



## CATIA PLM Express CATIA - Concept Product Creation

**Styling creative work at the speed of the imagination**

Today's competitive market requires companies to quickly deliver aesthetically appealing products to define new trends. Because style is one of the crucial keys to develop customer loyalty and capture new clients, companies need to strengthen their brand identity and to differentiate it from the competition.

### Overview

CATIA - Concept Product Creation delivers ultra fast modeling technology for industrial designers to embrace styling creation, directly in the CATIA design environment. It includes the powerful ray-tracing engine enabling realistic simulation of the product's appearance for quick style validation.

### Customer Benefits

#### Ultra fast modeling

- Innovative ideas captured in a natural way
- Instant concept morphing for fast styling iterations
- Productivity gains resulting in more creative concepts exploration
- Easy to learn and use for non-CAD specialist

#### CATIA design environment

- Collaborative environment for quick propagation of design changes
- Ready-to-use styling surfaces for product engineering and manufacturing

#### Style validation

- Quick validation of the product's appearance
- Rapid communication using the product realistic images across the extended enterprise

## Key Capabilities

### Ultra fast modeling

CATIA - Concept Product Creation breaks the traditional approach of concept surface modeling by introducing a new comprehensive approach methodology. It enables to easily transform ideas into exact 3D geometry models in a few minutes, starting from scratch or 2D hand sketches. Based on the power of the unique subdivision technology, this groundbreaking approach stimulates innovation by accelerating the engineering of the product's emotional content. Used for the first time in a design system, the subdivision technology offers an unrivaled freedom to define, and control intuitively a shape, for impressive instant design modifications at any time during the designer work.

The created surfaces are exacts, could be opened or closed, support sharp edges and the connections between surfaces are G2. Moreover, this technology enables the creation of surfaces compliant with any CATIA V5 applications.

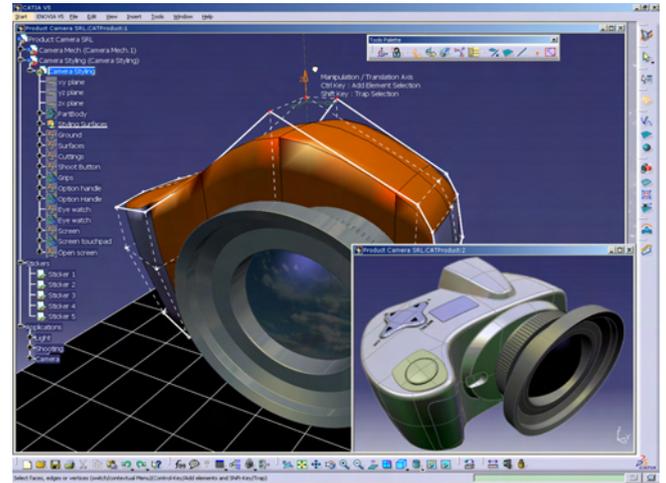
To support the subdivision surfaces technology, CATIA - Concept Product Creation introduces a powerful curve modeler based on an aesthetical approach. This new modeler provides users with a natural and intuitive way of drawing and controlling a complex curve. These curves can be created, a posteriori, in the model. The subdivision surfaces can be then controlled by curves for global deformation. The internal connections between curves are G3

### CATIA design environment

Taking full advantage from of the CATIA V5 platform, CATIA - Concept Product Creation embeds powerful surface checkers in order to help delivering high-end surface quality. It provides also a comprehensive set of powerful features such as sweep, fillet, extrude? to facilitate the creation and combination of complex styled shapes. It is the unique solution in the market allowing designers to leverage the manufacturability of their concept models. The full associativity between the styling and the other CATIA V5 design applications means that any modification is quickly propagated across the global team. So replace, or modify, doesn't mean any more tasks

### Style validation

To accelerate the validation of the concept design, the user can



Screen capture of CATIA - Concept Product Creation

rapidly produce and share the product appearance through powerful realistic images and animations. CATIA - Concept Product Creation rendering capabilities are based on state-of-the-art ray-tracing technologies that surpasses graphic card capabilities:

- by providing real shadow computation and reflection effects
- by enabling anti-aliased images
- by computing images bigger than the full screen resolution

CATIA - Concept Product Creation is based on mental image®'s last generation rendering software component, mental ray®. Mental ray® is widely acknowledged to be the industry leading rendering core system in the Digital Content Creation and PLM markets

Visit us at [www.3ds.com/my-catia-plm-express](http://www.3ds.com/my-catia-plm-express)

### 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®, ULTRAARC®, ULTRAPAINT®, ULTRASPOT®, VIRTUAL NC® are registered in the US Patent and Trade Mark Office by DELMIA Corp. INSPECTTM is owned by DELMIA Corp.

