Industrial machinery and equipment

Modellteknik
Automation is a great reason for a new CAD system

Product
NX

Business challenges
Increase tool design efficiency
Improve quality

Keys to success
Migrate to design software with more automated processes and built-in intelligence
Provide customized training for users

Results
Tool design process is 30 percent faster due to fewer steps and more automation
Standardized tool design process improves quality

Modellteknik gained greater efficiency in tool design thanks to the automated processes within its new CAD system, making the migration to new software a huge success.

Swedish model maker strives for excellence
Modellteknik needed to upgrade its design environment to improve tool design efficiency and boost the quality of its models, prototypes and mold tools. Modellteknik AB makes models, prototypes and mold tools. The company has been in existence for more than 40 years, and is one of Sweden’s leading makers of models and prototypes for the Swedish manufacturing industry.

When Modellteknik management wanted to boost tool design efficiency and improve product quality, they realized that process automation offered an attractive
Automating as much of the tool design process as possible would enforce best practices, while streamlining the design process and saving time for the users. An I-deas™ software user for many years, Modellteknik was aware that the same supplier, Siemens PLM Software, also offered NX™ design software and a companion program for mold design, NX Mold Wizard. Modellteknik decided to investigate the Siemens PLM Software migration plan, which helps companies make the transition from I-deas to NX. Seeing that the plan offered the lowest-cost, lowest-risk approach to migration available, management decided to make the change.

Customized training facilitates transition
User training was essential to successfully exploiting the advantages offered by the new software. “It was important not to underestimate the need for training,” says CEO Roger Andersson.

Siemens PLM Software created customized training for Modellteknik. (While Siemens PLM Software’s regularly scheduled training courses could have addressed the need for training, Modellteknik did not want to wait for them to take place.) In addition to getting the training sooner, having customized training made it possible to adapt the content precisely to Modellteknik’s needs and requirements. “The customized training sequence definitely contributed

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to the success of the migration project. A standardized beginner’s course would certainly not have been as effective,” states Peter Zazis, tool designer at Modellteknik.

**Automation and built-in intelligence speed the process**

As part of the migration, Modellteknik implemented NX Mold Wizard, the NX module that expands the functionality and provides specific functions for designing tools in NX. One of the biggest advantages of NX Mold Wizard is that it creates an automated process for the designer, so that tool design proceeds in the same way each time, regardless of the part or the customer involved, according to a method that works.

NX Mold Wizard supports the user through each step of the process, and creates the entire structure with all the parts involved in a complete tool, thereby reducing lead times dramatically. “It is not uncommon for us to design a tool from a customer model in half a day,” says Zazis. There is also a built-in library of standard components from all the major suppliers for use in designing tools. NX has helped Modellteknik to achieve higher tool quality, since all the components are created automatically with the assistance of NX Mold Wizard. Certain components, such as cooling channels and ejector pins, used to be left out and then had to be clarified in production.

Summarizing the experiences from the migration project in hindsight, there is no doubt that it was a success. It is now easier for the designers to manage their work, and the design process has fewer steps. This makes the work go faster, and has improved the level of quality in the deliveries. “Switching from I-deas to NX has clearly given us a lift,” says Zazis. “NX has built-in knowledge applications that make things easier for the user. It was a major change, but it was absolutely worthwhile.”

Modellteknik has been able to quantify the benefit of the new CAD system. “We can see in our budget follow-ups that we have improved our efficiency,” says Andersson. “We are working about 30 percent faster, thanks to the increased automation that NX provides.”

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Peter Zazis
Tool Designer
Modellteknik AB

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