solenis.

RECORDED BENEFITS

- ValueAdvantage^{SM} of $270,000 annually

- Reduced hazardous byproducts

- More advanced technical expertise

Superior Wet Strength Technology Helps Packaging Mill Reduce Chemical Costs

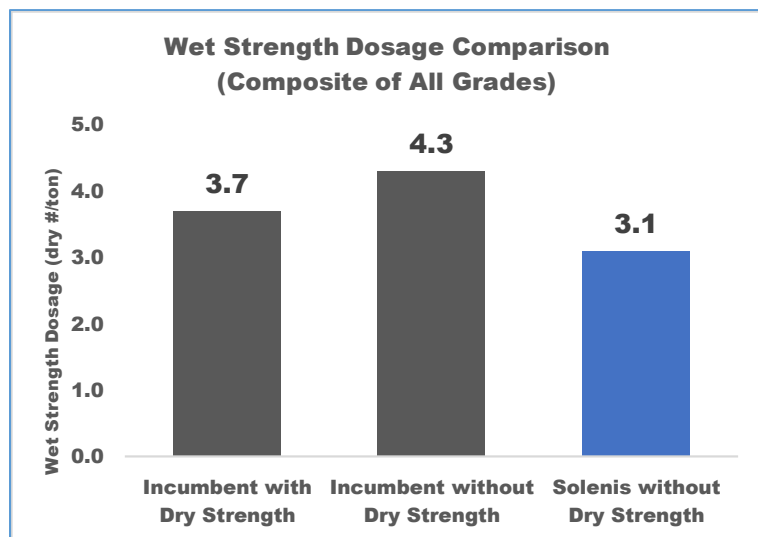## Kymene™ 1500LV Wet Strength Resin

Customer Challenge

A major packaging producer in North America was using a traditional wet strength resin from a competitor with minimal technical expertise. Based on prior application technology recommendations from Solenis, the customer was able to make usage reductions to the existing program but wanted to increase chemical savings. In addition, the customer had to eliminate the companion dry strength application due to budget constraints.

Recommended Solution

Solenis upgraded the existing program on two paper machines with our Kymene 1500LV wet strength resin and PerForm™ VMAX 1000 mixing and injection system. The team focused on improving resin distribution by applying and monitoring dilution for optimum injection velocity for every addition point. Solenis' Generation 1.5 cleaner, safer resin provided an incremental step in product sustainability compared to the incumbent product containing higher levels of hazardous byproducts.

Results Achieved

The Solenis wet strength program outperformed the incumbent program across all grades; head to head without the benefit of the dry strength program, a 25% reduction was achieved resulting in a net savings of $270,000 annually.

Wet Strength Dosage Comparison (Composite of All Grades)

Incumbent with Dry Strength	Incumbent without Dry Strength	Solenis without Dry Strength
3.7	4.3	3.1

Y-axis: Wet Strength Dosage (dry #/ton)