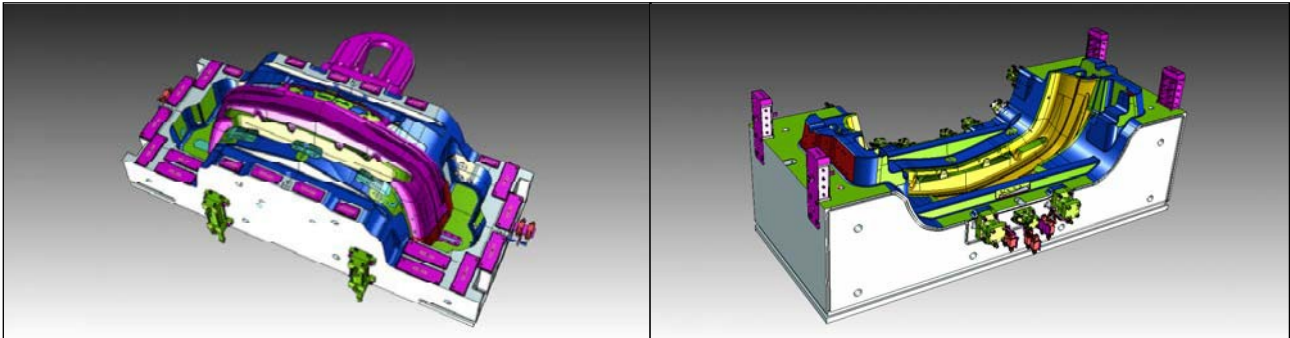


# SmartForm TOOLING



The ultimate hybrid CAD solution for the creation of molds and tools



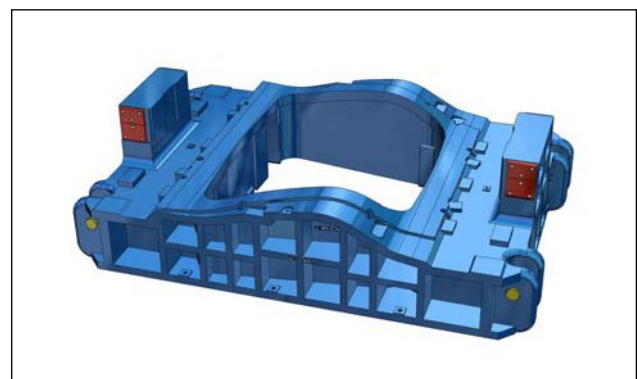
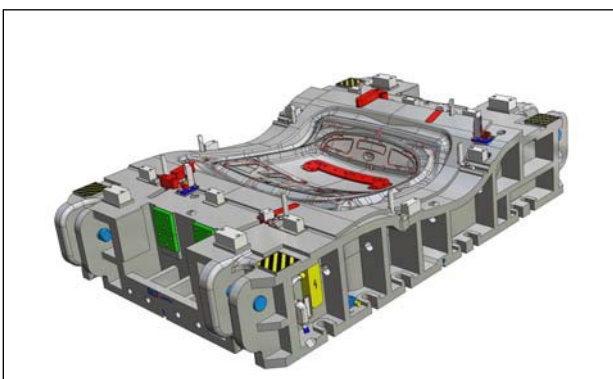
**SmartForm Tooling** is **SmartForms's** comprehensive CAD solution designed for tool makers & engineers specializing in tool & die creation. Built on strong CAD foundations, **SF Tooling** features innovative technologies such as **GSM (Global Shape Modeling)** and **Zone Modeling** that allow real-time modifications of complex models. **SF Tooling** offers libraries of 3D components and the most popular commercial catalogs, and it can be completed by adding CAM software and a wide range of direct converters. The management of files in various CAD formats of varying quality levels is one of the most challenging tasks for mould makers. Therefore it is very important to have the right tools to easily modify the models in neutral formats (IGES, STEP, etc...) they receive from their customers. A key element of the mold design process is still made in a "mixed environment" that brings together the speed of 2D and the quality and accuracy of surface and solid modeling. For this reason, **SmartForm Tooling** offers a single 2D/3D integrated design environment that can be used by specialists according to their needs.

## Hybrid Modeling

**SmartForm Tooling** is the **only software on the market offering unsurpassed hybrid modeling capabilities** that allow a perfect integration of tools for solids and surfaces. It is possible to use curves, surfaces and solids and to switch between both modeling techniques in very natural way.

## GSM Global Shape Modeling

**GSM (Global Shape Modeling)** is the only creation and modification tool that allows users to make global, accurate and quick changes, at any stage of the design process. **Global Shape Modeling, Zone Modeling, Capping & Zone Draft** are just a few of the powerful features that allow to modification and rebuilding of imperfect shapes (open solids) on imported, native or standard data.

