Autodesk® Inventor® Autodesk® Vault Workgroup

Many companies can produce one-of-a-kind designs, and many can manufacture products cost-effectively. With the help of Digital Prototyping, we can do both—produce one-of-a-kinds cost-effectively.

-Steve Riddell Company Executive Aspex Pty. Ltd.

Locking in automation.

Aspex Pty. Ltd. designs its unique machines in one-third the time with Digital Prototyping.



Image courtesy of Aspex Pty. Ltd.

Project summary

New Zealand's Aspex Pty. Ltd. specializes in the design and manufacture of high-quality, cost-effective industrial automation equipment and machinery. The company can provide cutting edge, custom solutions for companies of all sizes, from large pharmaceuticals to small businesses. Yet in today's competitive marketplace, it must accelerate time to market while controlling costs. To make its product development process more efficient, the company implemented Autodesk® Inventor® and Autodesk® Vault Workgroup software. Using Digital Prototyping, Aspex has been able to:

- Reduce design time by a factor of three
- Keep customer information confidential and secure
- · Easily share models with clients

The Challenge

Aspex engineers often create a design in the morning and show a model to a client by the afternoon, says company executive Steve Riddell. At this speed, securely controlling the flow of design data—and ensuring everyone is working with current data—is critical to attaining greater overall efficiency.

The Solution

The company accelerated its product development cycles using Inventor software to take advantage of a Digital Prototyping workflow, enabling engineers to create an accurate digital prototype of a new machine. Working with a 3D model, they are able to visualize how parts fit with other components as they design. This makes it easier for them to test for interferences early in the design process.

Aspex uses Autodesk Vault Workgroup to manage seamless integration of its CAD and CAM systems, making it easier for production to collaborate with the design team. So if someone on the shop floor spots an opportunity to enhance a design, a marked up or redlined drawing can be created and circulated electronically within the design department. "Linking Inventor to our CAM software removes many of the costs normally associated with design changes. Vault Workgroup provides an efficient way to allow production access to files with its state-based security, eliminating costly errors attributed to uncontrolled models," says Riddell. "Plus there's no doubt that it's helped improve communication with our customers. We encourage them to use the software, so that we can collaborate and share the 3D experience. With the interactive approach, there's a reduced risk of designing machines that don't meet our customers' needs."

The Result

According to Riddell, Aspex' investment in Autodesk technology has been key to continued growth in a niche marketplace. "Many companies can produce one-of-a-kind designs, and many can manufacture products cost-effectively. With the help of Digital Prototyping, we can do both—produce one-of-a-kinds cost-effectively," he says.

As an example, Riddell points to a large client who needed a custom sealing machine that puts tops on soft drink bottles. "We designed a new technology, one that had never been used before," he says. "The machine involved 14 interacting parts moving at very close tolerances. Having a clear 3D view was a significant advantage in exploring different options with customers, saving time and money."

For another client, Aspex designed a simple adapter used in conjunction with a hydraulic cylinder to remove the propeller from a fishing vessel, which saved the customer many hours and thousands of dollars in dry dock fees. "With Digital Prototyping, we were able to realize our vision three times quicker, which impacts our bottom line," concludes Riddell.

To find out how the Autodesk solution for Digital Prototyping can help you complete projects faster and at a lower cost, visit **www.autodesk.com/digital-prototyping.**

Autodesk[®]

Autodesk, Autodesk Inventor, and Inventor are registered trademarks or trademarks of Autodesk, Inc., and/or its subsidiaries and/or affiliates in the USA and/ or other countries. All other brand names, product names, or trademarks belong to their respective holders. Autodesk reserves the right to alter product offerings and specifications at any time without notice, and is not responsible for typographical or graphical errors that may appear in this document. © 2010 Autodesk. Inc. All rights reserved.