

Microvellum and High Country Millwork

Autodesk Independent Software Vendor Success

AutoCAD®

At High Country Millwork, we're growing about 30 percent per year. Microvellum and AutoCAD are key contributors to our growth rate.

—Michael Childs
President
High Country Millwork

Partnering for Success

Microvellum transforms the design and manufacture of wood products using AutoCAD® software.



The Company

Based in Medford, Oregon, Microvellum develops, sells, and implements integrated design and manufacturing technology for the woodworking industry. In recent decades, production technology—including computer numerical control (CNC) routers—has revolutionized the woodworking industry by increasing production speeds. At the same time, design software has enabled designers and engineers to realize ever more elaborate designs. But the industry lacked effective solutions that incorporated 3D modeling capabilities. That is until Microvellum stepped into the void with an integrated solution built on AutoCAD® software. Now, High Country Millwork and other wood products manufacturers have the technology they need to boost productivity even higher. Microvellum and Autodesk® technology help woodworking companies to:

- Cut costs by optimizing the use of wood
- Reduce time to market
- Respond to requests for custom products more quickly
- Use familiar technologies to increase efficiencies

The Challenge

Making Wood Products More Efficiently

Before Microvellum, woodworking companies relied on disparate software environments for each of their processes. They created designs in one environment, programmed woodworking machines in another, and developed cut lists in yet a third environment. For many companies the lack of integration between processes limited the value of investments in the latest woodworking machines. Optimizing the use of wood was also a time-consuming, but essential process, especially for companies that used fine woods. While several software companies began offering solutions for the woodworking industry based on basic design software, the software was slow and did not incorporate a familiar design environment.

“Woodworking is in many ways a very traditional industry, but companies within it still need to compete on time to market and cost,” says Doug Morse, business development manager for Microvellum. “Lean manufacturing has definitely changed the way people think about their equipment and design tools. We saw a need for an integrated, industry-focused solution to help manufacturers go from design to assembly more efficiently.”

Autodesk®

Microvellum and AutoCAD help wood products manufacturers to reduce costs and time to market.

For manufacturers of custom wood products, such as High Country Millwork, the challenge of disconnected systems was especially acute. Its customers are often on tight schedules and typically order fine wood elements as finishing touches on larger projects. Michael Childs, president of High Country Millwork, explains, "We specialize in wood display systems for high-end retailers. Many of our customers are under tight time constraints. That doesn't give us much time to design, finalize, and manufacture their displays. We needed a reliable solution that could help us respond to customers quickly."

The Solution

Since it was introduced in the early 1990s, the Microvellum solution has enabled wood products manufacturers of every size to adopt more efficient, cost-effective processes. Along the way, Microvellum has enhanced the solution with leading-edge capabilities, including 3D modeling, parametric design, and integration with business systems. The solution has been built around AutoCAD software from the beginning, a fact that helped Microvellum introduce its product successfully and continues to benefit the company.

Today, the Microvellum-powered process goes as follows. Manufacturers design new wood products in the familiar AutoCAD software environment. Because Microvellum has enhanced AutoCAD software with 3D modeling and parametric capabilities, changes to one aspect of a design automatically modify related elements, saving significant time. Design data integrates with CNC-enabled manufacturing equipment, and design information can also be used to optimize wood use. Throughout the process, manufacturers can take advantage of integration with business systems to streamline processes such as procurement and billing.

A Strong Foundation

"When we chose AutoCAD, it was the most widely used design solution in the world," says Morse. "It

still is. Using AutoCAD allowed us to offer our customers a design environment they were already familiar with, which was definite selling point. Autodesk has proved to be a great partner. When we run into design limitations, Autodesk developers help us work around those limitations. Looking ahead, we're working with Autodesk to integrate the advanced parametric capabilities of Autodesk® Inventor™ into our solution."

Accelerated Processes

High Country Millwork has used the Microvellum solution for seven years. It chose Microvellum because the company offered a solution that integrated with its CNC equipment and was based on AutoCAD. High Country Millwork's designers and engineers begin all their projects in AutoCAD software, and once the designs are approved by the customer, they use the Microvellum component to drive their equipment, make changes, and, if necessary, produce 3D models. Along the way, they reuse elements of prior designs, a process made easier by the library of designs they manage within the Microvellum solution.

"Our customers expect the best service and designs," says Devin Estabrook, head of engineering for High Country Millwork. "Microvellum and AutoCAD help us to deliver. Having an integrated solution that includes AutoCAD software gives us a tremendous amount of flexibility and enables us to collaborate more seamlessly with our customers' architects, who typically use AutoCAD software as well. Just as important, using the solution, we can respond to customers more quickly."

The Result

Since its inception, Microvellum has experienced significant success. Morse sees the company's partnership with Autodesk as an important contributor to Microvellum's achievements. He says, "Autodesk supports our efforts with a number of powerful resources. Our contacts at Autodesk help to keep us up-to-date about where the manufacturing industry is heading, which



contributes to our ability to make forward-looking decisions. Autodesk also provides us with valuable marketing support and the pricing flexibility we need to serve customers better. And by providing development input, we're able to enhance our offering more quickly and efficiently."

Growing at 30 Percent per Year

Microvellum's success can best be measured in terms of its customers' satisfaction and results. "At High Country Millwork, we're growing about 30 percent per year," says Childs. "Microvellum and AutoCAD are key contributors to our growth rate. They help us to deliver what our customers want in the time frame in which they need it. Approximately 75 percent of all our business is repeat customers. We see ourselves as partners to our customers—an approach that Microvellum and Autodesk share."

Learn More

Find out more about Autodesk Independent Software Vendors at www.autodesk.com/ISV.



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