

**Case study - 1: Core Board**

# Native Starch Optimization

Production: Core-Board

Fibers: Secondary Fibers

PM Speed: 230 m/min

Basis weight: 400 g/m<sup>2</sup>

Output: 15tp/h

Standard I.B.: 450J/m<sup>2</sup>

Chemicals Standard Dosages:

Native Starch: 10%  
Cationic Starch: 0.85%

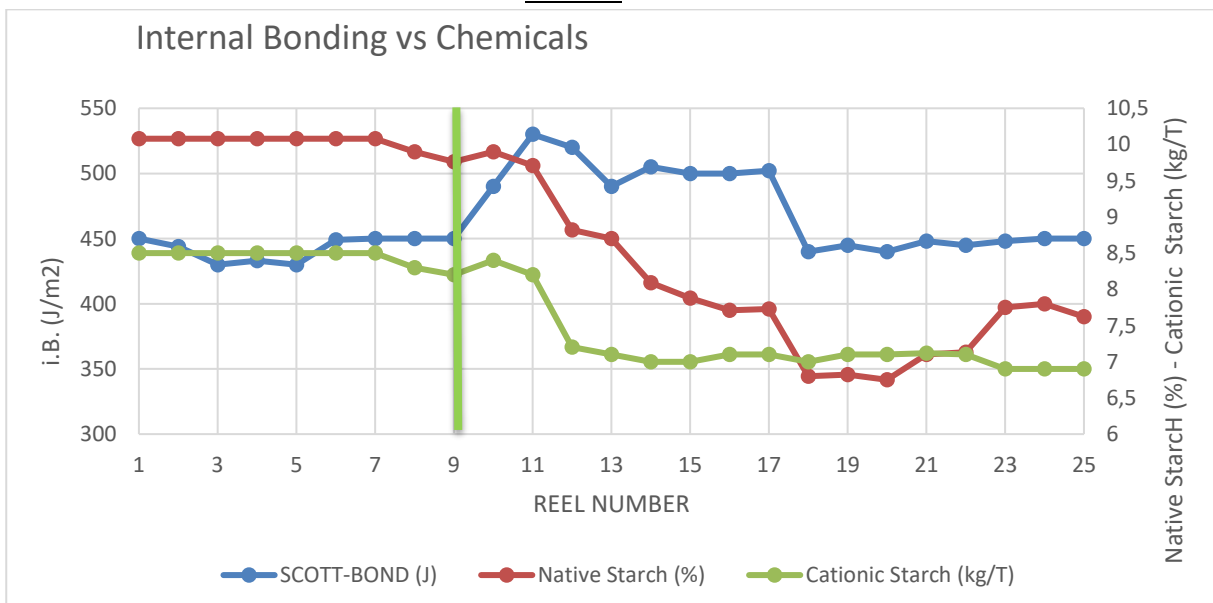
## TARGET:

Optimize Native Starch and Improve Internal Bonding

## TRIAL TEST:

A Cationic Lamberti Hydrocolloid has been added in PM Machine Chest with a dosage of 0.6Kg/tp (green Line on *Table 1 from roll #9*). After first I.B. improvement, Customer has decreased both Native and Cationic Starch, gradually, in order to optimize them.

*Table 1*



**ACHIEVEMENTS:**

Lamberti Hydrocolloid (Cationic) has been able to achieve the following target:

- I.B: the I.B. grew up of 15% (from 450J/m<sup>2</sup> to 540J/m<sup>2</sup>) with 0.6kg/tp of added Hydrocolloid.
- Optimization: thanks to I.B. improvement the Native Starch has been reduced from 10% to 8% (20Kg/tp saving)
- Optimization: thanks to a better retention Cationic Starch has been reduced from 8.5Kg/t to 7Kg/t.
- Cycle Benefits: the Starch optimization has allowed to decrease the COD at the water treatment system