

RECORDED BENEFITS

- Eliminated dirt outbreaks on the pulp dryer
- Reduced bleach costs
- Reduced defoamer feed
- Increased pulp production
- \$539,000 annual savings

Defoamer Program Unlocks Washer Bottleneck and Reduces Bleach Costs

Advantage™ CS9625 Defoaming Agent

Customer Challenge

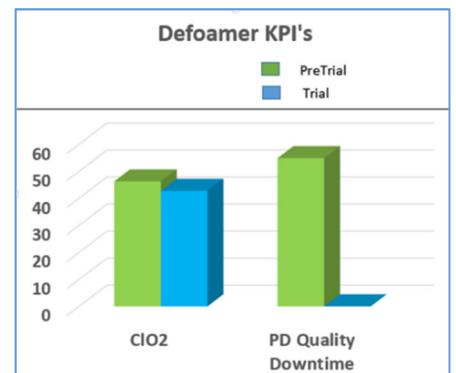
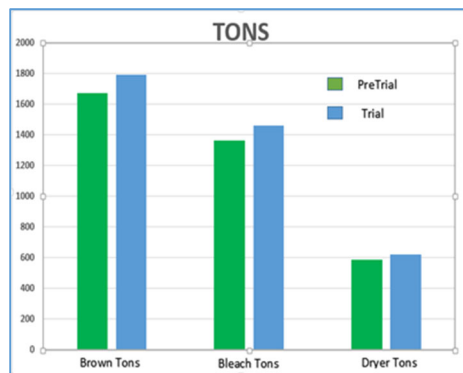
A southern U.S. pulp mill running DD washers in the brown stock area designed to run 1,800 TPD was limited to 1,675 TPD due to poor washer runnability. High defoamer carryover was resulting in dirt outbreaks on the pulp dryer. Due to issues in the O₂ delignification system, air was being entrained in the stock going to the post O₂ washer. Screen room temperatures would typically drop to 115-120 °F due to fluctuations in stripped condensate temperature and availability to the screen room DD washer. The main production bottlenecks were the O₂ delignification and screen room DD washers.

Recommended Solution

Solenis recommended replacing the existing two-product program, which consisted of an emulsion product and a concentrate product, with a single emulsion product consisting of Advantage™ CS9625 defoaming agent at the same feed points. Elimination of the concentrate product was believed to be key in reducing the silicone carryover and subsequent dirt outbreaks due to the enhanced dispersion of emulsions versus concentrates.

Results Achieved

This trial started as a “demonstration trial,” but the results were positive enough that the mill never went back to the incumbent program. Dirt outbreaks were virtually eliminated, resulting in an additional 54 min/day of uptime on the pulp dryer; conductivities to the bleach plant were reduced by 22%, resulting in a reduction in ClO₂ usage of 3.5 lb/ton; as received defoamer usage was reduced by 0.44 lb/ton; and overall pulp production increased by 10 to 15% due to better control of entrained air, which debottlenecked the two troublesome DD washers.



All statements, information and data presented herein are believed to be accurate and reliable, but are not to be taken as a guarantee, an express warranty, or an implied warranty of merchantability or fitness for a particular purpose, or representation, express or implied, for which Solenis and its affiliates and subsidiaries assume legal responsibility. ™Trademark, Solenis or its subsidiaries, protected in various countries. *Trademark owned by a third party. ©2020 Solenis.