# CATIA PLM Express CATIA - Mechanical Product Creation

The de-facto standard for mechanical product design excellence

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

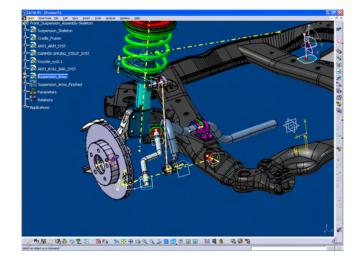
CATIA - Mechanical Product Creation brings a new level of flexibility and productivity to design by providing access to a collection of intuitive functional features. Whereas in most other CAD systems a complex modeling task would usually require the creation of several dedicated features, these industry-specific 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. Surfacic 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.



Screen capture of CATIA - Mechanical Product Creation

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