Customer Case Studies

Relex
A PTC InSight Product

Husky Injection Molding Systems Standardizes on Relex

Relex Provides a Complete, Integrated Solution

Husky Injection Molding Systems Ltd. is a leading global supplier of injection molding systems to the plastics industry. In early 2002, Husky's small staff of reliability/safety personnel started searching for a set of reliability and maintainability analysis software tools. They needed these tools to efficiently provide reliability predictions, FMEAs, Fault Trees, RBDs, and safety analyses throughout the entire development of their projects. The critical features that Husky required in this toolset were:

- **Comprehensiveness** - The solution had to accommodate the combined workload of mechanical, controls, hydraulic, and software reliability engineers.
- **Integration** - The solution had to share analysis results between the various analyses and provide all engineers access to each others' findings.
- **Flexibility** - The solution had to provide data entry and analysis structure in a way familiar to Husky personnel.
- **Customization** - The solution had to generate reports in the corporate style and format that Husky had already established.
- **Efficiency** - The solution had to eliminate rework and make analysis iterations practical.

Husky Encounters Problems With its Initial Non-Relex Choice

The first software package Husky chose to implement did not meet their needs in several key areas. According to M. J. Savard, Product Safety Specialist at Husky, its biggest drawback was its inability to analyze components of the same assembly using different reliability standards and then calculate the overall reliability prediction. "We spent a great deal of time separating the components by standard type and constructing independent assemblies for each," said Savard. "We had to manually obtain the reliability figure by adding the failure rates calculated for the components under each individual standard."

This problem impacted all other analyses Savard tried to complete. With components divided by reliability models, it was impossible for Husky to create a critical path in Fault Trees or a continuous path between the end effect and the next higher-level effect in FMEAs. "It was even more restrictive in our RBD analyses," added Savard, "because the components of the different assemblies could not be interconnected. Here again, the true critical path could not be determined."

This reliability toolset also lacked the ability to dynamically share data between analysis modules - an important feature when a staff of engineers is using the software to conduct multiple analyses. "Updated information entered into the RBD, FMEA, or FTA files could not be transferred to the prediction module files," said Savard. "Transferring product structure changes from the reliability prediction file into the RBD, FMEA, and FTA files would erase all the work completed in the other files."

Husky Chooses the Relex Reliability Software Suite

Savard continued to search for a software package that would meet Husky's criteria for an effective reliability analysis toolset. His search ended when he chose the Relex Reliability Software Suite. "We found that Relex was a better fit for our needs," said Savard. "It does not possess any of the undesirable traits we found in the previous software, and it has superior prediction functionality. In addition to supporting more reliability models, Relex has superior parts libraries, automates a number of time-consuming steps that the other software did not, and it supports a multi-user environment more efficiently."

Relex Reliability Prediction Supports Multiple Models

Relex Reliability Prediction supports the most current and widely used models in the industry. Savard used Relex to assign the reliability models at the component level - analyzing assemblies intact, without the need for separating components by reliability model and manually determining the failure rate. Relex Reliability Prediction also provided Savard with extensive components parts libraries for building his assemblies within the software. These time-saving features enabled Savard and his staff to evaluate the reliability and failure rate of several different system configurations in less time than it previously took to manually examine one configuration with the old software.

Relex Provides A Truly Integrated Solution

The modules in the Relex Reliability Software Suite are designed around a common database. This unique system architecture enables the modules to dynamically share both user-entered information and calculated data. Any new figures or changes in system configuration in one module are instantly updated and accessible in the other modules. This integrated approach results in faster, more accurate, and more comprehensive reliability analyses, and it efficiently supports a multi-user environment.

Friendly Interface & Flexible Report Designer

The Relex Reliability Software Suite provides impressive analysis capabilities wrapped within a user-friendly interface. The built-in Visual Report Designer allowed Savard to choose the data shown in the report, customize layout, fonts, and color styles, and even include product bitmaps and other visual elements. Savard was easily able to present his reliability findings in a format that complimented Husky's internal report style.

Relex Provides the Total Package

While several companies claim to provide comprehensive solutions, only the Relex Reliability Software Suite was able to meet Savard's needs and help his staff efficiently conduct their reliability analysis. Relex's support of multiple reliability models, total integration between software modules and analyses, and flexibility and ease of use make it superior to competitive products. When your reliability analysis goals are as demanding as those set by Husky - comprehensiveness, integration, flexibility, customization, and efficiency - do not be fooled into thinking that other products will meet these needs. Savard knows first-hand that only Relex can provide these important features.

About Husky Injection Molding

Husky Injection Molding is a leading global supplier of injection molding systems to the plastics industry. Husky designs and manufactures injection molding machines, molds for PET containers, hot runners, and robots. Their equipment is used to manufacture a wide range of products in the packaging, automotive, and technical industries. They serve customers in over 100 countries, and their sales in fiscal 2001 were reported at $640 million. Husky was honored as the second most ethical company in Canada in 2002 by the Corporate Knights. This honor was based on corporate social and environmental performance. For more information on Husky Injection Molding, visit www.husky.ca.

About Relex Software Corporation

Relex Software Corporation is a world leader in reliability analysis software. Its products are used by thousands of

engineers in a variety of businesses around the globe. In business since 1986, Relex Software Corporation asserts that its mission is to produce a superior line of high-quality software tools for reliability analysis.
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