



Case Study



PD 200 Eliminates Foam, Produces Cost Savings, and Reduces Chemical Usage by Over 90%

BACKGROUND:

The customer is a potato chip manufacturer. The manufacturer was using hundreds of totes of a competitor's defoamer annually in their three processing lines and additional spot-foam control locations. In this process, the potatoes are washed, peeled, inspected, sliced, rinsed, fried, seasoned, and finally packaged. Defoamer is required in the washers and starch recovery units to combat the potato starch foam. The competitor's defoamer historically utilized was a commodity silicone product that was entirely unable to adequately control foam formation. Food regulations dictate a 10 ppm maximum silicone concentration. The product was not able to do its job under this limit.

The manufacturer had utilized DuBois water treatment for over 15 years. In a regular investigation of process improvements, the DuBois team identified the defoamer process as an avenue to generate cost, environmental, safety, and space savings. The customer agreed to evaluate possible alternative solutions.



THE DUBOIS SOLUTION:

A DuBois team of technical experts partnered with the manufacturer to implement PD 200, a food grade defoamer specifically formulated for processes involving starches and proteins. This product replaces silicone with a vegetable oil base that has no effect on the taste or flavor profile of the end product. It is formulated to be effective at low concentrations with excellent foam knockdown and persistence characteristics, ultimately minimizing required dosage. PD 200 is formaldehyde and alkylphenol free, easy to handle, and compatible with most aqueous processing applications.

RESULTS AND BENEFITS:

Upon implementing PD 200 into their process, the customer noted a complete reduction of foam formation throughout the facility, allowing them to operate more efficiently and more safely with significantly less slip hazards. The customer also reported a **reduced chemical usage of over 90%**, both indicating an improved process and saving considerable storage space on their production floor. By replacing excessive use of silicone, this transition also drastically reduced the process's environmental impact.



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