

RECORDED BENEFITS

- Improved microbial control
- Reduced starch degradation
- Improved paper strength
- Reduced chemical consumption
- Reduced treatment costs

Packaging Mill Improves Sheet Strength While Reducing Total Annual Treatment Costs by \$730,000 Annually

Spectrum™ XD1878 Chlorine Stabilizer

Customer Challenge

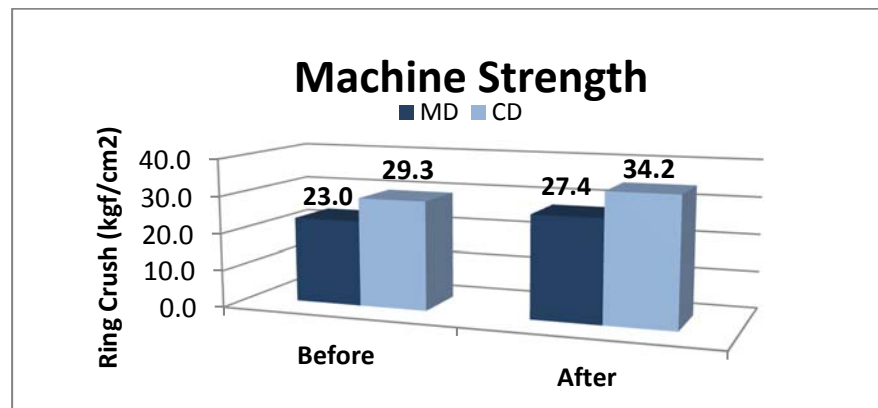
A large packaging mill in South Korea was challenged to improve its sheet strength and reduce its treatment costs. The mill needed to improve white water quality while maintaining a very closed system. The existing ammonium sulfate system was limiting the ability to improve the operation while running the anaerobic digester for waste water treatment.

Recommended Solution

After conducting a thorough audit of the machine, Solenis recommended that the mill convert to Spectrum XD1878 chlorine stabilizer to improve white water quality. This patented technology has the ability to significantly improve operations through better microbial control.

Results Achieved

When Spectrum XD1878 chlorine stabilizer was evaluated on the machine, wet end pH increased from 6.7 to 7.2, which correlated with a drop in microbial activity. Calcium hardness was reduced from 1,400 ppm to 1,000 ppm and conductivity dropped from 3,900 ntu to 3,500 ntu. While the Spectrum program alone was not expected to improve paper strength, the mill realized an increase in ring crush (18%), fold endurance (20%/CD and 60%/MD) and burst (12%) due to reduced starch degradation. Notably, the Spectrum program enabled the mill to reduce its chemical consumption by 23.5% and reduce the total annual treatment costs by \$730,000.



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, registered in various countries. *Trademark owned by a third party. ©2016, Solenis.