



Water Treatment Systems and Supplies

Tel (414) 354-0970 • Fax (414) 354-6421 • sterlco.com • Bulletin: SC7-510.4 • Effective: December 1, 2004 • Supersedes: SC7-510.3

Tower Water Management

The STW MV280 Tower Water Management system is a complete system that controls scale, corrosion, and micro-biological fouling in both open and closed recirculating cooling water systems. The STW MV280 system is contained in one compact, fully automatic, nearly maintenance-free package.

- **The STW MV280 system comes standard with a 2-year warranty on the controller.**

Four separate treatment phases are accomplished as follows:

1. Monitors make up water flow and meters an accurate blend of scale and corrosion control agents into the tower system.
2. Prevents biological fouling by “slug” feeding microbiocide at predetermined intervals.
3. Automatically removes suspended solids by means of a centrifugal separator coupled to a solenoid valve.
4. Automatically regulates the concentration of dissolved solids by using a conductivity meter, which acts as the separator purge.

Tower Water Management System

Includes five (5) gallons (19 liters) of biocide and five (5) gallons (19 liters) of scale and corrosion inhibitor (selection based on water analysis). Also includes quarterly water analysis provided by Sterling.

Model number ①	Shipping weight		Panel dimensions				Voltage
	lbs.	Kg	W		H		
	in.	cm	in.	cm	in.	cm	
STW MV280	140 lbs.	64 Kg	33"	84 cm	33"	84 cm	115/1/60

① Good for systems up to 280 tons (846,700 Kcal/hr). Consult factory for larger systems.

Tower Water Management Test Kits

Model number	Description	Shipping weight	
		lbs.	Kg
STK-1	Organo phosphonate test kit: ① • P/N A0504914	2 lbs.	1 Kg
STK-2	Chloride test kit : ② • P/N A0509929	2 lbs.	1 Kg

① Used to verify proper chemical feed levels.

② Used to verify proper bleed-off operation.

- See Pages 2 and 3 for water treatment supplies descriptions and availability -



Water Treatment Supplies

Cooling Tower System Water Treatment ①

Model number	Description	Ship weight		Volume	
		lbs.	Kg	gal.	liters
SBIO-1	Biocide No. 1, P/N A0509388	44	20	5	18.9

① Additional quantities of SBIO-1 and biological test kits (a means of indicating bacterial contamination) are available. Contact your Sterling sales representative for more information.

Scale and Corrosion Inhibitors for Cooling Tower Systems ①

Model number	Description	Ship weight		Volume	
		lbs.	Kg	gal.	liters
STR2000-H	Scale and corrosion inhibitors for hard water, P/N A0504153	45	20	5	18.9
STR2000-H	Scale and corrosion inhibitors for hard water, P/N A0504153	495	225	55	208.0
STR2000-L	Scale and corrosion inhibitors for low hardness water, P/N A0504154	45	20	5	18.9
STR2000-L	Scale and corrosion inhibitors for low hardness water, P/N A0504154	495	225	55	208.0

① STR2000-H is tower treatment for hard water makeup (>150 ppm) and STR2000-L is tower treatment for low hardness makeup water (<150 ppm). Use 300 to 600 ppm in tower water. Use STEP Test Kit for monitoring.

Tower Water Management ①

Model number	Description	Ship weight		Volume	
		lbs.	Kg	gal.	liters
STK-1	Organo phosphonate test kit, P/N A0504914	2	1	—	—

① Additional STK-1 organo phosphonate test kit, which measures phosphonate concentration to assure proper operation and feed rate of the chemical feeder.

De-Scaling ①

Model number	Description	Ship weight		Volume	
		lbs.	Kg	gal.	liters
SLDA-1	Liquid de-scaling agent, P/N A0502600	44	20	5	18.9

① Sterling Liquid De-Scaling Agent (LDA-1) is circulated through the heat exchanger. After de-scaling, the piping and equipment is flushed and dried with a compressed air purge. Additional five (5) -gallon (18.9-liter) quantities of LDA-1 is available. Contact your Sterling sales representative for more information.

