Finding ways to reduce design-to-manufacturing cycles is a key priority for industrial companies. An accurate virtual definition of mechanical products is the answer but sometimes its construction is time consuming and design changes are complicated. Companies require a solution that is highly productive and flexible, without compromising design accuracy.

Overview

CATIA - Mechanical Product Creation provides the most complete and robust solution, tailored for any company that wants to make the difference by developing rapidly high-quality mechanical products with the highest productivity in design changes.

Customer Benefits

- High quality design for all mechanical parts, resulting from strong partnerships with industry leaders from all industries
- Reduce time to design by enabling true concurrent engineering on complex parts
- Fast design changes by automatically adapting parts and products to new contexts
- Functional modeling: focus on what you want to model and not how to model it
Key Capabilities

Automated relational design
Generic parts are easily captured and automatically adapted to the new context in which they are re-used thanks to advanced publication mechanisms.

Functional feature modeling approach
CATIA - Mechanical Product Creation brings a new level of flexibility and productivity to design by providing access to a collection of intuitive functional features. Whereas in most other CAD systems a complex modeling task would usually require the creation of several dedicated features, these industry-specific functional features enable to complete the modeling in a single operation. This all-in-one concept saves considerable time when elaborating on a complex form. In addition, the various design elements can be created in any order making it easier for users to capture their design intent and focus on what they want to model, not how to model it.

Hybrid design
fully associative mechanical shape design in context of parts
CATIA - Mechanical Product Creation performs associative feature based hybrid modeling. Surfacing and wireframe geometric elements are designed and managed among solid features within the same environment which improves usability as well as facilitates design changes.

A unique part structure with multi-body design and powerful body operations
Parts can be structured by groups or zones of features making it easier for designers to work on dedicated local design areas, better understand the design, and implement design changes. A unique set of advanced operations is available to manage any combination of design elements thus dramatically improving productivity and promoting advanced collaborative design methodologies.

About Dassault Systèmes
a world leader in 3D and Product Lifecycle Management (PLM) solutions, Dassault Systèmes brings value to more than 90,000 customers in 80 countries. A pioneer in the 3D software market since 1981, Dassault Systèmes develops and markets PLM application software and services that support industrial processes and provide a 3D vision of the entire lifecycle of products from conception to maintenance. The Dassault Systèmes portfolio consists of CATIA for designing the virtual product - SolidWorks for 3D mechanical design - DELMIA for virtual production - SIMULIA for virtual testing and ENOVIA for global collaborative lifecycle management, including ENOVIA VPLM, ENOVIA MatrixOne and ENOVIA SmarTeam. Dassault Systèmes is listed on the Nasdaq (DASTY) and Euronext Paris (#13065, DSY.PA) stock exchanges. For more information, visit http://www.3ds.com

CATIA, DELMIA, ENOVIA, SIMULIA and SolidWorks are registered trademarks of Dassault Systèmes or its subsidiaries in the US and/or other countries. Copyright Dassault Systèmes 2002, 2006. All rights reserved. IGRIP®, QUEST®, IGRIP®, ULTRAAR®, ULTRAPaint®, ULTRASpot®, VIRTUAL NC® are registered in the US Patent and Trade Mark Office by DELMIA Corp. INSPECT® is owned by DELMIA Corp. Pictures courtesy of Wook Il Machinery CO., Ltd