

## McKenzie plant finds its own niches

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McKenzie Forest Products has taken a creaky and outdated plywood mill in Springfield, Oregon, thoroughly studied its processes and marketing, and embarked on a dynamic modernisation programme which considers the peculiarities of today's market.

The mill is on the site of the old Booth- Kelly Lumber Co, bought by Georgia-Pacific in the late 1950s. When the present ownership acquired it after bankruptcy it was one of those CDX sheathing mills that popped up in the mid 20th century, fuelled by a burgeoning housing market and without the competition of the yet-to-be-developed OSB.

The growth of OSB forced some of those sheathing mills out of business. Those remaining started to look at other products that could rest in the safe haven of special niches. Conversely, the very success of OSB, and its eventual premium price, caused some of the mills to re-think plywood sheathing, which became a profitable product for them.

So it has been with McKenzie. During the glory days of this summer's market it occasionally switched at least part of its emphasis back to sheathing.

But generally the company's emphasis has been on highest-quality panels manufactured with high-solids exterior PF resins and solid Douglas fir veneers. The AB and AA grades are suitable for both marine and high quality industrial uses. These are manufactured in 3/8in to 1in thicknesses in, so far, 8ft lengths. However, 10ft lengths are planned.

Siding is another speciality, as are sanded panels for furniture, doors and other uses.

McKenzie manufactures Dynea HDO (high density overlay) and MDO (medium density overlay) Plyform for high quality concrete forming. These are 5/8in and 3/4in panels, laid up with a minimum of seven plies, edgesealed and treated with a release agent.

The company's BB Plyform has a fully-repaired B grade face and back and a minimum of seven plies.



*Overall view of the mill floor*



*Tray system between Coe lathe and Durand-Raute clipper, with Ventek scanner at the end of the line.*

And the old faithful sheathing is designed for light frame wall and roof sheathing in thicknesses from 3/8in to 23/32in, in 8ft, 9ft and 10ft lengths. McKenzie president and ceo Steven H. Killgore traced the history of the operation. “McKenzie started in 1998 after the Springfield Forest Products bankruptcy. It was sort of a ‘buy your way out’ type of thing with the lender and new partners in the mill.”

He explained: “This was a commodity sheathing mill with a green end capability. The strategy was to take it from commodity plywood to speciality panels. The site was in mechanical disarray. And there were environmental issues that are being corrected.”

He recalled: “Except for one year, the other three years were fairly bloody. In April 2002, I was just finishing work with the transition team integrating Weyerhaeuser Company and Willamette Industries.

“While in college in 1976, I worked in a plywood plant managed by Dennis Spencer. He was one of the principals in McKenzie and asked me to join. It was a point in my life where I thought I had an option to take a risk, to see if we couldn’t get this entity turned around and bring it to profitability by working in concert with the other partners. I started in June 2002.

“We had a complex situation because we quickly started getting the order file. By then we had an off-line press for HDO, an off-line press for MDO and we installed a sander. We had grade logs that we could peel and get marine grade. We had a 10ft press so we could do 9ft and 10ft products.

“The plywood market was still in a four year trough of just awful prices. We struggled. We got the order file in place and then came educating customers about our quality products. The bank was very supportive. Our new controller, Jim Meyers, looked into which products were making money and all the complexities. Dennis stepped aside and I picked up the reins as president and ceo.”

Mr. Killgore went on to recall: “While we still believed the strategy was correct, that the speciality panels were going to provide the profit opportunity and our long-term position here in the west, we had to find the combination. We had a lay-up line, three spreaders, and four presses – how does all that work together? We did some experimenting in early ’03. The earnings were getting better. We had decreased overtime and the head count; in May ’03 we cut one third of the workforce. We had 300 people and scaled back to about 180, on three shifts, and contracted the product mix to fit. We got the mill to a cash flow break-even by mid-2003.”

In August ’03, the market began improving. The managers knew costs were not in line, but the mill was able to make a profit. Steve Griffith of Optware Solutions, Beaverton, Oregon, suggested a linear programme.

“Once the programme was in place, Mr. Killgore recalled, “it showed that we could have made money with the product mix in prior months. It focused on veneer loss, production flow, flow of veneer and production scheduling. We had some significant changes in the mill’s flow.”



*One of the Coe longitudinal dryers*



*Thirteen Raimann patchers are installed in two lines. Rotary sorting table at right.*

Many of the speciality products weren't making it. Mr. Killgore said commodity producers who could manufacture any panel other than CDX were doing it. He lamented: "We were not only spinning our wheels, but we had department costs."

His answer: "Let's take this as a compass and start gearing our profit mix to the linear programme. We picked up well over 35% savings in our manufacturing costs in that one year period with essentially the same products. We had shut down the lay-up line. The linear programme said you always run the lay-up line, with spreader production the gravy. That was the big change."

They added Metriguard-graded veneer to the mix and it was available for this year's favourable LVL market.

McKenzie runs the programme in one week windows. It provides the desired volume of each item, by category, thickness and size. It tells what veneer to use and how much profit the mill should be making.

Adalis Corporation, Vancouver, Washington, was another consultant providing an objective opinion on the mill from stem to stern. "We wanted to know what we needed to do for reliability, said Mr. Killgore. "Should something be repaired or should it be replaced to get the plant in reliable operating mode?

That was a three-week process with them in the mill, working with our folks and watching machinery. We've been working through the recommendations.

"I just wanted another opinion. When you're so close, it's sometimes hard to get that objectivity. Adalis is currently engaged in a project to go to a one-step MDO as efficiently as possible. They also did an efficiency plan for our composer to reduce waste and increase productivity, he said.

Last year McKenzie added a bonus system based on production, quality and safety. "They're doing very well, he said of the employees. "The crew is happier. They're better informed as we have frequent business update postings, and crew meetings where I talk with them.

"This is an old plant. I don't think there's an area we haven't touched. We still have folks working on the environmental things. We had to rebuild our boiler. We had training. And we had to get the head count right."

Looking ahead, Mr. Killgore said: "We see this all as a potential toehold to possibly get into engineered wood, into something broader. We have the veneer for LVL. We're opportunists. We've moved from survival into performance.

We have a very simple mission: producing quality veneer and plywood with focus and agility. We have to be able to turn on a dime and adjust to the market. If an opportunity comes up down the road, we'll certainly look at it."

The mill is now doing 550,000ft<sup>2</sup>, 3/8in basis, five days a week.

The company also has a green end in nearby Eugene. It provides A and B grades and 9ft and 10ft veneer. The green end in the main mill is a small log installation with an 18in maximum diameter block.

The two green ends provide about 60% of veneer requirements. Mr Killgore said they're about one third of the way through converting the Springfield lathe to 10ft production. The Eugene green end will eventually close. The final lathe work will be done this winter.

A large share of the mill's business is on the US West Coast, but it has sales all across the country and into eastern Canada. They're selling primarily to wholesale distributors. APA is their certifying agency.

Mr. Killgore summed it up: "All of us around here are realising these are the good times and we're enjoying them. We think we've positioned ourselves for those times when the markets aren't so good. We hope we never get tested on that but we're realistic enough to know that it's possible. These kinds of prices aren't going to stay forever.

"There may still be some contraction in the west, probably straight sheathing mills, but I would say those left in our industry are pretty good operators. Their hands are right on the controls and they watch every day. We're almost a niche in ourselves."