

Application note

Wet end optimization of testliner machine saves fiber

- Fiber savings
- Energy savings
- Improved uptime
- Stabilized quality

CUSTOMER BACKGROUND

The production line has an output of 150 000 t/year of liner made from 100% recycled fiber (OCC). This paper machine features a 2-ply forming section. Stock refining as well as wet end chemistry is used to improve strength parameters.

CUSTOMER CHALLENGE

The main challenge for the mill has been the process variability in the stock preparation and approach flow of the paper machine. This resulted in significant variation of paper strength values, overdosing of fiber and chemistry and an elevated number of web breaks.

SOLUTION

BTG conducted detailed audits of the dilution control performance throughout the process as well as the former setup. The process control strategy was adjusted, instrumentation gaps were identified and corrected. Additionally, the setup in the early former section was improved. The improvement measures were executed in several steps over several months. Training and workshops for the mill operators and stakeholders supported those efforts.

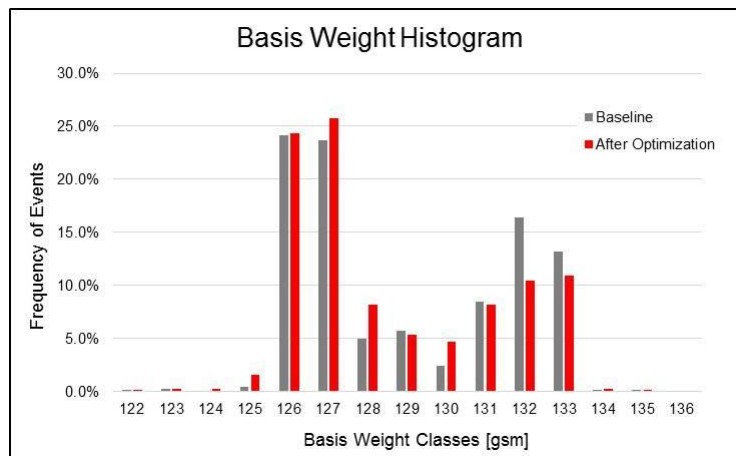


Figure 1: Basis weight histograms before and after optimization.

RESULTS

- Improved fiber yield for paper strength targets: 1,9 g/m² average basis weight reduction for high performance grades (Figure 1)
- Reduction of wet end breaks by 30%