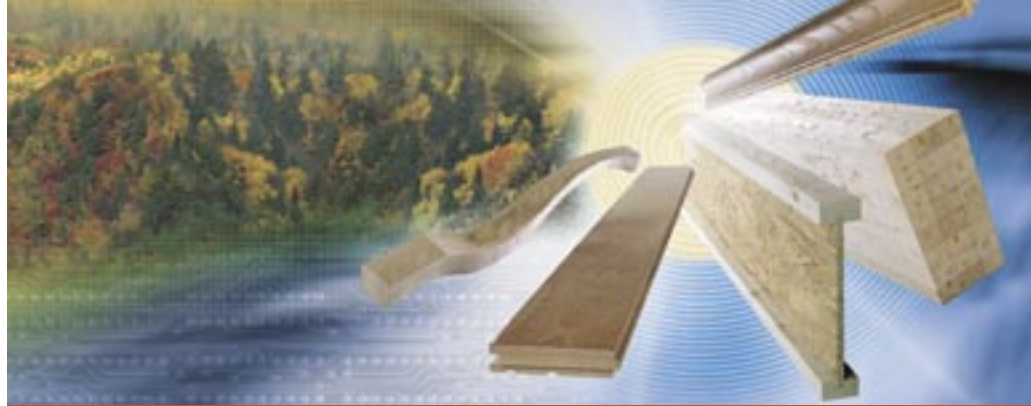




Value to Wood



Issue 3 04

For a More Competitive Value-added Wood Product Industry, in all Regions of Canada

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How Can Lean Manufacturing Help Your Business?

Lean Manufacturing is front and center in the news these days and many companies are using Lean techniques to increase the value and quality of their products, and subsequently improving their bottom line.

What is Lean?

Lean is a commitment to achieving a totally waste-free operation that's focused on your customers' success. It is achieved by simplifying and continuously improving all processes and relationships.

Lean Manufacturing techniques quickly cut production costs and inventories to free up cash. It also supports growth by improving productivity and quality and reducing lead times. For example, Lean Manufacturing can rationalize office and plant space which can increase capacity, enable companies to add product lines, in-source component production and increase the output of existing products without acquiring new facilities. Companies implementing Lean will be able to take advantage of renewed growth by increasing sales without increasing costs.

To stay profitable, Canadian secondary wood manufacturers need to be on their toes. Product development, market niche identification, new manufacturing strategies that include Lean may ultimately be the only ways to remain competitive.



What next? How the Value to Wood program can help you.

To get the message out, the Value to Wood program has already staged two workshops in Saskatchewan, where participants representing kitchen cabinetmakers, millworkers, stair and railing manufacturers, and timber framers gathered to hear information on how Lean Manufacturing can move their company to the next level.

For more information on Lean and how it can help improve your business, please call one of the Value to Wood coordinators on Page 4.

Manitoba Technology Mission Benefits Participants

It's not often that business owners have the chance to tour other successful businesses and ask the managers questions on manufacturing processes and how to implement cost saving practices.

The opportunity to tour some of the country's leading wood products producers was enough reason to draw a number of industry people

from across Canada to the Winnipeg area in February. The Winnipeg area is well known for such companies as Palliser Furniture, Loewen Windows and Kitchen Craft Canada – companies that the industry views as being progressive and leaders in their field. To remain competitive, these and other companies visited continually look for ways

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to become more efficient, reduce costs and improve their product.

For tour participants, the interaction with the companies was well worth the trip. "I was really impressed with the openness of the companies we visited", commented **Roland Léger**, from Norwood Windows in Scoudouc, N.B., "I learned things on this tour that I can take directly to my plant and apply right away".

Lean manufacturing techniques were certainly on the minds of the companies visited. Keep it simple and focus on the basics was a message that the group heard throughout the three-day event.

"We implemented lean manufacturing techniques so that we could get better at what we do", said **Dave Sawatzky**, from Kitchen Craft Canada, one of the companies visited.

"Applying the principles of lean manufacturing reduced our warranty claims by 25% and our safety record has improved by over 20% – for our business, it really made a difference".

For **Ken** and **Kim Kowalchuk** of Cabtec Manufacturing in Regina, the trip was an excellent opportunity to look at production processes and compare their operation with others. "The trip gave us a chance to see what other companies such as Duha, Loewen Windows, and Boeing are doing with respect to lean manufacturing" commented



"I learned things on this tour that I can take directly to my plant and apply right away".