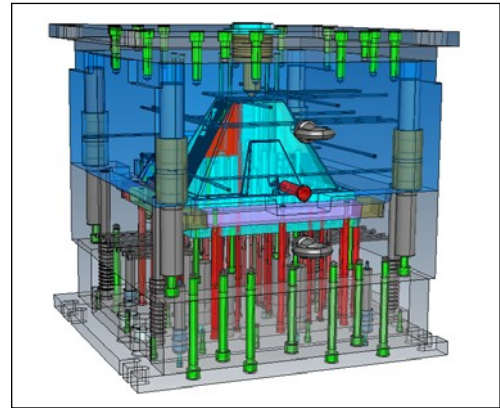


## 2D/3D Transparency

**SmartForm Tooling** offers a single design environment with 2D/3D transparency, eliminating the need of expensive 2D/3D interfaces. SF Tooling's best-in-class 2D and 3D environments ensure extremely high interoperability levels.

## Interactive Solid Modeling

The *Interactive Solid Modeling* feature allows modification of solid geometries, **both native and imported**, and helps users overcome the parametric logic made of sketches & constraints and the feature creation sequence, to get the expected modification result directly. Thanks to its solid modeling and surfacing functionalities, **SmartForm Tooling** ensures innovative part modeling functionalities in a flexible and easy-to-use design environment.

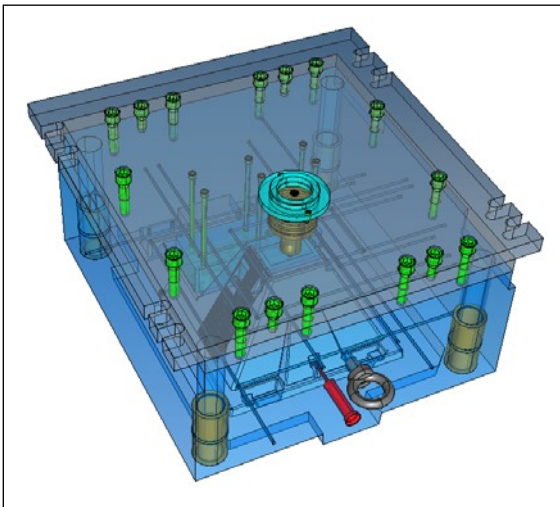


## Smart Objects and Adaptive Measures

**Smart Objects** enable users to capture, reuse and share a part or the whole project, ensuring greater compliance to company standards, fewer errors and faster design cycles. They also enable the creation of customized **Smart Object Libraries**. **Adaptive Measures** make the approach to component design in the context of the tool & die assembly more direct and intuitive. When inserting or editing features, values can be read from the surrounding geometric shapes with a simple mouse click, **preserving their associativity**. As a consequence, the top-down design of parts and assemblies becomes faster and less prone to errors compared to manual methods. It is also possible to quickly create a 3D model from 2D drawings in DWG/DXF formats.

## Global Sweep

This particular curve sweeping method, along a 2D or 3D path, which may contain sharp corners, **is also associative**. Users can test different shapes by changing reference curves and boundaries. For example, to prepare an object for mold making, it allows creation of parting surfaces. When modifying the model, the parting curve will change and its surfaces will be automatically updated.



## 2D and 3D Translators

**SmartForm Tooling** features 2D translators for DWG, DXF, IGES and GBG Draftmaker formats, as well as 3D translators for IGES, STEP, STL, VDA, VRML, WaveFront and IV formats, the neutral format of **SmartForm** and ASCII. Other SF translation platforms (purchased separately) support most of the proprietary 3D formats as well as the bidirectional conversion of Catia V5, Pro/E and Parasolid files. The bidirectional converter for Catia V4 files is also available (2D included).

## System Requirements for SmartForm Tooling

### Minimum

- Vista™, XP Pro x64 Edition, XP or higher  
Microsoft® Windows® -7 x64 or higher
- Intel® Core-i5 GHz or equivalent processors by AMD systems
- System memory (RAM) 2 GB, 4 GB for x64
- Virtual memory (paging) 1 GB
- Disk space 1.5 GB for a typical installation
- Graphics accelerator 1 GB Vram OpenGL™
- Microsoft® .NET Framework Version 3.5 or higher
- Microsoft® Internet Explorer 8.0 SP1 or higher

### Suggested

- Vista™, XP Pro x64 Edition, XP Pro or higher  
Microsoft® Windows® -7 x64 or higher
- Intel® Core-i7 3.2GHz or equivalent processors by AMD systems
- System memory (RAM) 2 GB, 8 GB for x64
- Virtual memory (paging) 2 GB
- Disk space 1.5 GB for a typical installation
- Graphics accelerator 2 GB Vram OpenGL™
- Microsoft® .NET Framework Version 2.3.5 or higher
- Microsoft® Internet Explorer 8.0 SP1 or higher