ChemTreat
Case Study

ChemTreat Helps Airplane Manufacturer Solve Air Stripper Tower Fouling Issues

BACKGROUND

An airplane manufacturer was maintaining eight stripper towers at a facility in the Midwest. Approximately 80 million gallons of process water flows through the towers every year, remediating groundwater of volatile organic compounds. The manufacturer was experiencing major fouling issues. Worried about maintaining optimum efficiency and environmental compliance, they reached out to ChemTreat for help.

SOLUTION

ChemTreat and several competitors were given a few towers each to clean in a three-month trial. We performed physical site inspections and evaluated water and deposit samples to prepare. The deposit sample revealed 11 percent phosphate, so ChemTreat recommended feeding an all-organic, phosphate-free treatment.

After receiving tower flow rate data to calculate treatment dosage and analyzing several chemical treatment options, ChemTreat began feeding an antiscalant, CL4704. Halfway through the trial, the antiscalant was delivering mixed results, so samples were sent to ChemTreat's microbiological laboratory for further analysis.

The sample test results showed that, in addition to calcium sulfate build-up, the towers were experiencing biological fouling. Based on this data, we began feeding a second product, CL427, to mitigate the biological build-up.

RESULTS

ChemTreat's treatment program successfully cleaned the air stripper towers while reducing manpower required for cleanings. We were also able to reduce the product dosage from approximately 108 to 50 ppm.

Thanks to the success of the trial, ChemTreat began treating all seven stripper towers for this airplane manufacturer. The ChemTreat team uses fluorescent tracers to accurately dose and track the chemistry, which has helped the customer achieve a 47% reduction in chemical usage while maintaining good results.

"All three trays were way cleaner, especially the top tray. All the build-up is gone," said the customer.

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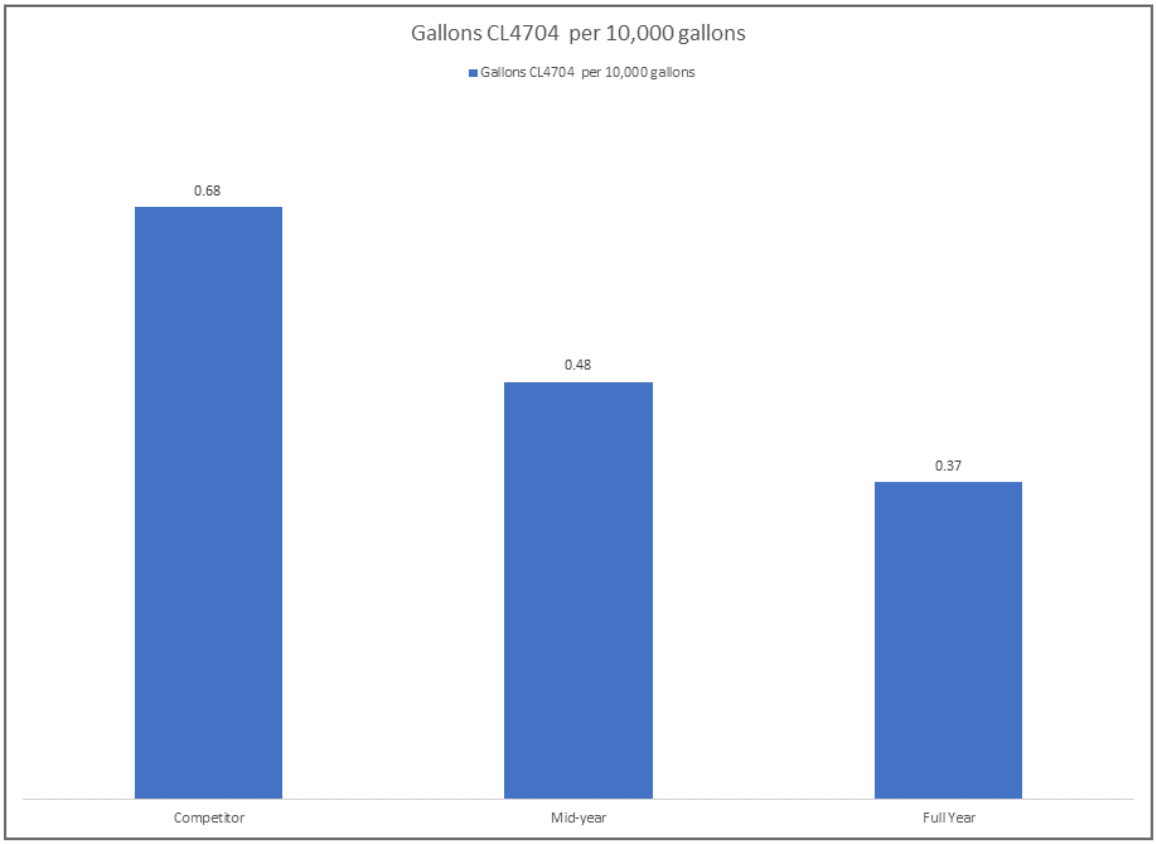
INSPECTION RESULTS



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Results are examples only. They are not guaranteed.
Actual results may vary