Digital Visualization and Online Product Configuration Promote Sustainable Growth

Con-form Group relies on Autodesk solutions for 3D modeling and engineering automation to support high growth rates for its innovative, modular surface mounted platform systems. 

I really see our 3D models as the engine room for our entire workflow, from online sales to our field operations to our new online configurator.

— Matt Quigley
Marketing and Design Manager
Con-form Group

Developing a fresh approach to a familiar engineering issue

The Con-form Group serves the Australian commercial industrial market with lightweight surface mounted platform systems designed to support, protect and conceal large condensers, packaged air-conditioning units and other rooftop systems.

The company sells its proprietary platform systems primarily through the architects and engineers involved in the design and construction of shopping malls and other large-scale commercial buildings that must incorporate a variety of mechanical plant equipment into rooftop designs.

The challenge: meeting customer needs more quickly

Driven by a rapidly expanding mining industry in Western Australia, suburban development is on the rise across the country. Shopping malls, office parks, universities, and other large buildings are springing up in record numbers. This is good news for the Con-form Group, which markets a truly one-of-a-kind product that is disrupting this industry—in a good way.

“Typically, the support structures for the HVAC equipment are done at the very end of the building project,” says Matt Quigley, Marketing and Design Manager for the Con-form Group. “It’s not uncommon for the builder to quickly design them without appreciating the impact on the structure. They often use heavy steel in one-off designs. These take many months to install, and they can change how many load bearing pillars you might need, for example, within a shopping mall. It can add a great deal of time and cost to the project.”

To address this challenge, the Con-form Group developed a proprietary surface mounted platform system that uses lightweight aluminum and an incremental modular approach that makes the systems faster and easier to specify and install. Today, the group is the only provider of these innovative platform systems in Australia.

“We can install a 200 square meter system that holds 50 tons in two days,” Quigley says. “And our products don’t penetrate the roof, so they significantly reduce the risk of leaks and unintentional structural damage. That’s why engineers and architects have been choosing our systems.”
The popularity of its products, however, created a different issue for the Con-form Group. Its “old school” design technology could no longer accommodate customer demands or support the company’s rapid growth.

**The solution: Autodesk tools improve bid response time and overall product accuracy**

“Our previous models for our systems were not fully defined or parametrically driven,” Quigley says. “As a result, we couldn’t use them to produce the bill of materials. We were stuck using Microsoft Excel spreadsheets for that, which used very complex formulas and macros. If anything went wrong with them it was very difficult to fix.”

The software the Con-form Group chose to update its approach was Autodesk Inventor. For the past few months, the company has been redoing all of its models in Inventor. The process has been relatively easy, and Quigley sees this step as vital to the overall growth of the business.

“I see these 3D models as the engine room for our whole business,” Quigley says. “They are completely accurate down to the last screw, so we can use them to derive precise BOMs from them. We can use them to drive our online configurator and ecommerce solutions too.”

**Configurator 360™** is a cloud service for Inventor software that enables the Con-form Group’s customers and sales team to access 3D product configurations in a custom-branded web environment called the “Build + Quote App.”

“What we’re focusing on now is customization,” Quigley says. “Our products are already modular, but we need to give our customers a measure of customization, and do it fairly easily, without putting all of the work on our engineers. That’s why we chose to move forward with Configurator 360—to free up our engineers’ time and win more business.”

**The result: Con-form Group sales teams close more deals**

The combination of Inventor and Configurator 360 is making a definite impact on the Con-form Group’s business, especially the speed at which the sales team can respond to customer requests.

“If we’re developing a new system for a customer, our sales reps can sit down, quickly mock up an assembly, and visualize the whole system instantaneously,” Quigley says. “It used to take several days and involve making physical models. Now, the client is able to graphically show us what they want and can sign off on it in the same meeting. It’s impressive and helps us close deals faster, which is a big advantage.”

“Our online product configurator helps save engineering time, specifically by reducing the amount of design iterations going back and forth between the customer, sales and engineering teams. Our sales team has now more autonomy to provide accurate quotes,” says Rick Cro, Operations Manager at Con-form Group.

In addition, the models that sales reps produce on the spot are fully parametric, so the sales team can’t recommend a product that is not manufacturable.

All of the 3D models that are available through the Configurator are stored in the cloud, so the Con-form Group doesn’t have to worry about software updates or database backups.

“The fact that the Configurator is in the cloud is important for the future of our business,” Quigley says. “Our ERP system will also be cloud based. Eventually we are going to work toward full integration, using our models to create the BOMs and push them into ERP and down the chain.”

**BIM Content on Demand**

Creating 3D models in Inventor also eliminates the expense of outsourcing the creation of Building Information Modeling (BIM) models for the architects and engineers who are ultimately responsible for the purchase decision. Now, BIM models in native Revit format can be pulled directly from Configurator 360.

“We’ve already gotten a lot of requests for quotes through the Configurator 360 solution,” Quigley says. “More than 100 in the past few months. And two of those turned into very large projects. The customers really like the whole experience. It’s clear that online 3D capabilities are going to be the driving force of our business.”

For more information

To learn more about how Autodesk applications are helping companies save time and money, visit [autodesk.com/inventor](http://autodesk.com/inventor).