



## **Innovative Solid Chemistry Water Treatment System**



***EASY...SAFE...SUSTAINABLE***

**EVAPCO® Smart Shield®...Water Treatment System Engineered for  
Closed Circuit Coolers and Evaporative Condensers!**



## Factory-Mounted Solid Chemistry Water Treatment

### EVAPCO Conductivity Controller 2 (ECC-2)

- Second generation controller with enhanced data acquisition capabilities
- Maximizes water efficiency
- Factory mounted, piped and wired - simple 120/230 VAC field power connection is all that is required
- Features a low maintenance Toroidal probe and reliable motorized ball valve



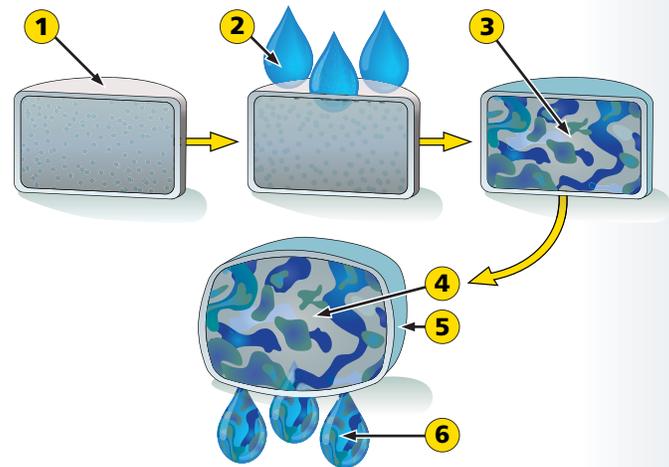


### Factory Mounted Feeder (FMF)

- Each feeder is engineered specifically for the size of your closed circuit cooler or evaporative condenser
- Easiest corrosion and scale inhibitor replenishment in the industry
- Patented technology controls the release of inhibitor chemistry over a 30-day period



### Inhibitor Operation



- 1 Polymer coated inhibitor tablet
- 2 Recirculated water permeates the polymer coating
- 3 Solid chemistry becomes a slurry inside the tablet
- 4 Osmotic pressure causes the tablet to swell, forcing the chemistry out through the polymer coating
- 5 Polymer coating controls the treatment release rate
- 6 Treated water returns to the basin



### Bio-Control Feeder (BCF)

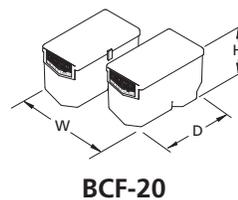
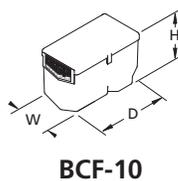
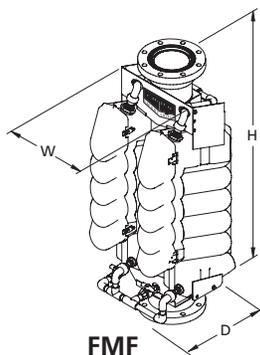
- Simplifies control of microbiological activity by releasing biocide whenever the spray water pump is in operation
- Utilizes easy and safe granular biocide which is replenished monthly
- Integrated membrane technology controls release of chemistry
- Factory mounted and piped on coil products utilizing EVAPCO's patented self draining design (U.S. Patent #8,093,917)

# Smart Shield® Benefits

-  Includes all the components required for an effective water treatment system, factory mounted and wired on EVAPCO closed circuit coolers and evaporative condensers.
-  Controlled release chemistry provides uniform treatment over a 30 day period.
-  EVAPCO Conductivity Controller 2 automates the blowdown process maximizing water efficiency.
-  Solid chemistry provides reduced packaging, shipping and handling compared to liquid products assuring a lower carbon footprint.
-  Solid products eliminate the potential for liquid spills making them easier and safer to apply.

## Engineering Data

Smart Shield Component		Dimensions in (mm)			Shipping Weight lb. (kg)	Operating Weight lb. (kg)	Blow Down Valve Size in (mm)
		D	W	H			
FMF	FMF-6-3	19 (480)	13 (330)	43 (1090)	44(20)	111 (50)	3/4 (20)
	FMF-6-4	19 (480)	14 (360)	43 (1090)	49 (22)	116 (53)	3/4 (20)
	FMF-10-6	19 (480)	17 (430)	49 (1245)	75 (34)	165 (75)	3/4 (20)
	FMF-10-8	19 (480)	18 (460)	51 (1290)	95 (43)	185 (84)	1 (25)
BCF	BCF-10	17 (430)	9 (230)	12 (305)	30 (14)	34 (15)	n/a
	BCF-20	17 (430)	25 (630)	12 (305)	60 (27)	69 (31)	n/a





Since its founding in 1976, EVAPCO® Inc. has become a global leader in the design and manufacture of heat transfer solutions. Our pledge is to make everyday life easier, more comfortable, more reliable, and more sustainable for people everywhere. EVAPCO's mission is to provide first class service and quality products in the following markets:

- Commercial HVAC
- Industrial Process
- Industrial Refrigeration
- Power

With manufacturing facilities and sales offices in more than 40 countries – EVAPCO is the team that engineers and contractors know they can count on for life. Our ongoing commitment to research and development has earned us a reputation for technological innovation and superior product quality. These advanced products, including water systems, are designed to provide:

- Higher System Efficiency
- Environmental Sustainability
- Lower Annual Operating Costs
- Reliable, Simple Operation and Maintenance



EVAPCO's Innovative Eco-PMC Evaporative Condenser

# EVAPCO Water Systems Engineering

The Wilson E. Bradley Global Research & Development Center incorporates laboratories for water analyses and state of the art environmentally controlled testing. These laboratories provide unique capabilities for advanced water systems research on full-scale operating equipment.

This state of the art research and development center has over 60,000 square feet dedicated to full scale thermal analysis and product development. EVAPCO's Smart Shield System was developed and tested utilizing these unique facilities.

EVAPCO's Water Systems division focuses on the application and ongoing development of water treatment systems as well as research on passivation and corrosion. This division utilizes advanced technologies and equipment in the field of analytical chemistry, including Ion Chromatography and Atomic Absorption Spectroscopy, giving EVAPCO the ability to conduct fast and accurate analyses of chemical, non-chemical, and hybrid water treatment systems.



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# Smart Shield<sup>®</sup>... The Easiest and Safest Solid Chemistry Treatment System...Available Today!



*Closed Circuit Cooler  
Baton Rouge, LA USA*



*Closed Circuit Cooler  
Bruges, Belgium*



*Closed Circuit Cooler  
Gainesville, FL USA*



*Closed Circuit Cooler  
Shanghai, China*



*Evaporative Condenser  
Birmingham, AL USA*



*Evaporative Condenser  
Miami, FL USA*

The first and only solid chemistry water treatment system specifically engineered for closed circuit coolers and evaporative condensers!

Visit us on the web to learn more: [smartshield.evapco.com](http://smartshield.evapco.com)

Contact your local EVAPCO Sales Representative or EVAPCO<sup>®</sup> Headquarters for more information.



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