CASE HISTORY

Tissue and Towel

RECORDED BENEFITS

- Reduced wet strength chemistry usage by 25%
- Reduced wet tensile variation by 23%
- Improved wet tensile adherence by 98%
- Produced no off-quality tons

AI-Driven Autonomous Control Delivers Immediate Cost Savings

OPTIX™ Applied Intelligence

Customer Challenge

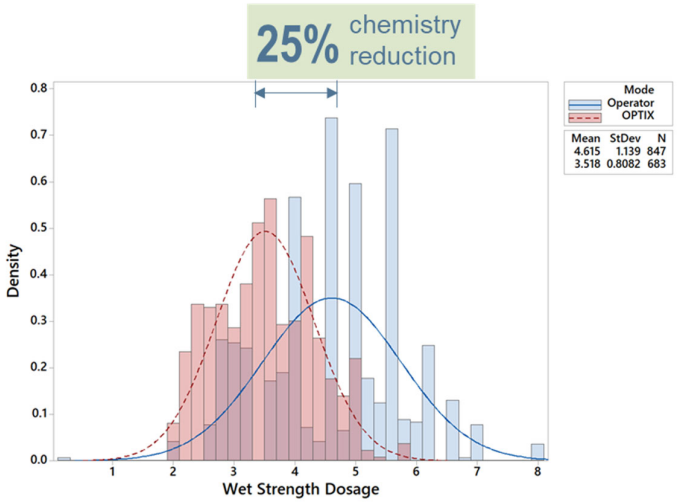
A North American tissue and towel producer was interested in reducing raw material consumption while optimizing wet tensile quality. The mill employed an inefficient dosage scheme for wet strength chemistry. The dynamically changing nature of continuous manufacturing and the periodic reel-to-reel quality measurement environment of tissue making presented optimization challenges.

Recommended Solution

Solenis recommended OPTIX™ Applied Intelligence – a machine-learning, predictive analytics platform with autonomous control capabilities. OPTIX generates a real-time virtual measure of wet tensile quality using machine learning capabilities.

Results Achieved

Over a six-month period of utilizing OPTIX autonomous control, the mill realized a 25% reduction in wet strength chemistry usage. The autonomous control algorithms adjusted the wet strength chemistry dosage to ensure wet tensile quality target adherence. AI-driven autonomous control optimized wet tensile quality by reducing variation by 23% and increasing target adherence by 98% all while avoiding off-quality production.



Next Steps

A second OPTIX solution being employed to optimize basis weight on same machine to further reduce variability and operational spend.