



Solutions for Wood With Gilbert Steinke

Going Lean

A custom millwork business increases production capacity by implementing Lean practices

Many manufacturers think that solving a specific problem requires a single-point answer. In truth, a system-wide approach to finding a solution is often the best way to increase overall productivity and efficiency.

That is what Edmonton-based Midwest Furnishings and Supplies Ltd took on when it recently moved into its brand new 26,000 square foot building. Company co-owner Dave Hildebrand not only wanted a new home designed to fit the business, he also wanted a better production flow.

Founded in 1975, Midwest is a custom millwork company that originally provided furnishings for industrial camp trailers. Hildebrand and his brother Andy became part owners in 1980. Since then, the company has evolved into commercial and institutional millwork for schools and hospitals. Employing about 35 workers, Midwest also supplies woodwork components for a

general contracting division of a company that is focused on hotel construction.

The issue

The company had been planning to move into a new building for a number of years and, in the process, had developed what they thought was a better floor plan. "Our old location was anything but ideal," says Hildebrand. "We had no flow, not enough space for the staff work areas and a lot of overlap. The square footage we have now is approximately 50 percent larger and is laid out specifically for what we do."



Midwest Furnishings and Supplies Ltd.

Most of the millwork produced at Midwest Furnishings is manufactured from both raw and prefinished veneer core and composite core sheet goods. Sheets typically flow from a Holzma panel saw which cuts the components, to a Brandt edge bander, then to a Morbidelli point-to-point CNC machine. Some components

will then proceed to a Koch dowel inserting machine before all components converge at the assembly bench area.

Incorporating Lean principles

Having heard about Lean manufacturing principles and the benefits they can provide to a business, Hildebrand turned to Forintek industry advisor Gilbert Steinke for advice. Commented Steinke: "Hildebrand sought assistance from an outside source. As an industry advisor for Forintek it was my role to provide an assessment of the ideas the company had developed." "We felt that sometimes a person can be too close to a project to be able to take a step back and see the big picture," says Hildebrand. "You've only seen it one way forever, so how else can it ever work?"

Although there were a number of similarities between the floor plans developed by Midwest and Steinke, Hildebrand discovered the value of a second opinion. For example, simply tweaking a floor plan and production flow significantly improves efficiency, production capacity and ultimately, the company's bottom line.

As a result of the assessment, some Lean manufacturing concepts were incorporated into Midwest Furnishings' production line. With the involvement of key company production staff, the current state of production flow was evaluated and followed by suggestions on what the future state of production flow would look like under the new plant layout. This included the concept of creating what Hildebrand called "production corridors" to make components flow more logically from machine centres to assembly benches to minimize travel for employees within the plant. For Midwest, a significant change was the move from bench assembly to line assembly — a shift they believe will make them more productive, efficient, and resilient to unexpected worker absences.

Hildebrand says he can't believe how quickly projects are being completed now. "I'm constantly surprised by my production manager coming to me and asking, 'What's next?'" he says. The additional capacity that has been created is something the company had no hope of achieving in their old facility because of physical constraints and production flow issues. "I am confident that we can increase production by 30 to 40 percent over the course of an average year," says Hildebrand. This also will provide the company with the opportunity to expand its market geographically, which at present is focused on Alberta, BC and the Northwest Territories. **WW**

Gilbert Steinke is one of Forintek's hands-on specialists. Forintek is a division of FPIInnovations, a company with more than 25 years of experience providing technical and manufacturing support to the wood products industry in Canada. He can be reached at (780) 940-6160 or gilbert@edm.forintek.ca. For more information, visit solutionsforwood.ca.

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