

Wheelabrator Group

Customer Success Story

Autodesk® Inventor® Professional
AutoCAD® Electrical
AutoCAD® Mechanical
Autodesk® Vault Manufacturing

We recently finished a fairly large job for an aerospace manufacturer designed entirely with Inventor software, and time was of the essence. It was fan and compressor disks for aircraft engines, and we were able to incorporate revisions quickly without any interferences. Even odd shapes resulted in quality fits, and the machine was ready for market in three months instead of four.

—Jim Oake
IT Manager
Wheelabrator Group

Finishing on top.

Wheelabrator Group realizes a strong ROI using the Autodesk® solution for Digital Prototyping.



Image courtesy of Wheelabrator Group

Project Summary

Wheelabrator Group has a simple value proposition: focus on customers' profitability, and they will continue to return to Wheelabrator Group for their surface preparation needs. As customers explore new designs, they repeatedly look to the 100-year-old company to increase quality and drive down costs.

Wheelabrator Group excels at this type of collaboration. Its technology center in Ontario, Canada, uses Autodesk® Inventor® Professional, AutoCAD® Mechanical, AutoCAD® Electrical, and Autodesk® Vault Manufacturing software to deliver innovative new products to its customers. At its parts center in Georgia, the Autodesk solution helps manage a library of more than 150,000 designs. The benefits are many:

- Digital Prototyping and design reuse shortens development time by 20 percent.
- Extensive libraries of 2D data are easily integrated into 3D designs.
- Customers receive real-time support on replacement parts.
- Repetitive tasks are automated, supporting overall innovation.

Challenge

"We recently finished a fairly large job for an aerospace manufacturer designed entirely with Inventor software, and time was of the essence," reports Jim Oake, IT manager. "It was fan and compressor disks for aircraft engines, and we were able to incorporate revisions quickly without any interferences. Even odd shapes resulted in quality fits, and the machine was ready for market in three months instead of four."

Solution

Besides medical projects, Autodesk software helps Wheelabrator Group remain an airblast and peening equipment leader in the automotive, aerospace, shipbuilding, marine, construction, and general

manufacturing industries. "Our customers are requiring 3D models, and the Autodesk solution for Digital Prototyping is helping us sustain our edge in the marketplace," Oake says. "Inventor's stress analysis tool, for example, is used for high-energy shot blasting—in order to improve overall fatigue resistance—and its design visualization results in everything fitting properly."

The panel design feature in AutoCAD Electrical is used to automatically generate a bill of materials, enabling Wheelabrator Group to copy multiple drawings of a project to a new one and provide easy insertion of parts and components using standard libraries.

Two years ago, when customer service technicians in Georgia received calls for replacement parts, they would request copies of the drawings to be emailed or faxed to them and then call the customers back. Now with Autodesk Vault Manufacturing, they can pull up drawings on a PC, check for changes, and answer questions quickly and accurately. "This is important because our parts replacement business helps reduce our customers' operating costs for an existing product line by extending its lifecycle," Oake says. "Our customers depend on us to be responsive."

Result

The marketplace has been extremely receptive to the use of innovative products by Wheelabrator Group and Oake says the company is seeing a strong return on its Autodesk Digital Prototyping software investment. "By improving reuse of design data and collaboration among design team members on the fan and compressor disk, we saved 20 percent in overall design and manufacturing time—all the way to the finish line," he concludes.

To find out how the Autodesk solution for Digital Prototyping can help you increase innovation, visit www.autodesk.com/inventor.

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