CASE HISTORY

Packaging

RECORDED BENEFITS

- Improved Ring Crush Index
- OCC increased from 53% to 60%
- MSF/day increased by 4%
- Refining kWt/t reduced by 8%
- $30K revenue added/day

Converted Newsprint Machine Producing Virgin Linerboard Increases Recycled Content and Productivity

Hercobond™ Plus 555 Dry Strength Aid

Customer Challenge

A packaging customer located in North America wanted to achieve higher Ring Crush Index on their 31 lb linerboard to allow for increased old corrugated container (OCC) utilization and improved paper machine productivity. The customer's paper production is limited by their pulping capacity and the paper machine is dryer limited. Achieving a higher OCC percent will allow the paper machine to increase output by eliminating the pulp mill bottleneck and has the added benefit of reducing total refining energy per ton.

Recommended Solution

Solenis recommended their dry strength aid, Hercobond Plus 555, to be added at 8 lb/ton replacing a competitive g-PAM that did not provide additional strength build above 6 lb/ton.

Results Achieved

Hercobond Plus 555 provided higher ring crush, allowed the use of more OCC, and facilitated the production of more finished board.

	Incumbent g-PAM	Hercobond Plus 555	Customer Benefits
Reel Speed	2180 FPM	2269 FPM	89 FPM
MSF*/Day	75,300	78,400	+3,000 MSF/Day
Ton/Hour	55.4	57.7	+2.3
Ring Crush	66.7	67.2	0.5*
Increased OCC %	53%	60%	Eliminate Pulp Mill Bottleneck
Virgin Fiber Savings	N/A	1.0 lb/MSF	~ 40 Ton/Day
Chemical Cost ROI			> 3 to 1

*MSF equals one thousand square feet.

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