

# TIME TO GIVE YOUR MILL A FIBER BOOST?

All the equipment is in place and up and running at your mill. You and your team have worked hard to maximize raw material supply chains and you have solved all the obvious production bottlenecks on the fiberline that have been holding back your mill performance. Your mill, you believe, is pretty much running at maximum efficiency. So now it's time to sit back and relax....

Absolutely not! Now is the time to boost performance, to take what is already working quite well and fine tune it to the max – to get the best production possible out of the existing equipment installed – to go the extra mile, to where the real, recognized success of a mill is: when the cost curve is going down and the production curve is going up.

### Performance Booster – because numbers matter

The world of pulp making is highly demanding and challenging – to be successful, a mill has to be a cost leader and existing equipment capacity must be maximized. The alternative, of course, is to invest in newer, better-performing and more efficient technology – which could be expensive – but it doesn't have to be.

There has been a lot of work going on at ANDRITZ in R&D on specific individual elements of the fiberline. Now, significant savings can be made from new technology and developments that have taken place in the cooking, oxygen delignification, and bleaching stages – and most importantly, they are not expensive to implement as they can easily be added to an existing fiberline.

A surprising amount can be done with a mill's existing fiberline equipment with a *Fiber Boost* program. But to start, imagine what effect significantly lower shives (with improved screening efficiency), lower energy consumption, better runnability, and minimal good fiber losses would have on the bottom line at your mill?

12 FIBER BOOST SYSTEMS SOLD AND OPERATING!

### 1 FIBER BOOST CASE STUDY I SOFTWOOD SULPHATE PULP

**Problem:**  
Final pulp quality was being significantly affected by shives and bark.

**Action:**  
At this mill, the reject handling system was upgraded with the installation of a new shive cleaner to remove a culmination of small shives and bark particles. Pressure screens were upgraded with the latest ANDRITZ rotors and new screen baskets with narrow slots sizes.

**Results:**  
Final product quality has improved dramatically. Before the *Fiber Boost* upgrade, only 6-34% of production was prime quality; most of this was defective because of shives and bark. After the upgrade, over 90% of production was measured as prime and there were no declassifications made because of shives. Thanks to better screening results, the mill has been able to optimize other processes, just one of those being the cooking kappa which has been increased from 26 to 31.

### 2 FIBER BOOST CASE STUDY II EUCALYPTUS PULP

**Problem:**  
Again, shives were affecting quality, and the mill was over-bleaching to mask the presence of shives.

**Action:**  
Once again, the reject handling system was upgraded, with the installation of a new shive cleaner to remove both shives and bark. Pressure screens were upgraded with the latest ANDRITZ rotors and new screen baskets with narrow slots.

**Results:**  
Oxygen delignification oxygen consumption reduced by 10%. Bleaching stages were optimized resulting in the pulp brightness set-point decreasing from 90.5 to 89.5 and chlorine dioxide consumption went down 10%, and after tuning of the hydrogen peroxide dosage and reduced absorption of organic chlorine in the effluent, there was total chemical savings of 1 EUR/t.

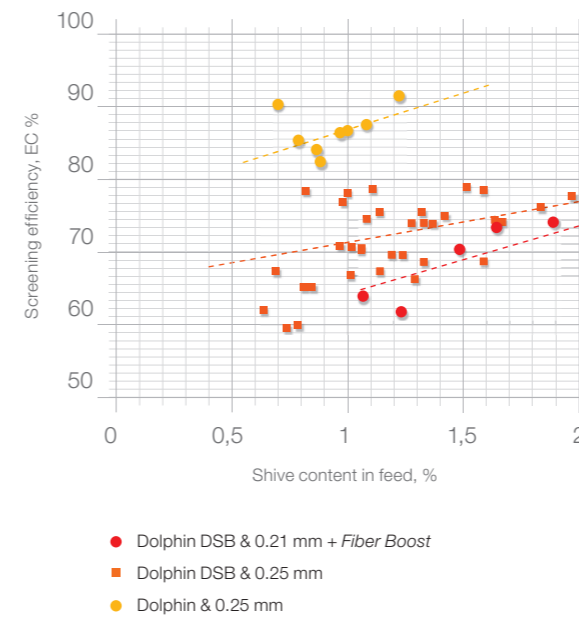
### 3 FIBER BOOST CASE STUDY III SOFTWOOD AND HARDWOOD PULP

**Problem:**  
High losses of good fiber were occurring in the reject handling system due to poor operation that was causing overloading of the evaporation plant.

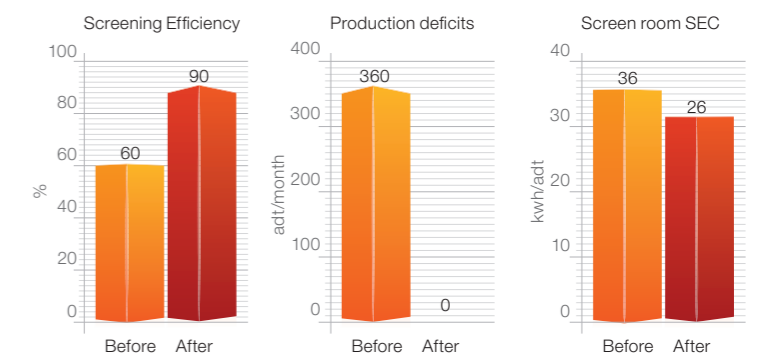
**Action:**  
The screen room reject handling system was upgraded with a new reject washer, sand removal cleaners, and a reject shive cleaner for removing small shives and bark particles.

**Results:**  
Good fiber loss was reduced by 1,400 adt annually. Also, due to the modernization, evaporation plant overloading from washing bypassing was reduced by 7 l/s and the mill has been able to increase production. Screen room wear has also been significantly reduced.

### SCREEN ROOM OPTIMIZATION RESULTS



### SAVINGS SUMMARY (BEFORE VS AFTER FIBER BOOST)



Saving from screen room area	7.8 EUR/t
Additional Saving from Fiberline process	3.6 EUR/t
<b>Total Saving</b>	<b>5.4 EUR/t</b>
Annual Production	650,000 t/a
<b>Annual Savings</b>	<b>3.5 MEUR/a</b>