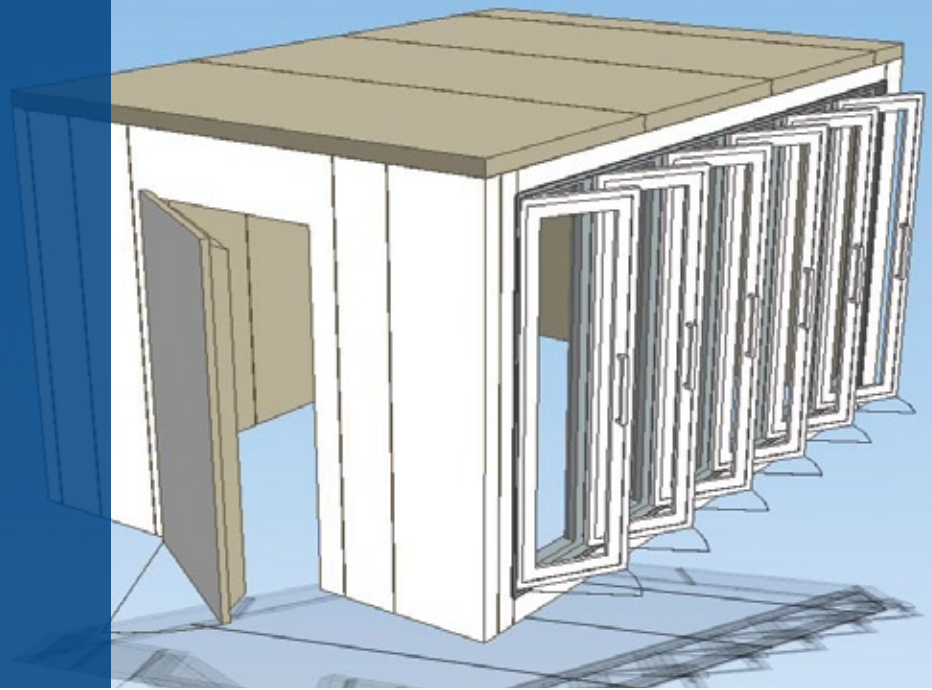


Kysor Panel Systems

Customer Success Story

Autodesk® Inventor™
Autodesk® Design Review



“Our workflow is connected electronically from the time a customer contacts us for a quote to when we ship the product.”

Tom Williamson,
Business Application Development Manager,
Kysor Panel Systems

Freezing Out the Competition

With Autodesk® Inventor™ and Autodesk® Design Review software products, Kysor Panel Systems automates and connects workflow—and stays ahead of the competition

Project Summary

Founded in 1947, Kysor Panel Systems (Kysor) is now the leading North American supplier of coolers and freezers to the supermarket and convenience store industries, major food service projects, and environmental chambers. Kysor’s growth has been fueled by its ability to meet the design and timing needs of customers. In the past, this has required employees to put in long hours throughout the design workflow process, from developing quotes and designs through to manufacturing. Not anymore. Using Autodesk® Inventor™ software with integrated Autodesk® Design Review technology, Kysor has automated and accelerated its design creation and design review workflow, dramatically reducing paper use throughout. With an integrated workflow that uses Inventor and Design Review, Kysor is:

- Generating approval drawings in minutes instead of hours
- Automating as much as 80% of its design process
- Completing designs and reviews more than 25% faster
- Sharing designs and collaborating with customers efficiently
- Streamlining manufacturing by enabling shop floor staff to view, mark up, and measure designs

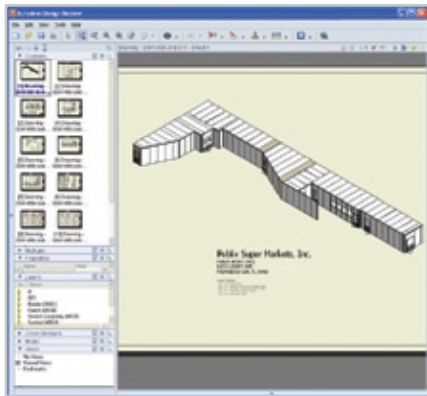
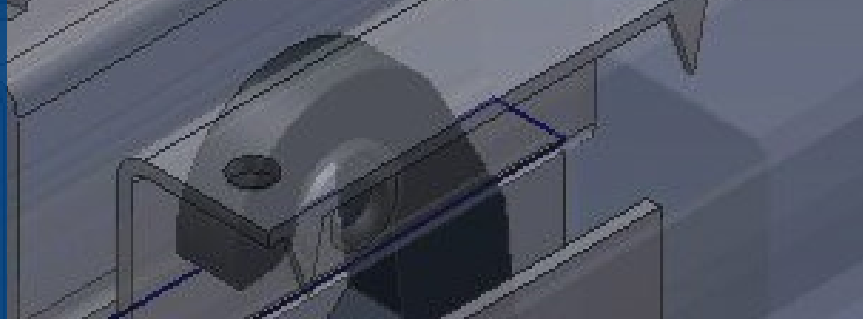
The Challenge

