

WOOD PRODUCTS

Elmwood Reclaimed Timber

Floor panel manufacturer improves sales by 10 percent with advanced planning and scheduling solutions

Product

Opcenter

Business challenges

Improve on-time delivery to enhance customer experience

Eliminate manual scheduling and dealing with urgent issues due to short-term visibility

Overcome scheduling limitations of existing ERP system

Keys to success

Implement tight integration between Opcenter AS and ERP systems

Account for shop floor constraints like material, yield and changeovers in finite capacity schedule (FCS)

Use Opcenter AS to provide visibility and flexibility for rescheduling throughout the manufacturing process

Improve responsiveness to customer demand changes

Results

Increased top line revenues in 2016 by 10 percent

Increased production output without increasing headcount

Improved on-time delivery

Elmwood improved production planning and scheduling using Opcenter Advanced Scheduling

Prioritizing on-time delivery and efficient resource utilization

Elmwood Reclaimed Timber Inc., based in Kansas City, Missouri, manufactures and markets the highest-quality reclaimed wood products that adhere to standards embracing the company's deep respect for the environment. Every product created by Elmwood, including wide plank flooring, counter tops, beams and cabinet lumber, is manufactured using wood salvaged from sustainable sources.

Out of respect for cultural heritage and architectural history, only structures that are condemned, abandoned or beyond repair are deconstructed for reclaimed wood. All of Elmwood Reclaimed Timber's products are certified by the Forest Stewardship Council's Recycled accreditation. The recognition adds validity to an already green, environmentally conscious team.

Elmwood is committed to efficient manufacturing of its custom products and assuring on-time delivery to customers. With this priority, Elmwood began its digitalization journey by searching for tools that would complement its existing enterprise resource



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Elmwood Reclaimed Timber,
Inc.



planning (ERP) system and improve the planning of manufacturing operations to synchronize demand and supply.

Elmwood began looking for a scalable and flexible capacity planning and scheduling package that would integrate with the existing ERP system and the homegrown shop floor data collection system. The answer was Opcenter Advanced Scheduling (AS) solution, a part of the Siemens Opcenter Advanced Planning and Scheduling (APS) solution family. The APS solutions help manufacturing industries improve the synchronization of

manufacturing processes, giving greater visibility and control to increase utilization and on-time delivery while reducing inventory levels and waste.

In addition to leveraging specialized skills required to identify high-quality wood, Elmwood had to consider the complexities of accurate scheduling of its manufacturing operations.

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production,” says Mark Callison, president of Elmwood Reclaimed Timber. “But more importantly, we are able to replan our material in case of any dynamic changes.”

The entire manufacturing process sequence depends on the allocation of green lumber with large variations in sizes and the requirements of customers. Elmwood used the advanced pegging features of Opcenter AS to link the green lumber output to further cutting processes, laying the foundation of a sound planning and scheduling process.

To arrive at accurate schedules, Opcenter AS enabled production teams to consider labor, material and capacity constraints. “Opcenter AS exceeded expectations and became the key software that helped us expand our capacity and automation,” says Connor Burns, vice president of production. “Opcenter AS moves the manufacturing shop floor.”

Tightly coupled integration

The implementation of Opcenter Advanced Scheduling at Elmwood included the entire manufacturing process and two-way integration with the ERP software, a critical need at the company.

Currently, the ERP system is used to manage bills of materials (BOMs), routings, planned and production order generation, and to send the necessary data to Opcenter Advanced Scheduling. The use of Opcenter AS provides detailed, real-time visibility and order traceability throughout the manufacturing process, feeding information back to the ERP system upon completion. Elmwood sends detailed serial information to its customers.



"We have configured Opcenter AS to take our specific constraints and challenges when we are going to communicate with ERP," says Callison.

Benefit beyond expectations

With Opcenter Advanced Scheduling, Elmwood integrated key business decision support systems for managing its operations.

