

# **CATIA PLM Express CATIA - FEM & Structural Analysis**

High product performance and quality improvement

### **Overview**

CATIA - FEM & Structural Analysis delivers a complete finite element modeling and analysis solution covering a wide range of structural analysis processes. Fully integrated within the CATIA design environment, it promotes seamless product design quality improvement.

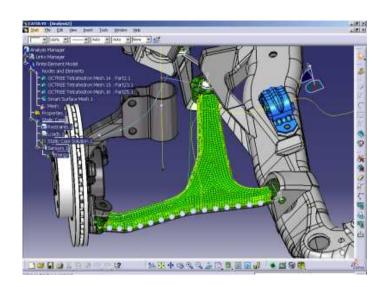
### **Benefits**

- 60 % improvement of the product design-analysis cycle time comparing to non integrated design-analysis solutions
- Generative and associative specification-driven solution for a rapid propagation of changes
- Ensures compliancy with company best practices thanks to integrated knowledge capabilities
- Accurate simulation of the product's mechanical behavior
- Decreases the need for physical prototypes
- Promotes concurrent engineering
- Open to other solvers to address specific needs
- Scalable solution to perform complex computations on large models: up to 25 million degrees of freedom



# **Capabilities**

- Single analysis and design environment avoiding errors and duplications
- Knowledge-based architecture
- Advanced stress, modal and dynamic analysis on any type of part or hybrid assembly
- Robust and advanced finite element model components for wireframe, surface and solid meshing
- Unique topology simplification to obtain a high quality mesh
- Multiple types of connections for meshing of an assembly
- Compatible and non compatible meshing support
- Pre and post processing analysis package exchange
- Ability to perform assembly of analysis
- Take advantage of the 64-bit platform



### Visit us at www.3ds.com/my-catia-plm-express

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### About Dassault Systèmes

As 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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