



# CATIA PLM Express

## CATIA - Realistic Dynamic Rendering

### Optimizing Products for Emotional Appeal

Consumers from every demographic and economic class are becoming more style-conscious, elevating the role of appearance in buying everything from cell phones to cars to clothing. While functionality and price are still critical factors, when faced with a choice between two similar products, consumers will always purchase the one with the most aesthetic appeal.

#### Overview

CATIA - Realistic Dynamic Rendering provides a comprehensive set of tools to simulate and iterate product appearance. This allows design teams to front load more decisions in the virtual stage of development ? before investing in expensive prototypes, production resources, and product launch activities.

#### Customer Benefits

- Complete real time rendering environment enabling easy and rapid virtual design review
- Unique specification-driven approach of rendering parameters making it possible to optimize the design review and rapidly evaluate different alternatives at any time during the process
- Generation of high-end realistic photos and movies of a product?s appearance making it possible to share its emotional content with customers and thereby decrease the need for physical prototypes
- Early preparation of marketing and sales campaigns by providing suitable materials at the beginning of the product development process

## Key Capabilities

### Explore realistic design scenarios

V5 users and collaborative teams can easily explore and assess design alternatives by switching materials, changing the lighting or perspective, creating new environments and sharing the results with management teams, sales, marketing and prospective customers. These explorations are accomplished without any data translation or time-consuming export/import work between design and rendering V5 applications. To promote innovation, V5 provides a default materials library that includes rendering effects, but also lets users create their own materials. To achieve more dramatic effects, V5 embeds the cutting-edge CgFX shaders technology from NVIDIA®, which enhances the surface effects of materials like car paint, leather, and wood by adding reflections, textures, etc.

### Real-time simulation and animation

CATIA - Realistic Dynamic Rendering enables real-time product rendering for instantaneous visualization and ?live? animations that bring your digital mock-ups to life. Just apply the materials, set up your environments and lights, and play with the mock-up! For a completely immersive experience and high-impact design reviews and presentations, V5 supports several virtual reality technologies, including multi-screen display, Multipipe™, stereoscopic view and VisionDome®.

### Optimize market appeal with photorealistic rendering

To generate the most sophisticated renderings and compelling movies of your product designs, V5 provides photorealistic creation capabilities, based on the latest generation of components from Mental Image®, an industry-proven rendering suite. To stimulate creativity and maximize efficiency, you can save and reuse the scenes, letting you compare different products in the exact same setting. As photorealistic computation can require significant memory, V5 is fully compatible and optimized for multi-processor computation and 64-bit platforms.

### Real benefits from a proven solution

CATIA - Realistic Dynamic Rendering is used by thousands of customers worldwide today. It has helped teams interactively create and evaluate realistic renderings, test design alternatives, reduce physical prototyping time and costs, and increase the



Screen capture of CATIA - Realistic Dynamic Rendering

quality and pace of innovation.

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### 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>

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