

Straight Talk from CAD Designers



Why Being a [Pro] ENGINEER Rocks

Hear what designers are saying about Pro/ENGINEER®



DID YOU KNOW

"Pro/ENGINEER is so capable and flexible these days. It does much more than cut design time – it enables us to design quickly, interface with suppliers and customers, and share design intent efficiently."

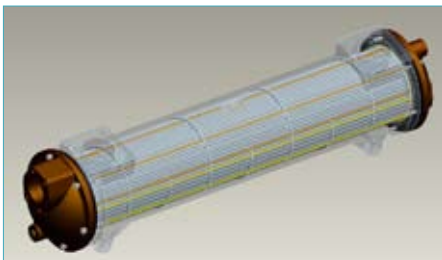
So reports Commercial Engineer, Ivan Robinson, of Thermex Ltd., one of the UK's leading global heat exchanger manufacturers. It has been a long time since Mr. Robinson even used a 2D solution, so quantifying how much time the 3D capabilities of Pro/ENGINEER saves his team is less of a concern than it used to be.

"I'm of the view that there are other things that have a greater impact on the day-to-day working life of engineers," he explains. "And Pro/ENGINEER offers them all."



Ivan Robinson, Commercial Engineer, Thermex Ltd., is a fan of Pro/ENGINEER.

Five Ways Pro/ENGINEER Makes My Job Easier



Rapid reuse of existing data from other products dramatically reduces the time to manufacture and deliver complex bespoke parts.

■ 1. Reusing existing data quickly to generate new parts

"I was able to generate a new design cooler for an enquiry in only 15 minutes yesterday. This included: building our tubestack assembly with over 400 tubes, 15 baffles and associated tubeplates and spacers; inserting it into a body, fitting two bespoke headers that are derivatives of existing castings; and specifying high-temperature viton seals. This would have taken about three hours in AutoCAD®."

■ 2. Interfacing accurately with customers' models—pronto

"Once I'd generated the above model, I sent my customer a STEP file, which he pulled into his assembly to check out the interface conditions. He then let me know there was a potential clash condition. So I reworked the cooler by changing the stack and body for other units out of our standard range and sent a new STEP file back to the customer—all inside 30 minutes."

■ 3. Easily importing customer data to allow building into a space envelope

"I am currently working on a cooling system for agricultural machinery with a customer. Every Monday, he uploads the latest iteration of his chassis/engine pod design to his FTP site, which I can then download and continue working my coolers into. I then upload the cooler model, which he pulls into his master model. I'm working in Pro/ENGINEER, he's using Solid Edge®—and we go back and forth without a hitch."



Quick and simple output of 3D data in many formats makes it easier for customers to incorporate Thermex products into their own designs.

■ 4. Generating rapid prototypes, with output in various file formats

"There is absolutely nothing cooler for an engineer than slaving away on a design for a couple of weeks, e-mailing some computer file to a bloke who's got some sort of fancy printer that sticks dust together, and then ending up with a tangible, touchy-feely version of what you've been working on. And the prototype is ready all within a week or so. Best of all, it's getting cheaper, which makes it easier to justify to the 'bean counters.'"

■ 5. Interfacing with CNC machine tools to remove programming time

"We frequently generate IGES files, which can be dumped straight into water jet cutting machines to allow accurate cutting of complex 3D formed edges. This alone has saved us—and the machine shop—six hours per first-off part."

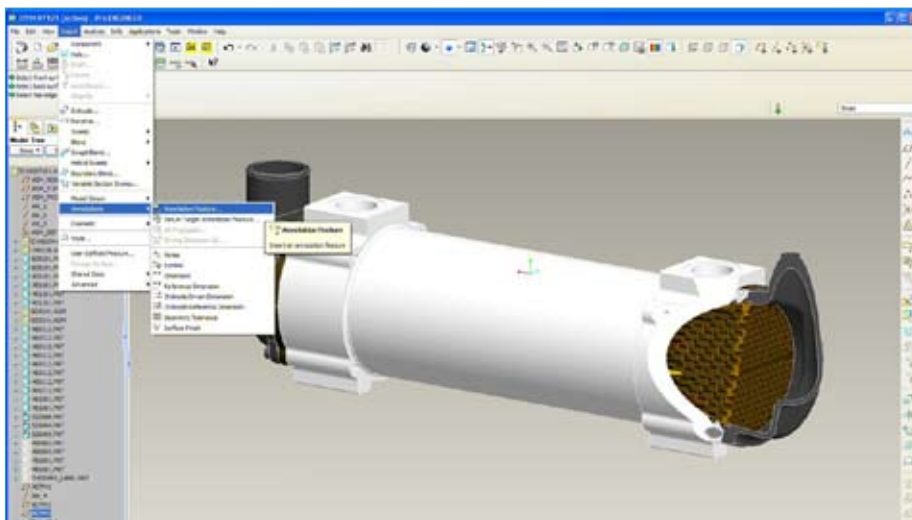
Pro/ENGINEER: Driving Design Forward

Reflecting on how Pro/ENGINEER has evolved over the years, Mr. Robinson likens the latest iteration to a sleek sports car loaded with extras. It used to be that cars were merely a way to get from point A to point B. Today, they include all the amenities—MP3 players, heated seats, airbags and so on.

"Pro/ENGINEER keeps getting better and better, too. What can I say except 'bring on the Pro/ENGINEER Wildfire® 5.0 version of the R8!'"



Being able to go from Pro/ENGINEER model to reality in three days, and being able to integrate easily with the CAD systems of its customers, means that the team at Thermex knows the model will fit and work.



"Best of all, learning to use Pro/ENGINEER is easy, especially with its dashboard approach. The hardest part, really, was training myself to stop thinking in 'paperspace' and start thinking in 3D."

– Ivan Robinson, Thermex