Pulp Industry

Pulp Mill Improves Brownstock Washing and Bleaching Performance with New Defoamer Technology

Advantage™ BN3340 Brownstock Defoamer

Customer Challenge
A Kraft pulp mill campaigning both hardwood and bleached softwood was using a defoamer to provide knockdown at the brownstock washers and another defoamer to enhance drainage at the brownstock washers and D0 washer. The mill wanted to reduce polydimethylsiloxane (PDMS) carry over as it was contributing to PDMS and betulin deposits in the bleached pulp screen room.

Recommended Solution
To simplify the mill’s existing defoamer program and to address the deposition issues, the local Solenis team recommended an evaluation of Advantage BN3340 brownstock defoamer. In other commercial trials, this technology allowed for significant process improvements at lower feed rates than competitive products.

Results Achieved
During the 14-day trial, defoamer feed to the brownstock washers was reduced by 33% and defoamer feed to the D0 washer was reduced by 50%, resulting in a 35% reduction in PDMS contribution. Additionally, program costs were reduced by 25%, pulp production increased by 2% and soda loss was reduced by 5%.

Defoamer Feedrates

- Defoamer feed rate was reduced by 33%
- PDMS contribution was reduced by 35%
- Program costs were reduced by 25%
- Pulp production increased by 2%
- Soda loss was reduced by 5%