



SR Plus SC Tablet

Case Studies

Case Study #1

100 RT Process Cooling Tower

Volume / Size	100 RT
Type	Process
Water Source	Tap Water
Cycles	4.2
Operation Hours/Day	24
Total Trial Time (days)	100
Dosage/Month (Gram)	300
Ideal Dosage/Month (Gram)	400
pH	8.9
Conductivity (µS/cm)	1228
Total Organic Phosphate (ppm)	0.3
Total Phosphate (ppm)	0.45
Carbon Steel Corrosion Rate (mpy)	0.75
Admiralty Brass Corrosion Rate (mpy)	0.19
Scaling Index Deviation % *	13

* Scaling Index Deviation % = [(make up Ca-H × Cycles)-(actual Ca-H)/(make up Ca-H × Cycles)] X 100

Notes:

- a. This system running at ¾ of the recommended dosage had excellent corrosion and scaling control



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Case Study #2

300 RT Air Conditioning System

Volume / Size	300 RT
Type	Air Conditioning
Water Source	Tap Water
Cycles	4.8
Operation Hours/Day	24
Total Trial Time (days)	74
Dosage/Month (Gram)	900
Ideal Dosage/Month (Gram)	1200
pH	9.97
Conductivity (µS/cm)	1373
Total Organic Phosphate (ppm)	1.95
Total Phosphate (ppm)	2.25
Carbon Steel Corrosion Rate (mpy)	1.43
Admiralty Brass Corrosion Rate (mpy)	0.08
Scaling Index Deviation % *	-5

* Scaling Index Deviation % = [(make up Ca-H × Cycles)-(actual Ca-H)/(make up Ca-H × Cycles)] X 100

Notes:

- a. This system running at ¾ the recommended dosage had excellent corrosion and scaling control



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Case Study #3

120 RT Process Cooling Tower

Volume / Size	120 RT
Type	Process
Water Source	Reclaimed Water
Cycles	Not recorded
Operation Hours/Day	24
Total Trial Time (days)	49
Dosage/Month (Gram)	500
Ideal Dosage/Month (Gram)	480
pH	Not recorded
Conductivity (µS/cm)	Not recorded
Total Organic Phosphate (ppm)	Not recorded
Total Phosphate (ppm)	Not recorded
Carbon Steel Corrosion Rate (mpy)	5.37
Admiralty Brass Corrosion Rate (mpy)	0.34
Scaling Index Deviation % *	can not calculate without data

* Scaling Index Deviation % = [(make up Ca-H × Cycles)-(actual Ca-H)/(make up Ca-H × Cycles)] X 100

Notes:

- a. Using reclaimed water in this process cooling system would have been expected to cause much higher corrosion rates.



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Case Studies

Case Study #4

Two 60 RT Air Conditioning Systems (Treated and Untreated)

	Treated	Untreated
Volume / Size	60 RT	60 RT
Type	Air Conditioning	Air Conditioning
Water Source	Tap Water	Tap Water
Cycles	3.4	3.7
Operation Hours/Day	12	12
Total Trial Time (days)	80	80
Dosage/Month (Gram)	120	0
Ideal Dosage/Month (Gram)	240	0
pH	8.83	8.78
Conductivity (µS/cm)	1410	1428
Total Organic Phosphate (ppm)	0.5	0.12
Total Phosphate (ppm)	0.9	0.2
Carbon Steel Corrosion Rate (mpy)	6.08	-
Admiralty Brass Corrosion Rate (mpy)	0.28	-
Scaling Index Deviation % *	15	42

* Scaling Index Deviation % = [(make up Ca-H × Cycles)-(actual Ca-H)/(make up Ca-H × Cycles)] X 100

Notes:

- a. System treated at ½ recommended dose had significantly better scaling index as compared to untreated
- b. Carbon steel corrosion rates are higher than desired, however are expected to be lower if recommended dose was used.
- c. Running only 12 hours a day is expected to give poorer results for corrosion since system drained when in shut down mode



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