Chilled Water System Water Treatment ①

Model number	Description	Ship weight		Volume	
		lbs.	Kg	gal.	liters
SIEG-1	Inhibited ethylene glycol, P/N A0541358	45	21	5	18.9
SIPG-1	Inhibited propylene glycol, P/N A0542990	45	21	5	18.9
SCWT-1	Chilled Water Treatment, P/N W000173	10	5	1	3.8

① Systems requiring glycol should be protected with an industrial-grade antifreeze. SIEG-1 contains a blend of **ethylene** glycol and corrosion inhibitor. SIPG-1 contains a blend of **propylene** glycol and corrosion inhibitor.

SCWT-1 is a multi-component cooling water scale and corrosion inhibitor. It is formulated for both ferrous and non-ferrous chilled water systems. It does not contain heavy metal or other substances regulated by the EPA. Recommended dosage is 32 ounces per 100 gallons (1 liter per 400 liters) of system volume.

Closed System Treatment for Chilled Water Systems ①

Model number	Description	Ship weight		Volume	
		lbs.	Kg	gal.	liters
STR2500CL	Closed system treatment for chilled water systems:, P/N A0000173				
	• 6 single-gallon jugs; P/N A0000173	54	25	6 x 1	6 x 3.8
	• Five (5) gallons; P/N A0553842	45	21	5	18.9
	• Fifty-five (55) gallons; P/N A0553833	500	227	55	208.0

① Closed loop treatment for protection against corrosion and deposits. Use 1 gallon per 33 gallons (1 liter per 35 liters) of water. Use STEP Test Kit for monitoring.

Water Treatment Supplies (cont'd).

Description	Part no.	Ship weight	
		lbs.	Kg
Sterling Antifoulant ①:	• 5 gallons (18.9 liters) A0509388	45	21
Sterling Descaler ②:	• 5 gallons (18.9 liters) A0502600	45	21
	• 55 gallons (208.0 liters) A0553834	500	227
Sterling Industrial Cleaner ③:	• 5 gallons (18.9 liters) A0553840	50	23
Sterling LF Low Foaming Detergent ④:	• 5 gallons (18.9 liters) A0542992	40	19
Sterling SC System Cleaner ⑤:	• 5 gallons (18.9 liters) A0509626	45	21
	• 55 gallons (208.0 liters) A0553835	500	227
Sterling Dispersant ⑥:	• 5 gallons (18.9 liters) A0553837	45	21
Sterling AF Antifoam ⑦:	• 18 8-oz. (237 ml) bottles A0553836	45	21
Sterling Safe Glycol ⑧:	• 5 gallons (18.9 liters) A0552990	45	21
	• 55 gallons (208.0 liters) A0552991	495	225
Sterling Ethylene Glycol ⑨:	• 5 gallons (18.9 liters) A0541358	50	23
	• 55 gallons (208.0 liters) A0539637	500	227

- ① For use in both open and closed recirculating water systems. Prevents fouling caused by water-borne constituents and organic materials.
- ② Strong acid descaler for removal of mineral scale buildup from heat exchangers, tanks, etc. Contains muriatic acid. Inhibited to prevent corrosive attack.
- ③ Non-hazardous cleaner for removal of mineral scale and metal oxides from heat exchangers, tanks, etc. For best results, use 20% (min.) solution.
- ④ Low foaming detergent for cleaning open and closed recirculating water systems. Use 2 to 4 gallons per 100 gallons (2 to 4 liters per 100 liters) of water.
- ⑤ New system startup chemical cleaner. Effective in removing mill scales, greases, and other foulants associated with new construction. Use 1 to 3 gallons per 100 gallons (1 to 3 liters per 100 liters) of water.
- ⑥ Supplements STR2000-H and STR2000-L by enhancing the cleanliness of heat transfer surfaces. Use 200 to 400 ppm in the system once or twice per week.
- ⑦ Cooling and process antifoam. To control foam, use 2 to 4 fluid ounces per 100 gallons (60 to 120 ml per 38 liters); packaged in 8 fl. oz. (237 ml) bottles **only**.
- ⑧ Propylene glycol solution. An environmentally safe alternative to ethylene glycol. Refer to glycol charts for usage concentration. **STC2500 CL must be used in closed systems** (see Page 2) for protection against deposits and corrosion.
- ⑨ Freeze/burst protection fluid for closed chiller water systems Refer to EG charts for proper use concentration. **STR2500 CL must be used in closed systems** (see Page 2) for protection against deposits and corrosion.

Sterling Test Kit

Description	Part no.
Sterling Test Kit; test for chemical levels	A0553838
Test kit refill	A0553839

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