

NX

Jaguarmold

Using NX, one of Brazil's leading mold manufacturers reduces project development time by 40 percent; NX CAM and synchronous technology play critical role in productivity gains

Industry

Industrial machinery

Business challenges

Complete all machining through the use of NX CAM

Significantly reduce machining time

Lessen the need for human intervention

Ensure all CAD model and engineering requirements are met

Keys to success

NX deployed company-wide

Greater ability to simultaneously model both solids and surfaces, as well as re-use parts in future projects

Synchronous technology to speed complex modeling operations, especially models generated via other systems

Customized assembly design, including sub-assemblies with all attributes, via NX Reuse Library tool (e.g., screw, coupling)

Highly professional employees

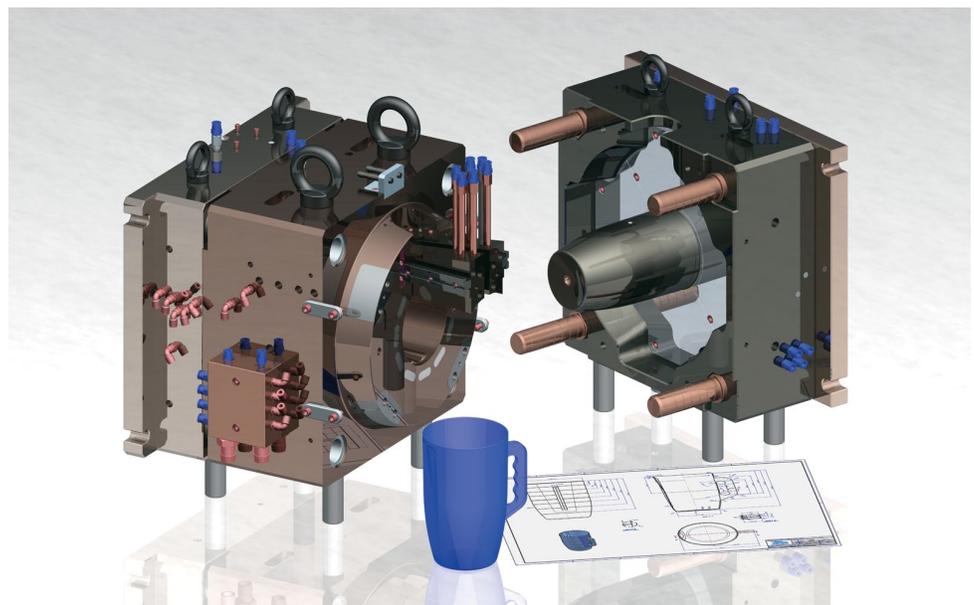
With NX, company also significantly improves overall business operations

Moving from I-deas to NX

Founded in 1998, Jaguarmold creates molds used for the production of both domestic and industrial plastic products. With a talented workforce of 45 persons, the company is one of the biggest tool shops in Brazil.

From its start, Jaguarmold used I-deas™ software Artisan series, which had good

molding and surface modeling functionality. However, the software had limited 2D and computer-aided manufacturing (CAM) capabilities. After using I-deas for 10 years and pushing the limits of its capabilities, the company assessed its options, and then selected NX™ software from Siemens PLM Software. In 2007, Jaguarmold licensed NX CAM for its computer-aided manufacturing (CAM) operations. In 2009, Jaguarmold added the NX modules it needed for more comprehensive project development and management.



Results

- Increased productivity
- Significantly reduced need for model changes
- Easier and faster handling of complex models
- Reduced development time by 40 percent
- Greatly improved business operations – design through manufacturing

“Ultimately, with NX CAM, we are getting our products to market faster; we are continuously building better quality into our products; and our costs are well managed.”

Cleber Brandino de Oliveira
Project Development
Jaguarmold



Due to the highly integrated applications of NX, the company's project and detail departments are simultaneously linked. Using an integrated product development environment has brought more efficiency and speed to Jaguarmold's design and production processes. As a result, employees no longer need to exchange multiple emails or hold regular discussions to clarify design updates/intent. Having all data in one integrated platform also saves time, because data no longer needs to be exported from one platform to another.

Total integration advantages

Four significant benefits were identified: 1) better integration among the company's different functions (development, project, detail and CAM); 2) use/creation of a library, which would eliminate problems with archive management; 3) easy handling of project changes and without the need to return to the beginning of the process to redo or export 2D data; and 4) accurate production of models, with the acquisition of new machining centers helping to optimize model production.

Production time reduced by 40 percent

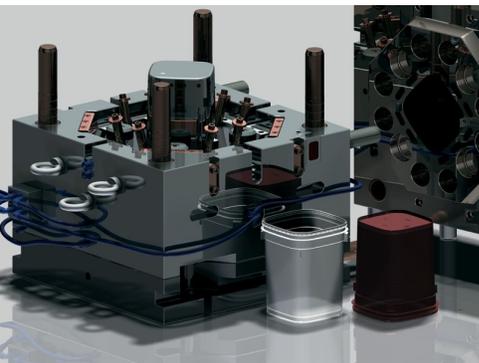
Before adopting NX, each project would first be modeled in 3D and then exported to 2D using another platform. With NX,

however, using other platforms for the project is no longer necessary.

The improvement process was initiated when Jaguarmold's executives identified which actions could be taken to reduce costs. As a starting point, the company began producing some parts internally, while also purchasing standard parts (that were frequently used in the market) for warehouse storage. Internal part production is now quite successful due to an optimized machining process. Complementing internal production, the standard parts are purchased by the lot at attractive prices, as a result of negotiations based on quantity.

In order to advance operational agility and specifically reduce costs and time across processes, the same principles and models were used for all standard parts of NX. After structuring the models, they were added to the part re-use library, which is accessible to all employees.

In the beginning, the library was made for the use of standard parts and all the changes and additions done by the users were saved in the same place. This created a database with all parts, including ones that were used in an exclusive project. To



Solutions/Services

NX
NX CAM
www.siemens.com/nx

Customer's primary business

Jaguarmold is a leading tool shop for Brazil's domestic and industrial plastic products.

Customer location

Jaguariúna, Sao Paulo
Brazil

"Our turning-point came when we replaced I-deas with NX CAM, aiming to guarantee the speed and accuracy of machining. We were facing time constraints and tolerances on the surface modeling. This hindered us in subsequent processes, such as polishing, which consequently slowed down project response time. Using NX helped us to increase our speed of production, as well as enabled us to ensure better precision throughout the process."

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Project Development
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make some portions of the database usable in certain projects, options were defined for each one of those items in the NX Reuse Library, allowing variations in the configuration of any part.

Cleber Brandino de Oliveira, responsible for project development at Jaguarmold, notes, "Using NX, production time has been reduced by 40 percent, and we've increased manufacturing output substantially. Our turning-point came when we replaced I-deas with NX CAM, aiming to guarantee the speed and accuracy of machining. We were facing time constraints and tolerances on the surface modeling. This hindered us in subsequent processes, such as polishing, which consequently slowed down project response time. Using NX helped us to increase our speed of production, as well as enabled us to ensure better precision throughout the process. Ultimately, with NX CAM, we are sending our products to market faster; we are continuously building better quality into our products; and our costs are well-managed."

Oliveira explains, "Because NX allows the creation of part lists in different formats, we have customized our ERP (enterprise resource planning) by names and codes. Standard parts in the re-use library are also shown through different stages: in stock, in need of purchase or in need of production."



On the horizon

Jaguarmold is looking into the possibility of implementing NX software for numerical control (NC) turning. It is also reviewing Teamcenter® software for product data management (PDM).

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