

ChemTreat Solves Can Quality Problems For Major Brewery

Background

A large Midwestern brewery was experiencing classic can dome staining in two of its can lines, which had become an increasing issue due to the implementation of water conservation measures that introduced inconsistencies in water quality. These inconsistencies caused increased retention times in the pasteurizer and difficulties keeping contaminants out of the pasteurizer. In addition, a blue-green sticky mass appeared on the suction box screens and internal walls of the pasteurizer.



Solution

ChemTreat's R&D lab studied a sample of the blue-green mass with FTIR analysis and found that the major components were conveyor lube, can necker lube, and can overcoat varnish. In addition, two components of the corrosion inhibitor were precipitating in the pasteurizer water. Further testing showed that the blue-green mass was consuming the polymer. ChemTreat recommended countermeasures to reduce organic matter buildup in the heat and hold zones. The pasteurizers were taken offline and fully cleaned with pressure washers to remove all of the organic deposit. In addition, ChemTreat provided a reformulated, custom product suitable for the more severe conditions of the pasteurizer.

Summary

ChemTreat used its expertise to help the manufacturer understand how specific components were impacting pasteurizer performance and can finish. This understanding allowed the manufacturer to select a better overcoat varnish to improve can quality.

Results

After the pasteurizers were cleaned and ChemTreat's newly reformulated product was applied, the can staining disappeared and no further problems were seen. Even after six months, the can staining issue has not resurfaced.

