

Wood Product Innovation – Bangor Daily News – Sept. 2017

Innovating for growth in wood product manufacturing

By Kelly Short



Dave Redmond of the Northern Forest Center (left), Wayne Messer of the Androscoggin Valley of Governments/Maine Manufacturing Extension Partnership (center) and Ryan MacEachern of KBS Builders talk about ways to improve production flow in the plant.

Maine’s wood product manufacturers turn out fine furniture, wooden toys, construction lumber, pepper mills, modular homes, golf tees, wooden eggs for the White House Easter egg hunt, indoor and outdoor play sets, baseball bats, decorative objects and moldings, custom cabinets and much more.

These varied businesses face many similar challenges that come with operating in today’s global market, where customers shop online and expect custom options, quick turn-around and competitive prices, in addition to quality craftsmanship. Other issues include succession planning, organizational development, marketing and e-commerce.

The Northern Forest Center, a nonprofit organization with offices in Maine and New Hampshire, has been helping Maine wood product companies to introduce innovations that make them more competitive and profitable. “Strong wood products companies are a lynchpin in the region’s forest economy,” said Rob Riley, president of the Center. “They create demand for wood, which in turn helps forestland owners keep forests as forests, and they support good jobs on both sides of the process—for mill workers, manufacturing staff, loggers, foresters and truckers.”

The Center uses a combination of in-house expertise from Dave Redmond, director of wood products initiatives—whose career spans 30 years in manufacturing and banking—and financial assistance through a matching grant program to enable companies to contract with the experts they need to make big changes in their companies. The program has been supported by the Northern Border Regional Commission, the U.S. Department of Agriculture-Rural Development, the U.S. Economic Development Administration, the U.S. Endowment for Forestry and Communities, the Sewall Foundation, Maine

Timberlands Charitable Trust, other foundations and private contributions.

KBS Builders

KBS Builders employs 146 people at its plants in South Paris and Waterford. The company manufactures about 250 modular houses a year, ranging from ranches to multi-family homes. Operations Manager Ryan MacEachern said that the major challenge for KBS Builders is to improve technology and to overcome the lack of skilled workers available.

“We’ve committed to organizational change with regards to lean manufacturing and putting all employees through training for Lean 101,” he said. “It’s a huge financial and time commitment for us.”

The core principle of lean manufacturing is to eliminate all waste in the manufacturing process, and “waste” is anything that does not add to the value of the product from the customer’s perspective. Lean projects often improve layout, speed production, eliminate wasted steps, and smooth the work flow throughout a plant. Wayne Messer, senior project manager at the Androscoggin Valley Council of Governments (AVCOG) and the Maine Manufacturing Extension Partnership (Maine MEP), is providing the lean manufacturing expertise to the KBS Builders project, and the Center has covered almost half the cost.

“We’ve done a lot to change the shop layout, and it’s made us more efficient,” said MacEachern. “We’re introducing new technology. The first step is a new CNC lumber saw, which we’re just learning to use. We also changed our design software to go with the new saw.”

“Our long-term goal is to add on product lines and increase output,” MacEachern said. “The Center’s help has been hugely important from a financial perspective. Dave shows his passion for what we’re doing, and it motivates us. He sees the changes more clearly than we do, because he’s not seeing it every day.”

Stratton Lumber

The Stratton Lumber mill yard sprawls across 85 acres in the village of Stratton, at the southwestern tip of Flagstaff Lake. It processes millions of board feet of softwood construction lumber annually.

General Manager Jed Whiting said a typical week sees about 100 log trucks coming in and another 90-100 going out with finished product, in addition to 100 trucks with residual material from milling. “We need to get different streams of product where they need to be, efficiently. Both incoming and outgoing trucks,” said Whiting. “We need to create an environment that allows everybody to do their work in most efficient way possible.”

Wayne Messer of AVCOG/Maine MEP worked with Stratton Lumber to develop a new workflow for the lumber yard based on lean manufacturing principles, with half the cost paid by the Center’s grant program.

“When we implement the plan, it will allow us to increase our production,” said Whiting. “Our goal is to more efficiently manage our current level of business and to increase in the future without increasing our acreage.”

Stratton Lumber sources all its spruce and fir from local loggers and its own log yards throughout New England. The nearly 400 weekly truck loads going in and out of the mill are run by owner-operators and truck brokerages, so the mill's economic impact flows far across the region.

"If we increase production at the planer mill, it's good for everybody," said Whiting. "Being able to do this project has given us interest and insight into how we can implement more lean procedures in other parts of our facility. We're inspired to use these methods elsewhere."

Katahdin Cedar Log Homes

With 82 employees, Katahdin Cedar Log Homes in Oakfield is the second largest employer in southern Aroostook County, and owner David Gordon understands that many people beyond his own family depend on the success of his business.

The Center has helped Gordon with two projects, first funding experts to help him with an efficiency plan for a new sawmill, and later working with him on a succession plan for the business. Dave Redmond also helped connect the company to new outlets for the cedar residuals that come from manufacturing.

"The Center understands how important these mills are to the region," said Gordon. "Dave has helped me tap into new markets because of his contacts throughout New England. It's very helpful to have his level of industry knowledge."

Gordon's father established the family business in the 1970s, and Gordon is planning now for the transition to his own son, Gabe, who lives 250 miles away in Berwick, Maine. Jim McHugh of McHugh & Company is helping develop a multi-year succession plan to reorganize company leadership and transition to Gabe Gordon's eventual management. "We're learning what the pitfalls have been for others," said David Gordon. "We've got our radar up so we won't make the same mistakes. We've got to have the proper people in place, and really understand the financial ramifications of our decisions."

The Center has assisted several other companies in Maine, including Duratherm Window Corporation, where lean manufacturing improvements and strategic planning helped position the company for sale to Pella Windows; Maine Wood Concepts, where organizational development work helped the company expand through acquisition of a line of gourmet kitchen products; and Thos. Moser, where a lean manufacturing project increased efficiency at the manufacturing facility in Auburn.