Going with the flow

Tolko’s Creekside sawmill in Williams Lake, BC, has done a retrofit on the operation’s two edgers which—along with other associated improvements—has improved the flow of boards within the sawmill.

By Jim Stirling

“We run the region as a virtual sawmill,” says Mark Everard (above), Creekside’s plant manager, talking about Tolko’s three Williams Lake sawmills and their seven production lines.

Squeeze a tube of toothpaste and the product inside changes profile. In a sawmill context, working on one area of the lumber production process can have repercussions up and down stream. Mill upgrades ideally need to be planned with consideration for overall mill efficiency. The team at Tolko Industries’ Creekside Division employed that approach with the recent retrofit of the operation’s two edgers and an associated ongoing project to improve the flow of boards within the sawmill.

Tolko’s Creekside Division is one of three company-owned sawmills in Williams Lake in British Columbia’s Cariboo country. Regionally, the company’s Quest Wood Division is just 121 kilometres up Highway 97 in Quesnel.

Together, the three Williams Lake sawmills and their seven production lines produce about 800 million board feet of lumber annually. “We run the region as a virtual sawmill,” points out Mark Everard, Creekside’s plant manager. It means synergies between the mills can be capitalized to ensure the best processing fit for Tolko’s varied timber profile in the region.

Everard uses a football analogy to illustrate the mills’ broad roles. The Soda Creek Division stud mill using small diameter logs and curve sawing gangs is likened to Tolko’s wide receiver. The Lakeview Lumber Division is the team’s running back, dealing in volume with mid-size, mid-quality pine logs from four to 12 inches on two production lines and filling a MSR lumber marketing niche. Creekside is the good ol’ linebacker. The three-line mill handles the broadest
inventory of logs, explains Everard, from a small canter and six-inch curve sawing gang to a head rig side with 12-inch tops and better.

Creekside has been ticking along well for about 10 years with various “tweaking” projects on its machine centres, rather than major capital investments. But the three primary breakdown lines were tending to clog the middle part of the mill, relates Everard. The first phase to remedy the bottleneck was the retrofit of the mill’s number one and two edgers.

In their day, the edgers were top line. But new standards in scanning technologies and setworks that maintain their accuracies have considerably raised the expectations and performance of the edging function, he explains.

The four-saw number one edger handled boards from the head rig. The lumber recovery factor was not good and it typically operated at around five boards a minute. The installation of a new scanning system and double-sided sawing from Coe Newnes McGehee has the capability of operating at 40 boards a minute. Everard says the machine usually runs at about 65 per cent of that speed and has been working well.

It’s a similar story with the mill’s number two edger. A complete Coe Newnes system from the scanner through the edger to the tailer has helped boost throughput to a comfortable 30 boards a minute, and has contributed to a significant spike in recovery.

Personnel training is a key element in getting the most out of the new equipment. “The Newnes start-up guys were good, and we’ve been bringing them back in every three or four months to make maintenance more routine for our millwrights, electricians and saw filers,” outlines Everard.

The process has worked well. Creekside has assigned dedicated tradespeople to the edgers. And Kara Macdonald, the mill’s quality assurance supervisor, has written manuals for the edgers. “She did a phenomenal job,” credits Everard. “We’ve been happy with the value we got and the performance of the edgers.”
With the edgers purring along, some fine-tuning has resulted in improved canter throughput by about 30 per cent on the six-inch curve sawing line and the 10-inch vertical double arbor. An additional improvement has been the installation of a Comact lug loader and staging area ahead of the J-bar lumber sorting system.

The Creekside mill produces lumber in dimensions from 2x2 to 2x10 and “banana” boards from the curve sawing line, he continues. “This lug loader takes most of what we throw at it.”

Two important features of the system are the tongs that feed the lugs and the staging area supplying the boards. The tongs have the ability to load even waney boards without applying pressure back into the boards in the staging decks. The three decks can speed up or slow down independently to move boards forward as required to keep the lugs filled. The staging decks also provide short-term storage capacity if there’s a disruption in the sorting system.

Improving the overall flow of boards within the mill’s layout is a complex challenge, says Everard. Essentially, the task is to simplify the flow so it moves more smoothly through the lumber production process. “It’s pretty detailed stuff requiring lots of steel and decks,” he summarizes. “We’re not where we want to be yet, but it’s starting to flow pretty good.”

And here’s an indication of progress with the edger retrofits and flow adjustments: “We’re producing more on two-line combinations than we did on three.”

Much of the credit for that goes to the new equipment and the mill’s employees. “People in general at Creekside, the staff, the production and maintenance people, electricians and filers all worked very hard to make this successful,” says Everard.