All of Elmwood's manufacturing is custom in nature. The company uses Opcenter AS to help decide what to manufacture because the cutting of reclaimed wood requires consideration of specific data for accurate scheduling. Elmwood uses this data to help make predictive decisions and identify problems before they occur.

Opcenter AS is integral to Elmwood's successful business processes and is a key enabler of its continued growth.



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Mark Callison
President
Elmwood Reclaimed Timber, Inc.

Solutions/Services

Opcenter APS
siemens.com/aps

Customer's primary business

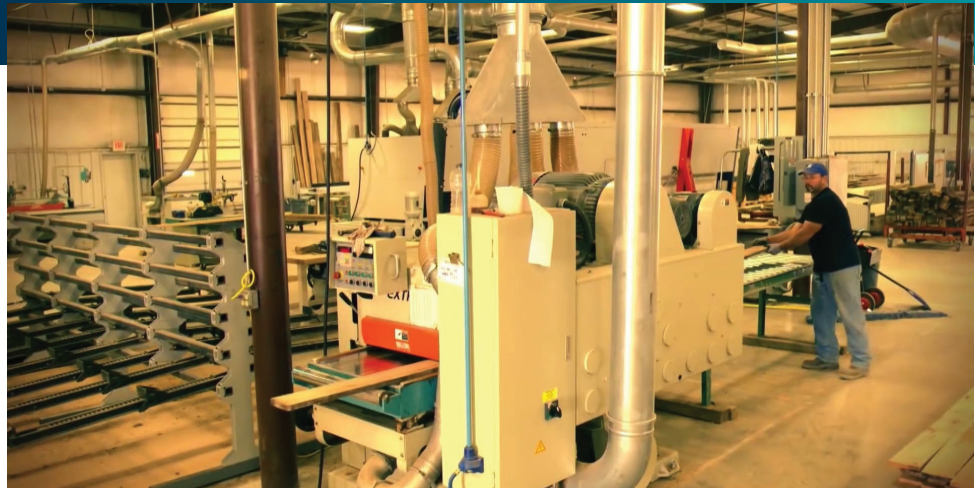
Elmwood Reclaimed Timber, Inc. manufactures products like custom-milled reclaimed antique wood flooring, stair parts, paneling, cabinet lumber, countertops, bar tops, table tops, beams, fireplace mantels, shelves, barn wood, lumber and antique tin.
www.elmwoodreclaimedtimber.com

Customer location

Peculiar, Missouri

Solution Partner

SNic Solutions
www.snicsolutions.com



Elmwood has realized the benefits in many business areas. In manufacturing operations, the use of Opcenter AS has provided real-time visibility into work-in-process (WIP), machine and operations loading plans for all areas of manufacturing, identification of operational bottlenecks, and the ability to use calendars and set manpower and machine constraints.

For production planning and scheduling, Elmwood can now balance key performance indicators for sales and production using what-if scenarios; develop a single unified plan for better coordination of sales, production and purchasing; and predict problems instead of reacting to them.

The use of Opcenter AS has also helped enhance general business management with better visibility of customer delivery and sales, improved material planning, and reductions in work-in-progress inventory.

Expert service and support from partner SNic Solutions

In complex technology implementations, a critical success factor is finding a partner with combined knowledge of domain and technology and practical experience at the right price. Manufacturing teams have understand their requirements but are seldom able to prioritize them. At Elmwood, the skills and knowledge of SNic Solutions, a Siemens Digital Industries Software solution partner, played a key role.

Elmwood selected SNic Solutions as a preferred strategic partner to implement Opcenter AS. "SNic Solutions' knowledge in manufacturing operations, supply chain, production planning and scheduling and deep expertise in manufacturing operations management and digital manufacturing was key to our success," says Callison. "Moreover, they delivered a very high-quality solution remotely at affordable cost which has truly has made them our strategic partner to get ready for Industry 4.0."

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