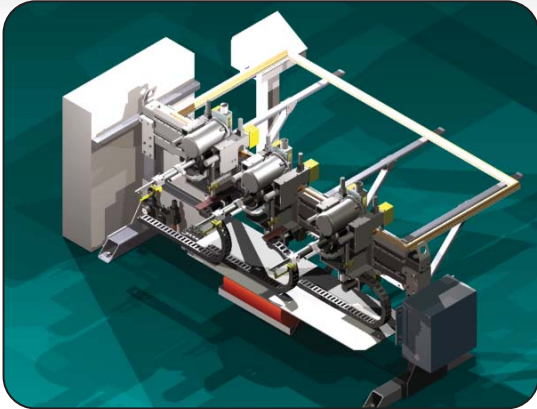


JELD-WEN Implements Autodesk® Inventor™



Automated Saw

→ THE CLIENT

JELD-WEN, inc. is the world's leading manufacturer of reliable windows and doors. Based in Klamath Falls, OR, JELD-WEN began as a small Oregon millwork plant in 1960 and has grown into a company with more than 150 divisions and more than 20,000 employees worldwide. JELD-WEN is the official window, door, and millwork provider of the PGA Tour, and Champions Tour; Proud Partner of THE PLAYERS; and title sponsor of the JELD-WEN Tradition.

→ THE CHALLENGE

JELD-WEN had more than twenty seats of AutoCAD® and wanted to integrate a Computer Aided Manufacturing (CAM) System to streamline their manufacturing process.

→ DESIRED OUTCOME

JELD-WEN wanted a 3D object modeling solution to help them move beyond the limitations of 2D design and reap the productivity benefits of 3D.

→ THE SOLUTION

Project Manager Glenn Davina, discovered Autodesk Inventor during Mechanical Desktop training in 1999. Glenn explained, "During lunch, Inventor Revision 2 was introduced and I was able to open it up and start using the program right away! I came back to the office excited to tell everyone about how much more we could do with Inventor."

In response to his excitement, IMAGINiT went on-site and demonstrated Inventor. Their primary reason in choosing Inventor was the 3D modeling capability, which provided easy customization and rapid design changes, plus the design data could easily be integrated into their existing CAM software.

"IMAGINiT helped us with our training needs and if we ever had any questions, we called them and someone always helped," added Glenn. JELD-WEN currently hand writes their bill of materials (BOM), but is working with IMAGINiT to implement Autodesk® Vault so they can start using an automated bill-of-materials process internally. Glenn noted, "This will provide earlier visibility for accurate up-to-date component lists to improve estimating and resource decisions."

→ ACTUAL RESULTS

JELD-WEN uses Inventor to model their projects, import the models directly into their CAM software, and then output the code to the machine. "Without CAM and the CAD process that precedes it, customization would be a time-consuming, manual, and costly process," noted Glenn. Through the use of CAM, processes can become highly automated because each of the many manufacturing procedures in a CAM system is computer controlled, achieving a high degree of accuracy. "Using the parametric technology inherent in Inventor, our designers can better predict product performance, understand the behavior of a product, and explore what-if scenarios," added Glenn.

"There are a lot of features we particularly like in Inventor such as the frame generator in 2008, the content center, and the interference analysis feature, which improves design manufacturability and reduces errors. The whole purpose of any print or design is to communicate the design intent with clear dimensions and annotations. Inventor allows us to do this extremely well," noted Glenn. JELD-WEN has been able to accelerate and streamline the creation of their production drawings while minimizing errors. "With the automatic drawing views, we can create front, side, detail, isometric, section, and auxiliary views of our 3D model and then quickly dimension and annotate them. This has really improved the communication with our shop," concluded Glenn. "I estimate about a thirty percent reduction in mistakes," affirmed Glenn.

Many clients do not understand 2D prints, which can often lead to issues after the completion of a project. JELD-WEN now uses a web-conferencing program to show their clients the 3D model of the project, which resolves any issues in the early stages of design. With Inventor, they are not only improving communication with their clients, but helping them visualize concepts and propelling their project forward faster.