SpaceClaim

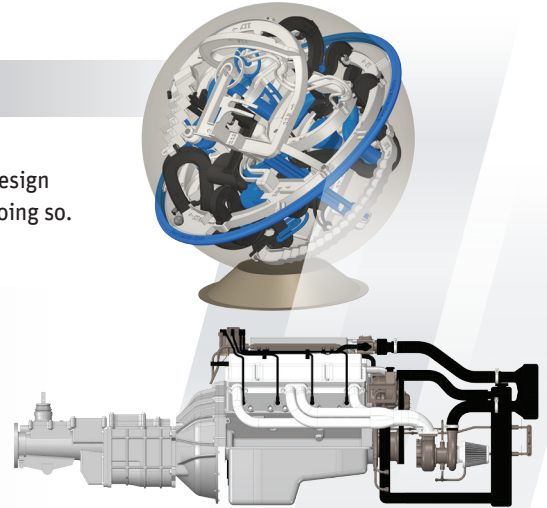## A multipurpose 3-D Modeler for Faster Solutions

Design

Design the way you think

Our vision from the beginning was to bring 3-D to everyone by providing a simple, fast, flexible design tool. We believe a 3-D tool should be so simple, anyone can learn it quickly and have fun while doing so. **Imagine, design, make and realize your ideas faster with ANSYS SpaceClaim®.**

Design Faster with:

- Full part and assembly modeling
- Detailed drawings including full 2-D/3-D GD&T
- Photorealistic rendering capabilities with Keyshot
- Open/edit files from neutral and native CAD systems
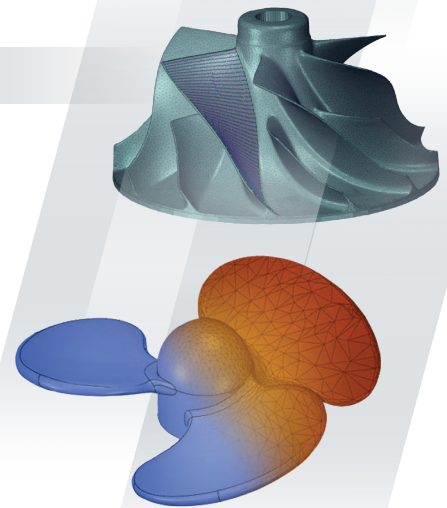- Complete help guide and tutorials for a rapid start

Reverse Engineering

For reverse engineering, SpaceClaim is unmatched in terms of **power, ease of use and flexibility.** You can quickly build complex solids or use direct modeling commands while referencing an STL model. SpaceClaim automatically fits surfaces to complex shapes while still enabling you to edit the fine details. These same intuitive tools can be used to build fixtures or construct mating components as needed.

Why Leverage SpaceClaim for Reverse Engineering?

- Automatic surface fitting along facets of any STL file
- Create and modify highly organic skinned surfaces
- Sketch curves along the facets of an STL file
- Easily create fixtures around faceted data
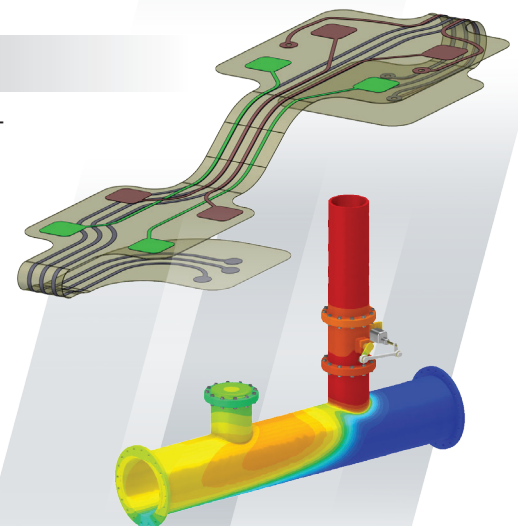- Rapid blending of period loops in recreating complex geometry

Simulation

Use ANSYS SpaceClaim for all Fluids, Structures and Electronics model preparation to remove geometry bottlenecks and get your models to analysis faster. You can open data from any CAD system, edit designs and prepare them for simulation without relying on CAD export, no matter where the model was created.

