SUPPRESSOR 3418 POTATO PROCESSING CASE STUDY

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Introduction

A large potato processing company operating multiple facilities was experiencing ongoing challenges with its defoamer program. Plant leadership raised concerns related to inconsistent foam control, high chemical usage, and rising program costs associated with the incumbent defoamer. To address these issues, the company partnered with Hydrite to evaluate alternative solutions that could improve performance while reducing overall chemical consumption.

Value Created

By taking a consultative, plant-specific approach, Hydrite helped the potato processing company achieve measurable improvements across multiple facilities using Suppressor 3418. Across the evaluated facilities, the new program demonstrated reductions in defoamer usage ranging from over 50% to more than 60%, creating both operational and economic value.

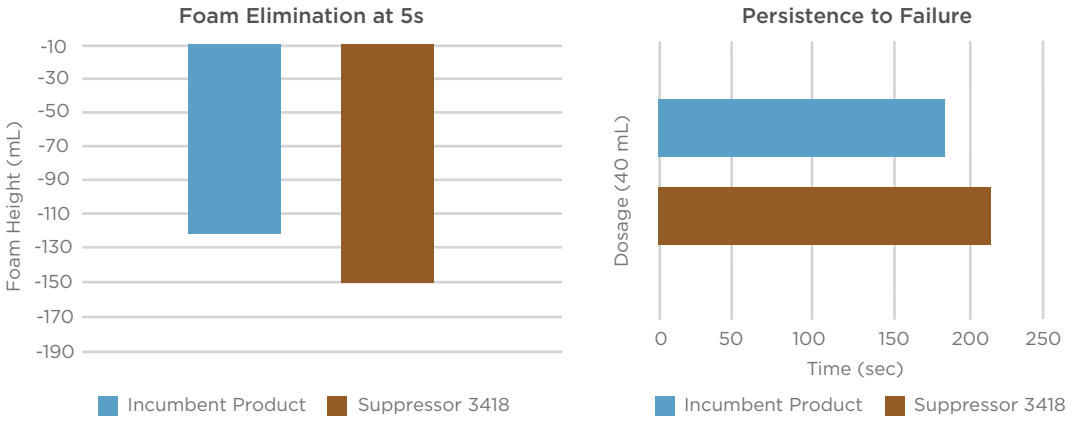
Solution & Results

Hydrite began the engagement with comprehensive plant surveys and walkthroughs, followed by detailed discussions with plant management, sanitation, and process teams. Foam cell testing was conducted at designated application points to evaluate performance under real-world conditions. Based on these results, controlled tote trials were implemented with on-site Hydrite technical support.

FACILITY A

Two candidate solutions were evaluated through foam cell testing and on-site trials. The selected Hydrite defoamer demonstrated superior foam control compared to the incumbent product. Over time, the facility achieved a 63% reduction in daily defoamer usage, lowering average consumption from nearly 600 pounds per day to approximately 225 pounds per day while maintaining effective foam suppression.

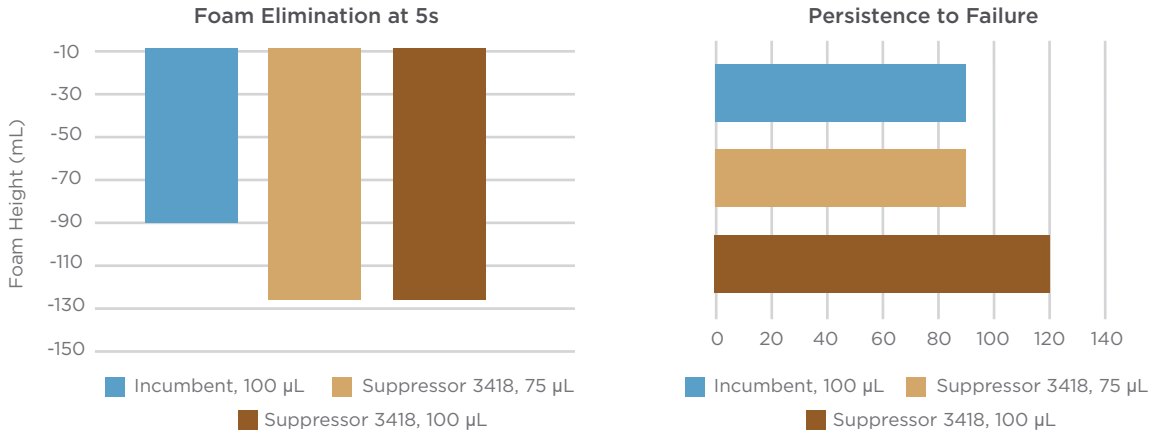
FOAM CELL BENCH TEST



FACILITY B

At a second facility, similar concerns regarding defoamer cost and performance prompted a plant walkthrough and foam cell testing. Following a successful tote trial, the Hydrite solution again outperformed the incumbent defoamer, resulting in a 52% reduction in chemical usage during the trial period. Effective foam control was observed across multiple application points, including high-use areas where performance is typically most challenging.

FOAM CELL BENCH TEST



In a broader tote trial spanning several application points, the optimized program delivered consistent foam control while allowing reduced solenoid feed rates. This optimization resulted in an overall 38% reduction across the entire program, translating directly into a 52% reduction in chemical usage compared to the incumbent defoamer.

Conclusion

By combining plant-specific testing, hands-on technical support, and performance validation, Hydrite delivered a solution that reduced chemical usage by more than half in some applications—without sacrificing foam control or operational reliability.

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