

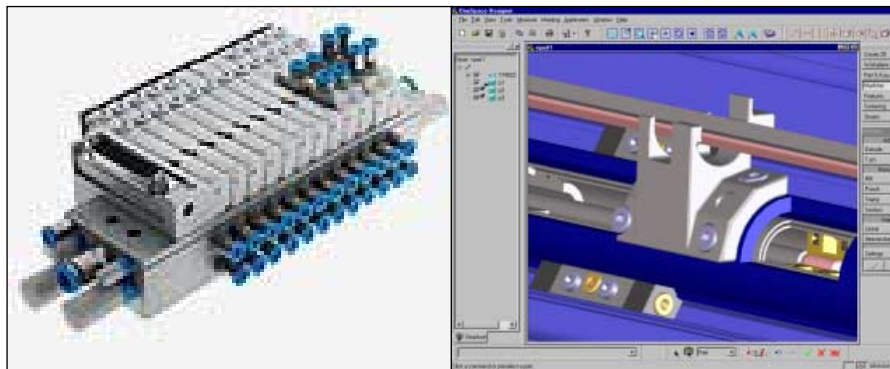


250 designers from 2D to 3D at FESTO AG.

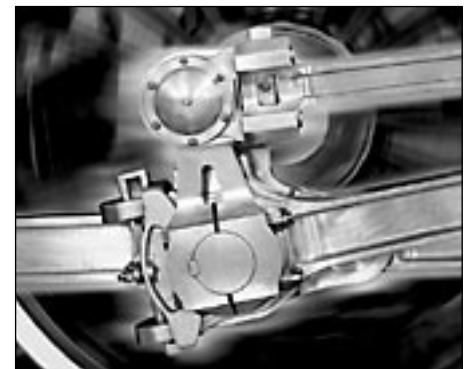
The Situation

“Within 3 years we have reduced product development time by 20% using the OneSpace Designer products”

Juergen Schiefer, Project Manager (FESTO AG, Germany)



Company Profile



The Challenges

- Improve productivity by automating processes and re-using design data throughout the development cycle.
- Maintain high levels of teamwork and innovation.
- Migrate to 3D CAD without disrupting productivity.
- Manage more than 200,000 2D drawings and all new design information.
- Realize 100% adoption of 3D technology by engineering staff.

The Solution

OneSpace Designer Modeling and data management software from CoCreate

The Results

- Reduced development time by up to 20%.
- Reduced time lost with engineering change orders by up to 80%.
- Increased input from analysis, manufacturing, and customers, resulting in more innovative and manufacturable products.
- Increased efficiency because engineers easily find and re-use existing files.
- Reduced errors because all engineers work off the latest data.
- Quick adoption of new software - most engineers trained in one week.

New ideas for cost-effectiveness have a name: Festo. Innovations from Festo set the standards in industrial automation, including function integration, improved performance, miniaturization, as well as pneumatic and electronic connectors.

Festo has revenues of 1200 Million Euro and employs more than 10,000 people worldwide. A total of 52 independent Festo companies can be found in over 250 branch offices.



A few years ago Festo decided to migrate from a technology-driven company to a market-driven company. They wanted to deliver innovative products to the market faster than before. On the shop floor, that meant more projects had to be completed in less time.

A key to their new strategy would be to move from their 2D design processes to a more contemporary system. They knew that with 3D CAD solution they could visualize product information early in the design process. Plus, the master data they created could be used throughout the development cycle - in analysis, manufacturing, and quality assurance. This would speed up development significantly. "Many things took too much time back then," remembers Juergen Schiefer, Project Manager. "For example, an engineering change order took up to 3 weeks because of all the manual steps involved."

Yet they weren't willing to abandon their 2D data. More than 200,000 drawings had been generated already, and had to be accessible for the entire product's lifecycle. The new solution could not compromise access to those drawings.

They also were not willing to spend a lot of time learning how to use a new system.

"We wanted a solution with which all of our 250 engineers can work, without being out of the office for a 3-week training," says Schiefer.

In addition, Festo expected the new solution to allow them to easily incorporate feedback and ideas into a design. "The more inputs we can build in the design, the more quality and innovation can we deliver," says Schiefer. This seems trivial for a 2D CAD system. But as the company researched solutions, they learned that many 3D systems require engineers to keep track of modeling "constraints" and "history" - features that make changes quite a challenge.

So, five years ago, Festo chose CoCreate's OneSpace Designer as their 3D solution. They also adopted data management

solutions from CoCreate. Now, all design departments at Festo work with OneSpace Modeling.

The results have been impressive: "OneSpace Designer, with all its modules, helped us to reduce the overall product development time up to 20%," says Schiefer. That's because, in part, OneSpace products let them do real concurrent engineering: While the creative designer derives the 3D representation of the new design, annotation experts start to prepare "minimum documentation" for manufacturing.

And, as required, Festo was able to maintain their extensive body of 2D drawings, as well as their new 3D models. "By using data management solutions from CoCreate our designers are able to re-use existing parts, which saves a lot of time and money," says Schiefer. "All engineers work off the latest data resulting in much fewer design mistakes. We also save time by using one and the same model within several assemblies."

How long did it take for the engineers to learn the new software? "One week of training was enough to teach basic productivity," says Schiefer. Because OneSpace Designer Modeling uses dynamic modeling rather than history-based modeling, "designers don't have to turn into CAD-technology experts understanding the behavior of history trees and feature constraints. They can do what they like most: focus on their designs—even if they are new on the project and don't know anything about previous modeling steps."

That's especially helpful when designs need to be changed late in the development process. With dynamic modeling, any designer (with permission) can make modifications without knowledge about history or constraints. Plus, model changes can be automatically updated in any 2D representations and used for downstream 2D processes. That means engineering change orders can be slashed by "up to 80%, down to 1 or 2 days," says Schiefer. A striking result at a company that once lost up to three weeks with ECOs.

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