



# CATIA PLM Express

## CATIA - Fabricated Product Creation

**Complete and efficient design solution for sheet metal parts**

Finding ways to reduce design-to-manufacturing cycles is a key priority for industrial companies. Companies need to rapidly design standard compliant sheet metal parts in 3D that are complex in addition to being ready-to-manufacture.

### Overview

The CATIA Fabricated Product Creation option is dedicated to the rapid design of sheet metal parts. Designers benefit from already capitalized know-how and can take into account manufacturing constraints early in the design. In this way, they can create sheet metal parts that are fully compliant with company rules and standards for efficient manufacturing.

### Customer Benefits

- Fast and efficient design of sheet metal complex parts
- Easily apply company-defined standards to ensure design quality
- Create right first time sheet metal parts thanks to design in context of the virtual product
- Take into account manufacturability constraints early in the design phase and speed up assembly design

## Key Capabilities

### Complete sheet metal oriented features most commonly used

- Unique number of predefined standards stamps for complex sheet metal design: bridge, bead, flanged cutout, stiffening rib, louver, surface stamp (multi-profile, punch and die, halfpierce, two profiles), curve stamp, circular stamp, dowel as well as user defined stamps (to create more complex stamping)
- Complete wall design: profile, extrude, tangent walls, swept walls (flange, Tear drop, Hem, User Flange), as well as wall on edge with automatic bend creation and rolled walls
- Full cutting capabilities: cutout and holes, corner relief, corner, chamfer
- Bending: simple and conical bend, bend from flat with local fold/unfold capability

### Creation and reuse of the company's standard sheet metal components

(bend tables, stamps, tooling templates) verify the design compliance with the company-defined standards and to ensure the design quality

- Deformation of the material during the folding and unfolding process can be managed through company defined bending tables that include the definition of bend radius, allowance and sheet thickness and stamping tools tables.

### Work concurrently on the folded and the unfolded state of the part

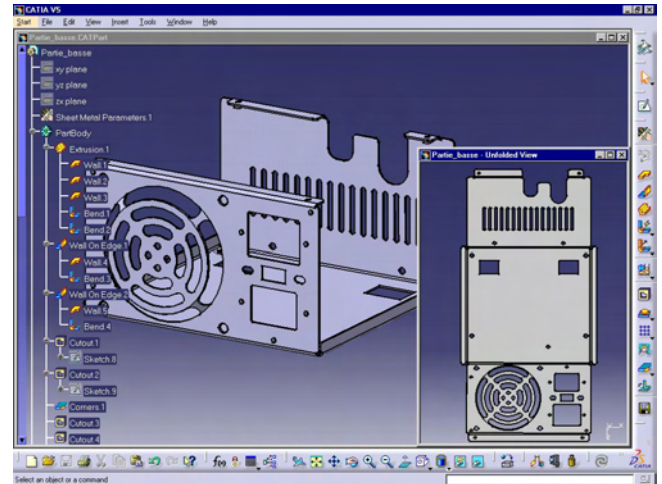
#### Unique multi-body capabilities

allowing designers to decompose parts following a logical representation for a better understanding of the design and simplifying exchanges

#### Weld design dedicated functionalities

- 15 welding bead shapes (1 fillet/7 groove and 7 double bead) based on ISO standards
- Automatically chamfers parts and edges in preparation for welding

### Sheet metal dedicated drawing generation capabilities for manufacturing as well as seamless nesting and cutting



Screen capture of CATIA - Fabricated Product Creation

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