

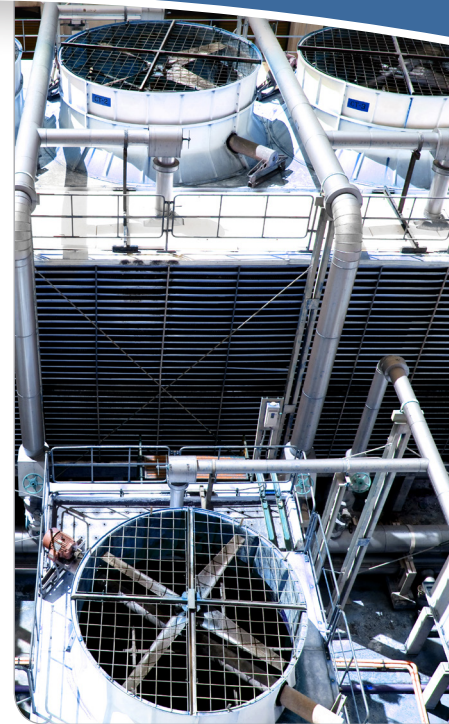
# FlexPro™ CL

## Closed Loop Corrosion Control Solution

### Background

A northeastern institutional facility faced a host of issues with its closed loop cooling system. The make-up water for the 13,000 gallon capacity ice builder was relatively corrosive due to low hardness waters. In addition, biocides could not be fed due to food and beverage regulations.

A nitrite based treatment program was initially chosen for the ice builder, which resulted in the corrosion inhibitor being rapidly consumed by bacteria. Corrosion rates spiked as a result. A pH based treatment program was then selected, yet the program also yielded inadequate corrosion rates.



### Solution

ChemTreat recommended use of its FlexPro™ CL, a phosphorous and nitrogen free product line, capable of delivering excellent corrosion rates and scale prevention. Because phosphorous and nitrogen are essential to bacterial growth, use of FlexPro™ CL circumvented the facilities inability to use biocides. FlexPro™ CL was shot fed at 800 ppm and the system was held to a pH of 8.7.

treatment is needed. The institution is very pleased with the use of low hazard chemicals, and has since adopted FlexPro™ in multiple other applications.

### Results

For months, FlexPro™ CL has maintained corrosion rates of less than 0.1 mpy for the mild steel heat exchangers. Bacterial counts remain below 1000 CFU/mL, thus ensuring no biocide

Analysis	Ice Builder Tank
Specimen Number	167927
Specimen Type	Mild Steel
Exposure Period (days)	122
Initial Weight (g)	8.1153
Final Weight (g)	8.1147
Weight Loss (g)	0.0006
Corrosion Rate (mpy)	<0.10