Roland Léger, Norwood Windows

the brothers, "we want to grow our business and it was good for us to see how others are moving to the next level".

The overall consensus from the participants was that the trip was well worth the time and effort. To find out more about this Mission, and how you can benefit from attending future Missions, please call the *Value to Wood* Coordinators in your region, their number is on the back page.

CASE STUDY

Expertise Valued Beyond Pure Commercial Ventures

Forintek's Industry Advisors are being called upon to share their expertise with more than just commercial value-added wood manufacturers.

Chrysalis is an Edmonton, Alberta society for people with disabilities, that helps disabled people develop skills that can be transferred to the work force. The organization recently contacted Edmonton-based Forintek Industry Advisor, **Dalibor Houdek**, to help it increase productivity and improve efficiency in its pallet manufacturing division.

One major challenge faced by Chrysalis was cost competitiveness, since many of its competitors were becoming more automated. Staff at Chrysalis already recognized that greater automation within their pallet operation was probably the right approach, but were unsure how to shop for equipment and incorporate the technology into their existing production system.

Over one month, Houdek evaluated their pallet manufacturing process and accessed their needs. Once that was completed, Forintek laid out a new conceptual design for their facility. The production was split into two different locations. One focussed on preparation of material and cutting pallet stock, while the other was designed to assemble new pallets and recycle and repair old pallets.

Forintek also researched equipment that spanned from fairly basic to fairly complex automation. Houdek provided



Chrysalis with guidelines for purchasing the equipment, which included what features the equipment should have and how the organization should communicate its needs to equipment manufacturers.

As a result of Forintek's recommendations, Chrysalis not only modified its production approach but also purchased a pallet jig.

"The changes we made to our production method really improved our efficiency," says Chrysalis wood division manager, **Jimmy Lam**. "We have been able to cut down the production cost for each pallet, and have also increased production."

The production flow model provided by Forintek was particularly helpful because of the small shop area being used for pallet construction.

"The suggestions provided by Dalibor definitely pointed us in the right direction," says Lam.

CASE STUDY

Forintek Experience Saves Company \$\$

A New Brunswick custom window and door manufacturer expects to save thousands of dollars in repair bills and the cost of building materials based on the valuable input provided by a Forintek Industry Advisor during a recent visit to the business.

Industry Advisor **Marcel Lefebvre** spent two days at West-Wood Industries, located in Scoudouc, New Brunswick. At the company's request, he looked at two specific areas. The first was to evaluate the company's sawing and gluing procedures. The second was to help improve the performance of a critical piece of equipment bought by the company so that it could manufacture some of its own building material.



The rack on the saw was breaking quite frequently and bolts were coming loose. The company needed help to fix the problem. "The last time I had to fix it, it cost me \$3,000," says **Roland Léger**. "I didn't want to pay that every time it broke, which seemed like once a month."

Lefebvre aligned the multiple rip saw's press rollers. These rollers feed the raw dimension lumber into the machine. He showed staff how to configure the machine so that it would perform at full capacity. He also helped balance the machine, which resulted in the manufacture of consistently accurate building material and less wear and tear on the rip saw.

"We haven't had a breakdown since Marcel made the improvements," says Léger. "If it continues to work well, I'll be very happy." Operating at optimum, the multiple rip saw will reduce West-Wood Industries' monthly raw material costs to roughly half of the current \$30,000 to \$35,000 it is paying.

Lefebvre also evaluated the company's presses, including the curving press, and its gluing procedures. He found that West-Wood Industries was doing a lot of things right, which was very reassuring to the company. "It was nice to hear an outsider with experience tell us that what we were doing is right," says Léger.

CASE STUDY

A Phone Call Is All It Takes...

A Hinton, Alberta log building manufacturer recently learned what a difference one phone call to Forintek can make.

Mark Deagle, owner of Mark Deagle Log Building, and a contractor he was working for in Oregon, had an unhappy client on their hands. A building inspector wanted the wall between the client's log home and garage drywalled and insulated with fibreglass. The inspector based his decision on a lack of information regarding fire-resistance of log buildings. However, installing the drywall would have negatively impacted the aesthetic appearance of the home.

While pondering how to deal with this problem, Deagle and his contractor, **Richard Tennant**, contacted the International Log Builders' Association (ILBA) for assistance, which in turn directed them to Forintek.

