

Industry: Pulp and Paper

- Brown Stock - Air Control Program

SONARtrac[®] SOLUTIONS

CiDRA provides all three “legs” of the mechanical-operational-chemical triangle for Brown Stock Washing Financial Control:

- \$550K/year Defoamer Savings
- Conductivity Stabilized
- Troubleshooting Expedited

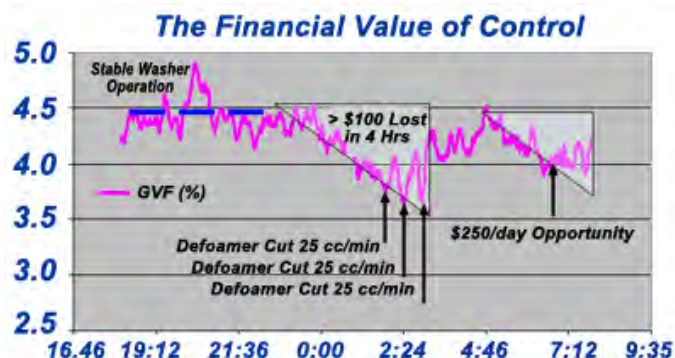
Pre-Existing Brown Stock Operation

As is frequently seen in Kraft Pulping, the operations team in this example had previously unseen opportunities to improve the financials of their oversized washer line. Even with talented operators keenly focused on managing the chemical costs of their washer line, they were unwittingly using excessive amounts of defoamer and deaeration chemicals to manage drum speeds and conductivity leaving the line and entering the bleach plant. This became even more painful for managers who were forced to absorb the recent price hikes in silicone and oil based chemistries in use. The pulp industry's experience with real time air monitoring and control systems have been limited, mostly due to reliability and accuracy of previous attempts at control solutions.

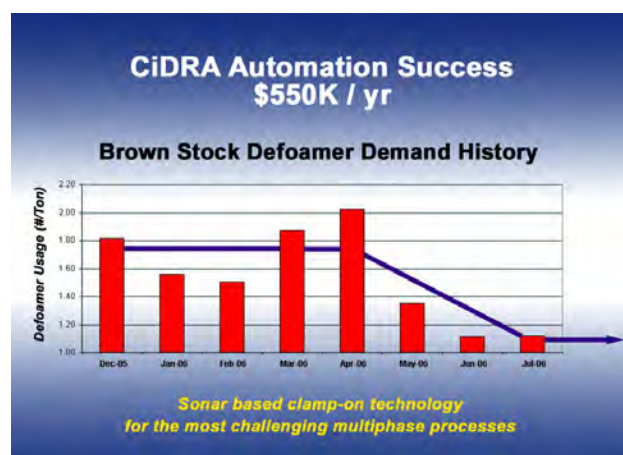
In this example cited above, a 1000+ ton/day Kraft mill with a 3 drum, conventional washer line linerboard system used operator control to manage the impacts of entrained air in the pulp. They balanced the typical levers of drum speed, shower flow and dilution factor to maintain washer runnability first, conductivity second, energy consumption third and chemical costs fourth. Consistency heading to the bleach plant was not in play because of the excess capacity in the line.

SONARtrac System Provides Cash Through Control

The operating team installed CiDRA silicone wash aid & SONARtrac air control solution to the washer line. The non-intrusive control system allowed them to see tremendous savings opportunities within hours of installation. As one can see in the figure that follows, the reliable, real time eyes into the air behavior exposed opportunities to drive defoamer costs down while maintaining conductivity results leaving the line.



The SONARtrac system provided management with a reliable air signal from which to control chemical addition. The long term impact on chemical cost can be seen below.....



The data above demonstrates the continuing improvements seen as operations teams adjusted the air targets to optimize air content and chemical usage. As is often the case, management can adjust the air content target and maintain washer performance if the system is in automated real-time control. Call CiDRA for more details on how on line control can help your financial position.