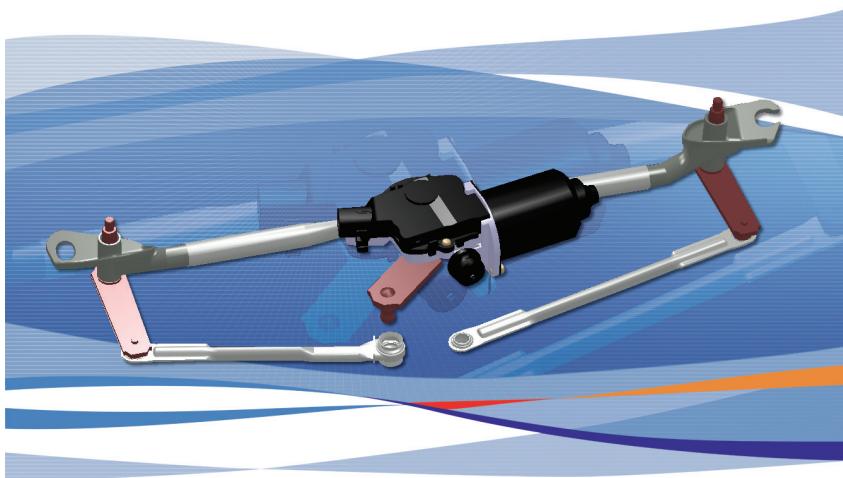


ASMO Co., Ltd. ASMO reduces design time with CATIA V5



“With CATIA V5, we can spend more time on the primary business of design, such as improving the quality of products and creating ideas for new ones.”

*– Kenichi Saito, Assistant Manager,
Wiper & Washer System Engineering
Department, ASMO*

Overview

- *ASMO needed a 3D computer aided design (CAD) solution to support collaboration with its automotive customers, reduce design time and improve performance and quality.*
- *CATIA V5 offers ASMO a user-friendly solution with assembly capabilities and the ability to manage and re-use existing product and corporate knowledge.*
- *With CATIA V5, ASMO has reduced design time through efficiency improvements such as concurrent development and the automation of manual processes.*

Manual processes slow design development

ASMO Co., Ltd., a leading developer of small motor systems for the automotive industry worldwide, specializes in motor products, such as for power windows and blowers, and system products with mechanical components in devices such as wiper and washer systems.

ASMO's traditional design processes required engineers to perform much of their work manually, including data input and output for use in its proprietary analysis software. However, these processes were not those to which a designer is satisfied.

With much of the automotive industry turning to CATIA V5 and the solution predicted to become the industry-wide 3D CAD platform, ASMO sought to standardize its design processes on CATIA V5 to facilitate collaboration with its customers.

ASMO also wanted to streamline its design processes and improve performance and quality using template-based design. The company needed to reduce design analysis time and reduce the number of required prototypes to meet industry pressure to shorten development lead times from 18 months to just six months over the next three years.

CATIA V5 automates manual processes

In January 2002, ASMO introduced CATIA V5. The company says it finds the solution to be the best suited tool for reducing designs to templates thanks to its simple operation, assembly and knowledge management capabilities, and ease of use with API (Application Programming Interface).

Previously, ASMO's engineers would draw a design and analyze the expectations using its own in-house wiper analysis software. Using CATIA V5, ASMO hoped to reduce development man-hours, improving delivery time, as well as quality and performance with the use of templates.

CATIA V5 delivers template-based design

With CATIA V5, ASMO's engineers create their own design templates for data handling, decreasing the number of man hours for design development and enabling them to employ concurrent development.

In a pilot project, the company's Wiper & Washer System Engineering Department used CATIA V5 to create templates for the design and analysis of the link section of a wiper system.

The design template, with the wiper analysis as its core, is used to replace structural components, design component parameters, check design requirements, and apply analysis results to the model. And because templates include design requirements and know-how, engineers can easily modify or correct designs to meet their needs in real time, saving time, maintenance and cost.

CATIA V5 delivers development efficiencies

"We have achieved our first goal of reducing the design man hours by half in the wiper system design by coordinating the use of CATIA V5 and our wiper analysis application, and by using a template that processes the design automatically on the basis of

the results of the analysis," said Mr. Kenichi Saito, Assistant Manager, Wiper & Washer System Engineering Department.

According to Mr. Saito, abstracting requirements from an automobile body provided by a manufacturer used to take engineers about two days using manual processes. But using CATIA V5, the same work can be accomplished in about 15 minutes.

"This is a dramatic reduction, but the reason it can be done so quickly is that the data input and output and component changes are automated by the template, leaving adjusting the size for the parameter design as the only work to be done manually," Mr. Saito said.

The future

3D development is now spreading throughout ASMO and design templates are being used in other wiper development projects. ASMO believes CATIA V5 will become a powerful tool to establish an efficient template environment throughout the company and reform the design process.

"With CATIA V5, we can spend more time on the primary business of design, such as improving the quality of current products and creating ideas for new ones," Mr. Saito said. "We are creating and improving new templates on a daily basis."

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