

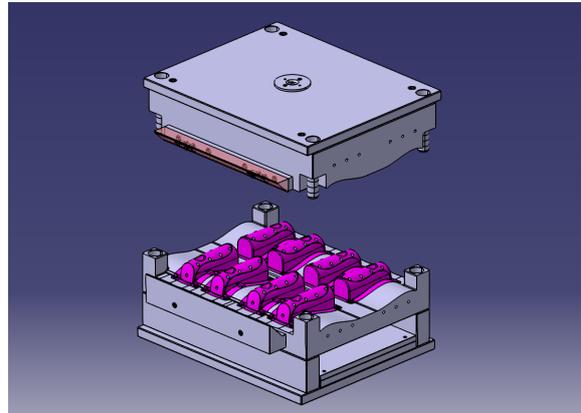
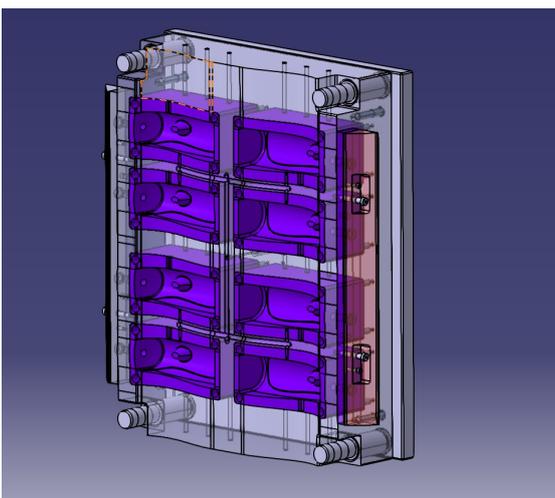
# CATIA - MOLDED PRODUCT DESIGN FOR MANUFACTURING

**Boost The detailed design of cast, molded and forged parts.**

The manufacturing constraints of molded and forged parts create a need for complex surfaces that are difficult and lengthy to design, and in most cases inflexible to modify. On the other hand, mass production parts require optimization to achieve the highest possible performance, while using the least amount of materials. Companies require highly productive technologies to focus more on innovation and less on modeling.

## OVERVIEW

CATIA - Molded Product Design for Manufacturing accelerates detail design of cast, molded and forged parts with substantial productivity gains. Concurrently, designers create fully associative parting surfaces, cores and cavities of the most complex parts. The advanced process-driven functionalities avoid the need of complex and repetitive use of surface and wireframe operations and reduce learning activity.



## CUSTOMER BENEFITS

- ◆ High productivity gains in defining molded, cast or forged parts
- ◆ Less learning activities and time spent in complex surface and wireframe definition
- ◆ Optimize or create more variants of parts with huge gains in design modifications
- ◆ Functional modeling: focus on what you want to model and not how to model it

## KEY CAPABILITES

- ◆ Highly productive definition of specific drafts and fillets for forged or complex cast parts
- ◆ Associative core & cavity separation with parting lines and surface definition
- ◆ Wide range of discipline oriented features that take into account manufacturability constraints: Extrude, Revolve, Cut, Thicken surface, Rib, Boss, Cutout, Rest, Pocket, Grill, Reinforcement, Shell, etc.,
- ◆ Order-independent feature creation resulting in history-free part construction .



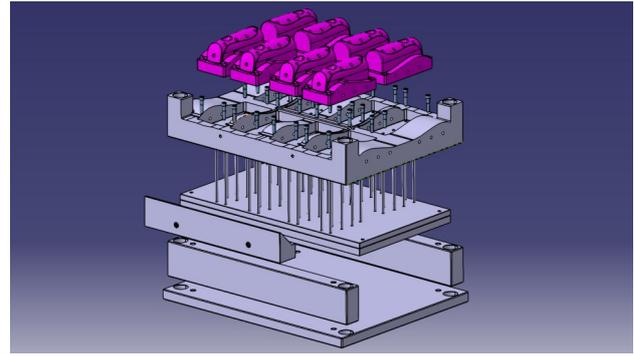
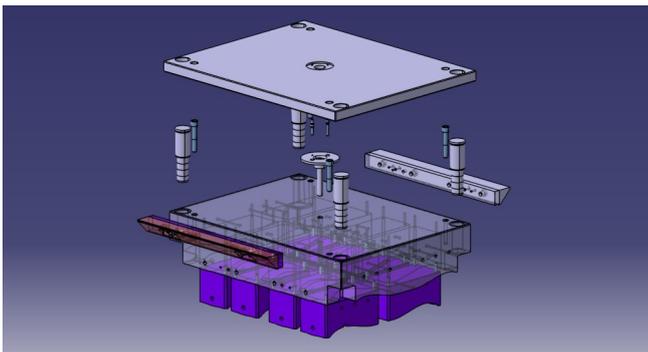
# CATIA - Mold Tool Creation

## Integrated environment for overall tooling design and manufacturing preparation

Now more than ever, mold manufacturers need to design faster and with the highest quality in order to differentiate themselves from the competition. Therefore, the tooling designer needs to maximize tooling automation creation to focus on the added-value tasks. In addition, designers should benefit from a single system that manages design changes throughout the design-to-manufacturing process.

## OVERVIEW

The CATIA - Mold Tooling Creation option is dedicated to fast mold and stamping die design. Designers are able to reuse already capitalized tooling know-how, enabling rapid tooling creation fully compliant with company rules and standards. Seamless tooling design fosters concurrent engineering between the design office, tooling and manufacturing departments



## CUSTOMER BENEFITS

- ◆ Fast core and cavity definition
- ◆ Easy know how capitalization and reuse thanks to components/tooling templates
- ◆ Efficient change management with full associativity throughout the tooling design and manufacturing process
- ◆ Ultra-large tooling design and management thanks to 64-bit support

## KEY CAPABILITES

- ◆ Check the validity of the imported shape and improve its quality
- ◆ Effective definition of core, cavity and parting surface according to pulling direction, moldability and manufacturability assessment
- ◆ Most commonly used standard mold catalogues
- ◆ Intelligent standard / user defined component management (with associated drillings & NC information)
- ◆ Define mold bases, sliders, retainers, cooling systems, gates and runners for plastic injection and ejection systems

