SIEMENS

Automotive and transportation

Dali & Samir Engineering

NX cuts tool design time in half

Product

NX

Business challenges

Parts with more complex shapes

More competitors and eroding profit margins

Increasingly shorter delivery times

Keys to success

Parametric modeling

3D visualization

Easy modifications to existing designs

Support and training from Gnosis Infotech

Results

Design time for new tool dropped by 50 percent (4 days to 2)

Productivity increase of 25 percent

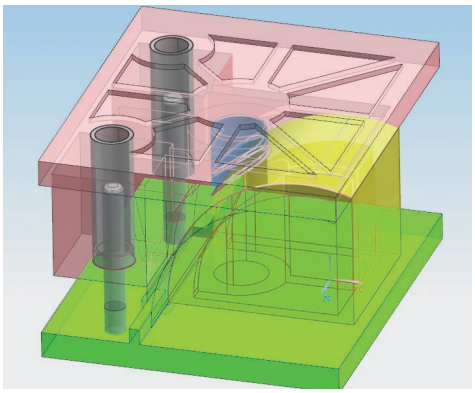
Cost savings of 25 percent in tool modification

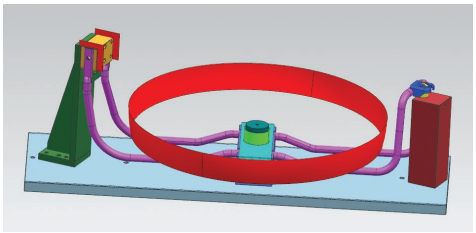
40 percent reduction in rework time

Automotive supplier realizes significant productivity gains, a 25 percent cost savings in product development and a 40 percent reduction in rework time

Growth through quality

Since 1972, Dali & Samir Engineering Pvt. Ltd. (D&S) has been manufacturing sheet metal components and exhaust systems for a wide range of vehicles, from scooters and motorcycles to cars, trucks and SUVs. In addition to exhaust systems, the company's product line includes fuel tanks, hydraulic tanks, vacuum tanks, radiator frames and other assemblies. Its customers include Tata Motors, (India's largest automobile company and the world's fourth-largest manufacturer of commercial vehicles), Kirloskar Oil Engines, Bajaj Auto Ltd., and Same Deutz Fahr.





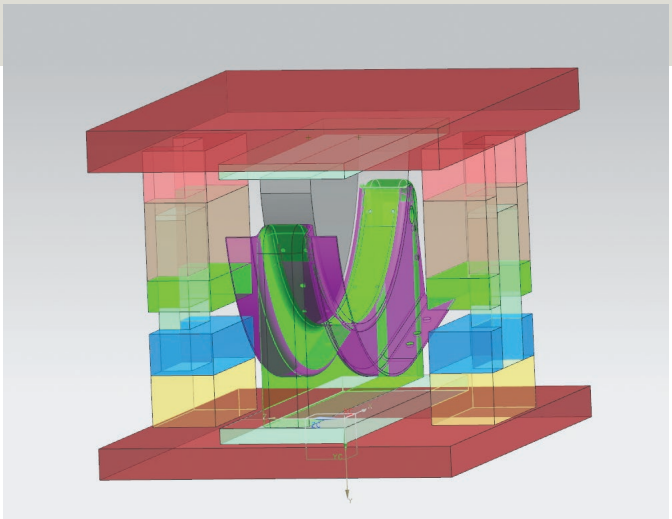
The company's motto, "Growth through Quality," reflects the traits that have helped it prosper over the years. During that time, however, the nature of D&S's products changed in a way that challenged the company's processes for tool and die design. The shapes of the mufflers and tanks grew more complex, and customers' requirements regarding accuracy increased. "As the shapes started becoming more complex, we needed a better way to handle these kinds of geometries," says Shivaji Powar, manager of design at D&S. The company faced another challenge familiar to all automotive suppliers: the original equipment manufacturers' (OEMs') requirements for shorter and shorter delivery times.

3D for complex shapes

D&S's original 2D computer-aided design (CAD) system made it difficult to visualize a design. This sometimes led to human error, which caused problems during production. It was also difficult and time-consuming to modify designs to incorporate customers' changes. "This was a problem, because our product

"NX is user friendly and easy to understand."

Shashikant Pawar
Deputy General Manager
Dali & Samir Engineering



development process typically involves a lot of back and forth with the customer," says Powar. "We needed to be able to swiftly make any modifications demanded by the customer."

During the search for a more advanced CAD system, D&S evaluated NX™ software, the high-performance product development solution from Siemens PLM software, as well as Pro/ENGINEER® software from Parametric Technology Corporation and CATIA® software from Dassault Systèmes Corporation.

The company chose NX as evaluation showed it to be "user friendly and easy to understand," says Shashikant Pawar, deputy general manager at D&S. "NX had the functionality we needed for tool design, including parametric modeling, and the ability to modify existing designs in a minimum amount of time using synchronous technology." Other features of NX that led to its selection included its ability to easily create 2D drafting and detail drawings from NX solid geometry, as well as excellent visualization functionality. Pawar adds, "Training and support from the Siemens PLM Software channel partner, Gnosis Infotech Pvt. Ltd., accelerated our productive use of NX, an important factor in our move from 2D to 3D."

"NX has enabled us to shrink the time needed to design a new tool – from 4 days in the past to 2 days today. We've also seen our product development costs drop by 25 percent."

Shivaji Powar
Manager of Design
Dali & Samir Engineering

Solutions/Services

NX
www.siemens.com/nx

Customer's primary business

Dali & Samir Engineering Pvt. Ltd. manufactures sheet metal components and exhaust systems for the automotive industry.
www.dalisamir.com

Customer location

Pune, Maharashtra
India

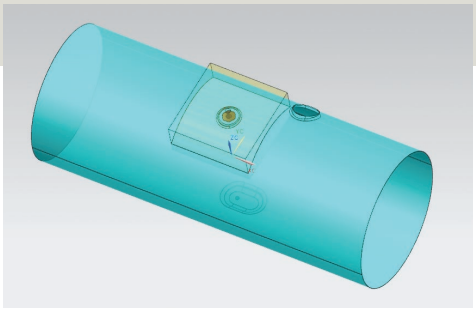
Partner

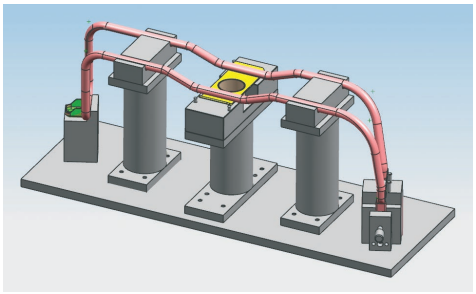
Gnosis Infotech Pvt. Ltd.

An OEM's first choice

Since installing NX, D&S has seen productivity increase by 25 percent. Significant savings have been noted during modifications of existing designs, and also in reworking a tool. Rework time has dropped by 40 percent since NX was implemented.

Pawar notes, "NX has enabled us to shrink the time needed to design a new tool – from 4 days in the past to 2 days today. We've also seen our product development costs drop by 25 percent. The improvements made possible using NX position us to achieve our goal of becoming an OEM's first choice when it comes to exhaust systems and other sheet metal components. Looking at the emerging market scenario, we want to enhance our core competency in the fabrication of sophisticated engineering products, especially in the automotive area. NX is playing an important role in our ability to accomplish this."





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