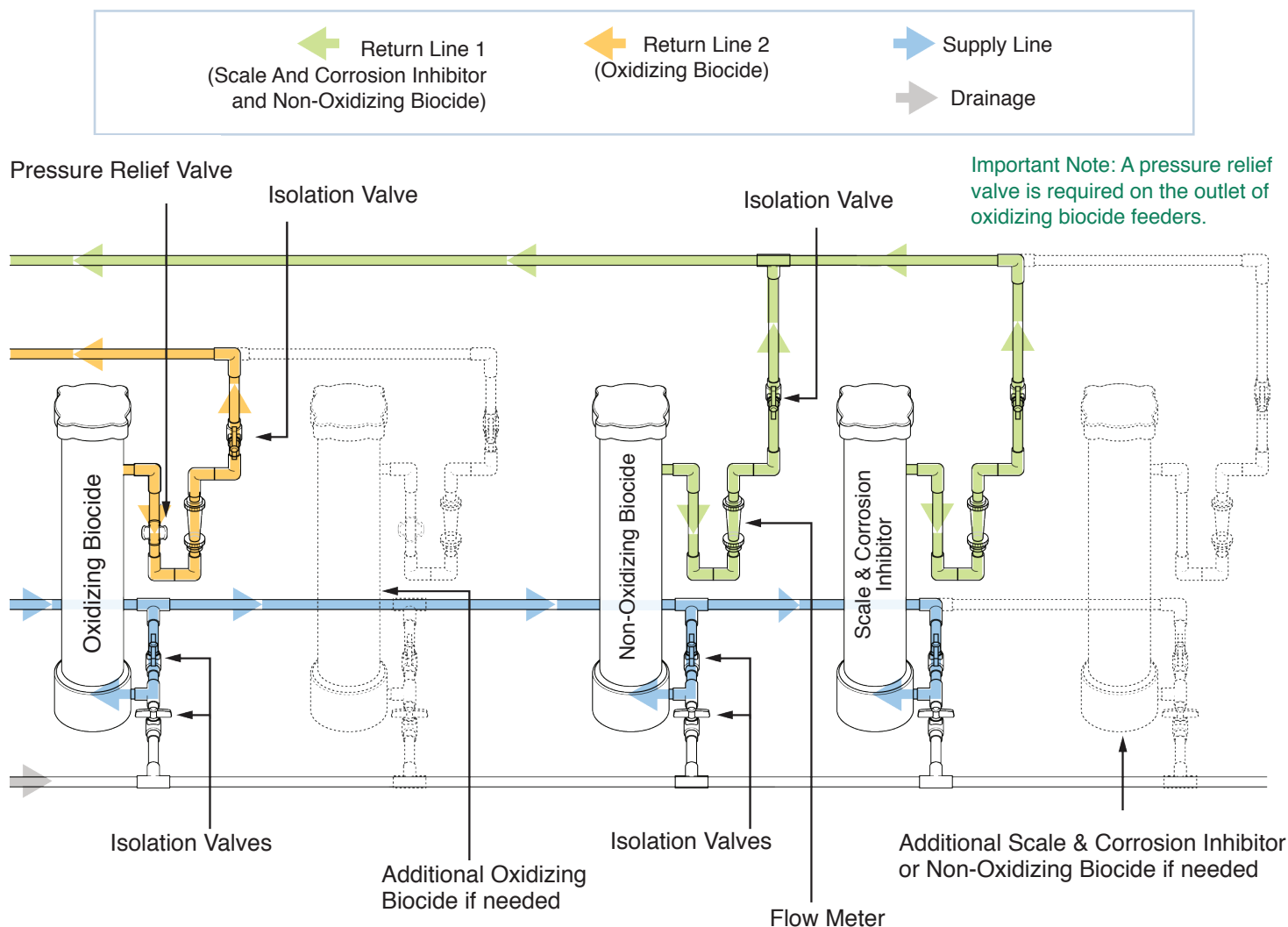
Securely mount to ground, wall or tower.

**D**

## 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.*



## MONITORING

Monitor Smart Release the same as you would for liquid chemistry.  
It's that easy.

# OTHER PRODUCTS



## **W00510 PRESSURE RELIEF VALVE**

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.



## **W00426 LID WRENCH**

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



*Normally Closed V00118  
Normally Open V00126*

## **SOLENOID VALVES**

Both 'normally open' and 'normally closed' solenoid valves available.



*Basin Feeder W00070  
Float Ring W00294*

## **BASIN FEEDER w/ FLOAT RING**

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



## **L00701-29 TEST KIT**

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

**JOIN OUR COMMUNITY  
OF OVER 6000  
INSTALLATIONS**

# CLOSED LOOP

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 $\text{MoO}_4$ or $\text{NO}_2$ )**

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 an 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](http://www.GoSolidWithSRT.com/getstarted)**

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**DOBER**

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