



Image courtesy: pimet

Realising enhanced production efficiency

An application story on how fast-moving consumer goods firm uses NX software products to reduce product development time by more than 50% and, thereby, optimise the manufacturing process

Jyothy Laboratories Limited (Jyothy) is a fast-moving consumer goods company founded in 1983 and located in Mumbai, India. The company has 21 manufacturing units in 14 locations across the country, including six business divisions: fabric care, household insecticides, utensil cleaners, fragrances, personal care and fabric care service. It is a fast-moving consumer goods company founded in 1983 with 21 manufacturing units at 14 locations across India. It has six business divisions, including fabric care, household insecticides, utensil cleaners, fragrances, personal care and fabric care service.

Some of the company's brands include Ujala, Maxo, Exo,

Jeeva and Maya. Ujala is a liquid fabric whitener and is the biggest brand in the company portfolio. Fabric care contributed 44% to company revenues in 2014. The company is the largest player in the fabric whitener space in India, with a market share of 72%.

To retain its competitive edge as a leading, fast-moving consumer goods company in India, Jyothy wanted to improve time-to-market for its new products. To meet this goal and achieve enhanced production efficiency, the company chose a trio of NX™ software products from product life-cycle management (PLM) specialist Siemens PLM Software: NX CAD for computer-aided design (CAD), NX Mold Design for

automated mould design and NX CAM for computer-aided manufacturing (CAM).

Cutting development time

Prior to deploying NX, Jyothy performed product design with 2D CAD software that featured a manual approach and inevitably led to a significant amount of testing by trial and error. These software products were just not able to adequately address all areas of product design and development. As a result, it took Jyothy six to seven months to develop a new product design.

The company found it was much easier to design with NX CAD. By combining the advantages of NX CAD with NX Mold Design and integrating them with NX CAM for the production process, they were able to reduce new product development time by more than 50% with these Siemens PLM Software solutions. "NX enabled us to substantially improve our productivity, which helped us add new products to our portfolio," said G Viswanathan, Assistant Manager—CAD/CAM, Jyothy.

Reducing errors

In addition to seeking to reduce time-to-market, the company also wanted to cut development time and costs as well as decrease design and manufacturing errors & defects. This had been an issue in the past because they had inadequate methods for tooling and production, so they often needed to do a lot of rework in tool design. "There's no question that the integrated solutions of NX CAD, NX Mold Design and NX CAM helped us realise faster time-to-market, gain a larger market share and produce better-quality products," said Viswanathan.

Jyothy conducted product design in NX CAD, used NX Mold Design to perform mould analysis and mold design, and

generated tool paths using NX CAM. By integrating 3D modeling with CAM, the company found that they could more quickly introduce new, robust products with fewer design and manufacturing errors, and leverage a faster and shorter development cycle that required far less tooling rework.

NX can be used for CAD, mould design and CAM. It leverages excellent training and support of Siemens PLM Software partner DesignTech. It is a key component for optimising manufacturing process. This helps to reduce product development time by more than 50%, achieve a 50% cost savings in design, improves productivity by 35%, improves quality and reduced errors by 75%, realises faster time-to-market, larger market share and produces higher-quality products.

DesignTech has also helped Jyothy get the most out of their NX products by providing training to designers, so they could learn and implement the required skills. The company also provided consistently strong support. "Proactive and timely support from DesignTech helped bring us up to speed and gain proficiency with the NX products, so we could make best use of them," shared Viswanathan.

Gaining market share

Jyothy found that NX had helped them achieve accomplishments, such as reduced costs associated with design by 50%, enhanced productivity by 35%, improved product quality by 75% and significantly reduced errors. "There's no question that the integrated solutions of NX CAD, NX Mold Design and NX CAM helped us realise faster time-to-market, gain a larger market share and produce better quality products. NX enabled us to realise a substantial enhancement in productivity, which helped us add new products to our portfolio," concluded Viswanathan. □

Courtesy: DesignTech Systems