Gaining Competitive Advantage

Orders for individual commercial coolers and freezers are surprisingly different. Kysor’s customers need equipment that fits perfectly into their floor plans and that suits the requirements of the items inside. In addition, the company’s retail customers want to present items in the freezers and coolers in an enticing way and make them easily accessible to consumers. Until recently, Kysor met its customers’ needs by drawing new designs for every order, including common features, which was a time-consuming process. Moreover, adding at least three days to the process, the company often used paper and overnight mail to conduct design reviews and secure approvals from customers.

“At Kysor, we bend over backwards to make sure our customers get exactly what they want,” explains Tom Williamson, business application development manager for Kysor. “To further that tradition, we felt it was time to speed up our design to manufacture workflows by automating as much of our quoting, design, and design review and approval processes as possible.”

“Our solution was to initiate a project we call STEP1,” adds Paul Huff, a senior programmer



"With the implementation 70% complete, we've already decreased our project completion times by 25%."

Paul Huff,
Senior Programmer,
Kysor Panel Systems

with Kysor. "It is an all-digital process enabled by DWF and built around Autodesk Inventor and Autodesk Design Review. It is intended to make our internal and customer-facing processes faster. Our ultimate goal is to automate 80% of our design process and complete orders 33% faster."

The Solution

Kysor began implementing the technology that powers STEP1 in 2006. STEP1 uses Autodesk Inventor as its design engine, the DWF™ file specification to connect people and process, and Autodesk Design Review to deliver design review capabilities to internal non-CAD users and Kysor's customers. The process begins when customers submit a design or specifications for a quote. Kysor's staff enters the job's basic parameters into a custom interface, and the system uses Inventor to automatically generate a basic design and a DWF file of the design for quoting purposes. Kysor then emails the DWF and quote to the customer. Using the Design Review feature, the customer can view, mark up, and measure the design. Once approved, the designer can automatically round-trip comments back into Inventor.

After customers place their orders, Kysor's designers use Autodesk Inventor to complete the designs, which they send to customers as a DWF file for approval. Customers can again use Design Review to view, review, measure, and approve or request modifications to the designs—digitally. Once designs are approved, they are sent to Kysor's shop floor facilities, where employees use Autodesk Design Review to view and measure elements of designs as they fulfill orders. Kysor has dramatically reduced dependence on paper throughout the entire process.

"Our workflow is connected electronically from the time a customer contacts us for a quote to when we ship the product," says Williamson. "Autodesk Inventor and the Autodesk DWF Toolkit included an API (application programming interface) that made automating our design process and connecting our workflow possible. Autodesk Design Review completes the solution by enabling customers and our internal team to review designs."

Kysor's customers have embraced STEP1. Paul Sullivan the owner of Allied Representatives, an independent representative for Kysor and other commercial cooling equipment manufacturers, reports that, "STEP1 and Autodesk Design Review are a breath of fresh air. My customers can view,

comment on, print, and approve designs quickly and easily. They save at least two hours every design review cycle, and several days over the life of a project."

Greater Efficiencies on the Horizon

With the Autodesk technology behind STEP1 in place, Kysor plans to continue enhancing the solution. The design review process is one area where the company sees additional opportunities. Customers have readily embraced the viewing capabilities of Autodesk Design Review, but many have not used it to mark up and measure 3D Inventor designs. To encourage customers to use the application for design reviews, Kysor is building a collaboration website that incorporates Design Review.

"To reach our productivity goals, we need to keep improving our processes," explains Crispin Fjerestad, a project lead design technician at Kysor. "Autodesk Design Review is going to help us do that. It's free* and easy for customers to download. Customer markups can be integrated into Inventor designs very quickly. As more of our customers come on board, we're going to save even more time."

The Result

Meeting Milestones Ahead of Schedule

Although the STEP1 implementation is not finished, the project is on track to exceed Kysor's original productivity improvement goals. "With the implementation 70% complete, we've already decreased our project completion times by 25%," says Huff. "For example, getting out an approval drawing with our quotes used to take hours and now most are completed in minutes. Originally, we projected a 33% improvement in completion times, but now a 40% improvement for many processes looks very achievable."

"Our processes are faster, but they are also better," adds Noel Melendez, a design programmer and analyst with Kysor. "Customers automatically get a design they can view, comment on, and send back using Autodesk Design Review. It's a great fit with our history of putting customers first."

Learn More

Accelerate your workflows with Autodesk Inventor and Autodesk Design Review. Find out more at www.autodesk.com/inventor and www.autodesk.com/designreview.

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