



20-20 ENTERPRISE INSIGHT DOUBLES PRODUCTION AT HEARTWOOD MANUFACTURING

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The Challenge

Based in British Columbia, Canada, Heartwood Manufacturing has produced laminate office and institutional furniture for more than 25 years. The company delivers a fully-customizable selection of products while focusing on high quality and fast delivery. Heartwood has grown its operations over the years to become one of the largest suppliers of office furniture in Western Canada.

As the company increased its operations, Heartwood needed a solution to fully automate its manufacturing processes—with a particularly strong requirement to automate the engineering and design functions. "We looked closely at many solutions over the years but could not find one that adapted well to our operations," said Jenni Duff, General Manager for Heartwood Manufacturing. "Because we custom-build many of our furniture orders, we require a lot of flexibility in our design and engineering processes."

To meet its automation needs over the short-term, Heartwood Manufacturing had developed a custom in-house application. But as the company continued to expand and produce more orders, Duff realized they would require a higher level of automation to improve their overall production efficiency.

The Solution

After seeing a demonstration of 20-20 Technologies Enterprise in Sight at an industry conference, Heartwood was impressed with the seamless way the manufacturing automation solution could integrate with the entire Heartwood production system, including machines on the shop floor. "We had five people at the time in our design department doing a lot of the CNC (Computer Numerical Control) programming for our machines handling custom items," Duff said. "This was a manual process for us, so in Sight's ability to automate the process was a big benefit."

Duff said that Enterprise inSight gives Heartwood tighter integration with business processes, which the company was not able to accomplish on its own. The software is also flexible enough that Heartwood can customize it to meet specific needs. "Most solutions don't offer this level of flexibility and force you to work with what comes out of the box," Duff said. "But with inSight, for example, when design or order status changes occur, we can specify what actions we want to take place, such as the creation of reports or e-mails sent to the personnel involved in the order. This is a very important capability since we do a lot of custom jobs and the status of jobs can change often."

Enterprise in Sight also helps Heartwood in the on-going mission of continually developing leaner business processes that allow the company to function at higher efficiency levels with fewer resources. "We're always on a continuous improvement path and take lean manufacturing seriously," Duff said. "The in Sight solution developed by 20-20 helps us achieve this mission."

Another key attribute that appealed to Heartwood is the SQL database backend used by Enterprise inSight. Relying on this technology enables easy integration with other back-office systems Heartwood relies on, such as its Sage accounting solution.

To deploy the solution, Heartwood personnel first attended general courses offered by 20-20, and then 20-20 instructors visited on-site for one-on-one training supplemented by online training. After going through the courses, Heartwood then configured and deployed the solution with internal resources.

"20-20 also continued to support us throughout the project and helped us work out any issues we could not address on our own," Duff said. "This was a very big project for us, and we committed significant time and manpower. We researched and planned well, and we took the necessary time before going live. We also worked with exceptional people at 20-20, which established a support team that has been responsive to our questions while providing a high level of expertise."

The Benefits

Enterprise inSight has helped Heartwood fully automate processes such as design and engineering while also assisting with other processes including order entry, accounting and shipping. By automating more components of the business process, employees can spend more time on their primary job functions rather than on data input and retrieval. This benefits the sales, customer service and production teams.

Automated engineering outputs—including CNC—are now generated without human intervention. The company thus reduced the required manpower on the administrative front-end of engineering and design. New products can also be developed in less time so that Heartwood can deliver orders faster.

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Enterprise in Sight also offers the ability for Heartwood to continually become leaner as the system and Heartwood's business processes synchronize with each other to a greater extent. "As we discover improvements over time that we can apply to our processes, we can then improve how we interact with in Sight," Duff said. "We regularly find new ways to streamline our business processes, which allows us to take greater advantage of the in Sight capabilities."

Looking ahead, Duff said that Heartwood will take a close look at other solutions that 20-20 Technologies provides that Heartwood may be able to integrate with Enterprise inSight and other internal systems. "20-20 has proven the ability to adapt its solutions to create synergies with other systems," Duff said. "Over time, our partnership is likely to produce more benefits that help us automate our processes even further."