Upgrading of the edger system at Setra Rolfs Saw

In early 2015, Setra Wood Products in Kalix took the decision to upgrade its edger to obtain a higher yield. The edger line was equipped with an older measurement system from Saab WOOD. The choice was between building a new edger or to do an upgrade. “In terms of investment cost, the decision to upgrade was pretty easy,” said Hans Liljeström, Site Manager. “With the suppliers LIMAB, Andor Automation and Höga Kusten Teknikkonsult we found a competitive and interesting solution.”

In the summer of 2015 LIMAB got the order for the measurement system, Andor for the automation solution and the Höga Kusten Teknikkonsult for control and mechanical solutions. The requirement was 97% yield, but the target was set to 98%. Simultaneously, the demand for the production rate was set to 25 pcs / minute, with a goal of 30 pcs / minute. The installation was made in autumn 2015.

Before the edger all boards are transported in a cross conveyor. LIMABs measuring system, the BoardProfiler 3D-TE, is installed between the elevator and the linear infeed to the edger. Since the space does not allow an installation of a measuring system which measures in a lineal direction, LIMABs BoardProfiler 3D-TE fits perfect. The system scans with 3D laser technology the whole board in a cross conveyor and demands a very limited space.

When the piece of timber is scanned, the system makes an optimization based on established rules. The cut proposal will then be sent to a PLC which controls the positions of the saw blades and servos. This integration is made by Andor Automation. The BoardProfiler 3D-TE is also able to tilt the board to further maximize the yield.

“During the takeover a verification test was made to verify that the yield requirements were met,” says Hans Liljeström. “We found that the requirements were achieved and that the yield was actually higher than expected.”

This also applies to capacity, which is now consistently around the target of 30 pcs / minute.

“We are convinced that there are more sawmills that are interested in our BoardProfiler 3D-TE” says Christian Tellvik, Business Area Manager at LIMAB.

“Many edger mills have older measurements and automation systems and with a set-up similar to what we have installed at Setra Wood Products in Kalix they could raise their yield considerably.”

The measuring system BoardProfiler 3D-TE is especially designed for cross conveyor edger optimization. LIMAB also has a system of linear process,