Tennant called Forintek to see if it had any information on fire-resistance of log buildings. He spoke with Forintek Industry Advisor and log building construction expert, **Dalibor Houdek**, who was able to provide him with two articles that he had written on the subject, as well as a research report that he had done on fire-resistance of log construction.

The information was forwarded to the building inspector. After reviewing the information, he agreed to stamp the original plan, on condition that the insulation inside the lateral joints between the logs was changed from fibreglass to mineral wool, making the log wall compatible with one described in a Forintek article. "As a result of the information provided by Dalibor, we were able to finalize the sale and take the route that the client wanted," says Deagle. "We were also able to avoid a lot of extra work."

Since then, Deagle has maintained contact with Forintek and this has benefited his business in other ways.

For example, Houdek provided him with a new log home fact sheet recently prepared by Forintek, offering suggestions for protecting and finishing log buildings.



What Value to Wood Can Do For You...

The *Value to Wood* program is an opportunity for wood product manufacturers across Canada to have access to the technology and information they need to extract greater value from wood resources.

Research and Development

Value to Wood has a strong Research and Development component designed to address the knowledge and technology needs of Canada's value-added wood product sector. It draws on the expertise of leading wood research capabilities across the country:

- Forintek Canada Corp.
- University of New Brunswick – Wood Science and Technology Centre
- Laval University – *Centre de recherche sur le bois*
- University of Toronto – Natural Fibre Science Group
- University of British Columbia - Centre for Advanced Wood Processing

Together, these organizations are working on projects that have a high potential for direct and significant benefits to Canadian wood product manufacturers, in four areas: resource characterization, manufacturing processes, development of value-added wood products, and market access. For more information, see www.valuetowood.ca.



Technology Transfer

Through *Value to Wood*, Forintek Canada Corp. has established a network of Industry Advisors across the country. Their role is to help wood product manufacturers resolve technical issues and improve competitiveness.

How to contact us



Value to Wood Co-ordinator (West)
2665 East Mall, Vancouver, BC
V6T 1W5
Tel: (604) 224-3221
Fax: (604) 222-5690

Value to Wood Co-ordinator (East)
319, rue Franquet, Quebec, QC
G1P 4R4
Tel: (418) 659-2647
Fax: (418) 659-2922

www.forintek.ca

Upcoming Events

International Log Builders' Association - 31st AGM

Parksville, BC
April 1-4, 2004
www.logassociation.org

High Point Furniture Show

Highpoint, NC
April 1-6, 2004
www.highpointmarket.org

38th International Wood Composites Symposium

April, 5-8, 2004
Pullman, WA, USA
symposium.info@wsu.edu

Ontario Lumber Manufacturers' Association

Annual Meeting
Toronto, ON
April 21-23, 2004
www.olma.ca

Interbuild

Birmingham, UK
April 25-29, 2004
www.interbuild.com

TechniBois 2004 – 7th Edition

Centre de foire
Quebec, QC
April 29-30, 2004
info@technibois.com

CIB World Building Congress 2004

Toronto, ON
April 29-May 1, 2004
cib2004@nrc.ca

We Want Your Suggestions for Research Topics!

As a Canadian wood product manufacturer, your suggestions for research topics are most welcome. To get your topics to the Research Advisory Committee for review, please contact the *Value to Wood* Coordinator in your area, or submit your idea online (www.valuetowood.ca) under the Research and Development page.

Publications

Assessment of Heat-Treated Jack Pine and Balsam Fir
(E-3779)

Assessment of Wood Parquet
Finish and Product Stability
(E-3657)

Detecting Defects to Maximize Quality and
Value of Wood Products
(TP-03-03E)

Hardening of Solid Wood : Market
Opportunities and Review of
Existing Technologies
(W-1929)

*Impact de marques de caractère
sur le rendement au sciage secondaire
du bouleau blanc*
(E-3791)

Influence of Moisture Content and Temperature
on the Performance of Fingerjointed Lumber
(TP-03-02E)

Manitoba Wood Products Industry
(W-1998)

Optimisation of Gluing Parameters for
Trembling Aspen Face and Edge Gluing
(E-3656)

The North American Value-added Components
Industry : Overview and Market Opportunities
(W-1959)

Thermally Modified Wood
(TP-03-01E)

Weathering and Protection of Wood
(W-1966)

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Wood Adhesive Standard : Commentary and
Guidelines for Use
(W-1969)

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Ce bulletin est aussi disponible en français

