

Autoliv, Inc.

Customer Success Story

Autodesk® Inventor®

With Autodesk Inventor software we can work in a 3D environment and receive all the benefits that a model-based design provides. Plus we can see immediately whether a design will work or not.

—Fredrik Lindorsson
Production Technical
Group Leader
Autoliv, Inc.

No room for error.

Autoliv solves tomorrow's safety challenges with Autodesk® Inventor® software.



Image courtesy of Autoliv, Inc.

Project Summary

When you put yourself behind the steering wheel of a car, you are probably seated in a safety zone that was invented and manufactured by Autoliv. This is not surprising: the Swedish company is a top supplier of seat belts and air bags for automotive companies worldwide with \$6.5 billion in sales.

Being a market leader has been a long tradition for Autoliv. Founded in 1956 with a basic philosophy to always “see around the corner,” it developed the first three-point seatbelt and the world’s first course to simulate car crashes. The company has since maintained a dominant market share by meeting carmakers’ demands for lower costs, and by adhering to rigorous standards for accuracy. Key to this strategy is the implementation of Autodesk® Inventor® software for Digital Prototyping, which enables it to:

- Reduce errors and project turnaround times
- Communicate easily with partners and suppliers
- Cut the cost of design-to-market cycles

The Challenge

A zero error goal covers more than just Autoliv’s finished products. The company’s engineers seek to eliminate errors as early as possible in the design process, and preferably predict and prevent them before they occur. Compatibility with other software packages is also very important, because the nature of designing automotive safety systems requires many iterations and continual discussions with partners and suppliers.

The Solution

With Inventor software, Autoliv can create a single digital model that gives its engineers the ability to design, visualize, and simulate manufacturing equipment and tooling. This helps the company

develop flexible manufacturing processes and bring its products to the marketplace faster.

“With Autodesk Inventor software we can work in a 3D environment and receive all the benefits that a model-based design provides,” says Fredrik Lindorsson, production technical group leader at Autoliv. “Plus we can see immediately whether a design will work or not.”

The engineers at Autoliv use Inventor software to manage, share, and reuse the design components of the digital prototype—including data from AutoCAD® and other CAD systems—as a basis for developing equipment and tooling. The integrated data management tools of the software help boost productivity and support a more efficient design workflow. For example, the engineers can easily generate 2D files, as needed, to promote early collaboration with their machine manufacturers, as well as create descriptions and instructive over-views for those who will assemble or improve the machines in the shop.

The Result

“Inventor software provides a new and better world for us. Everything goes more smoothly. We can now easily validate the form, fit, and function of the designs, minimize the need for physical prototypes, and detect costly errors that are typically discovered after the designs are sent to manufacturing,” says Lindorsson.

In short, Autoliv’s strategy is paying off. The design-to-market process of its new generation of products is simpler, more efficient, and faster.

For more information on completing projects faster with Autodesk Inventor, visit www.autodesk.com/inventor.

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. © 2009 Autodesk, Inc. All rights reserved.