Use SpaceClaim to:

- Repair dirty geometry and restore model integrity
- Construct simplified representations of models, such as volume extractions, enclosures, beams, and midsurfaces
- Remove rounds and small, irrelevant features or components
- Edit and modify imported models
- Accurately wrap electric traces to any substrate shape

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ANSYS

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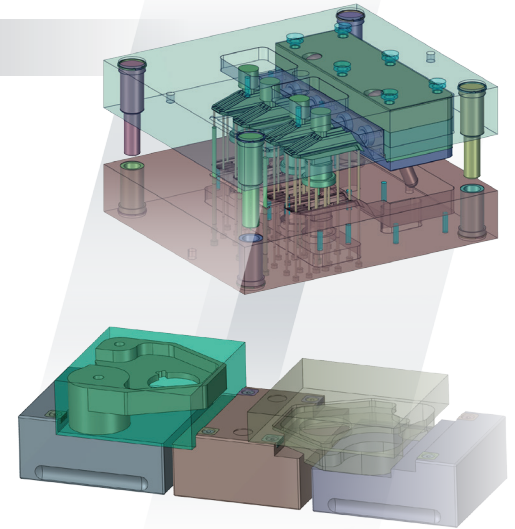FAX (949) 380-7790
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SpaceClaim

A multipurpose 3-D Modeler for Faster Solutions

Manufacturing

No other tool is faster to use and does a better job editing geometry, cleaning up corrupt or difficult CAD data, and quickly designing jigs and fixtures. SpaceClaim is the only solution on the market today that helps machinists complete jobs quickly while minimizing downtime on the shop floor.

Key Features:

- Open, edit, and prepare parts from any CAD system
- Easily convert DXF/DWG files into 3D data for machining
- Jig, fixture, tooling, and mold design
- Optimize models by editing rounds, chamfers, hole sizes, and draft angles
- Integrated standard parts from Traceparts or Cadenas libraries
- Leverage strategic partnerships with CAM providers like Mastercam, GibbsCAM, Espirit, MecSoft Corporation, and SigmaTEK
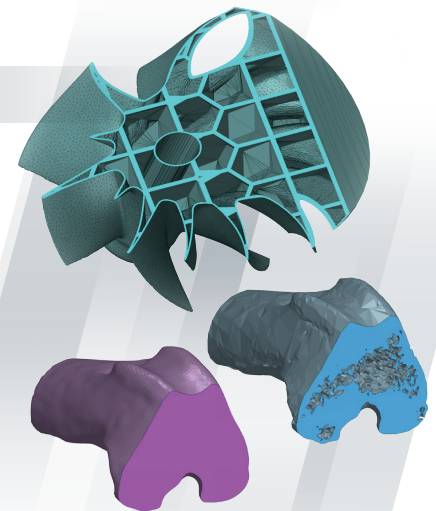
3-D Printing

ANSYS SpaceClaim's intuitive interface allows you to create, edit and prepare models for 3-D printing faster and more efficiently than ever before. With our STL Prep for 3-D Printing module, you will enjoy many automated tools that bridge the gaps between editing solids and mesh data.

Faceted Data Editing Capabilities:

- Shrinkwrap dirty CAD or faceted models for rapid print-ready file creation
- Automatic repair of dirty STL files for watertight models
- Shell and infill models to minimize waste and improve strength
- Decimate, normalize size, and smooth facets for better print quality
- Rapid lap joint creation for printing of large models

Sheet Metal

When it comes to giving busy machinists and engineers the right tool for unfolding models into flat patterns, SpaceClaim is the best solution for preparing any model for high-precision sheet metal manufacturing. With SpaceClaim, manufacturers will save time, increase productivity, minimize shop floor downtime and gain a better solution for winning new business.

SpaceClaim Sheet Metal Includes:

- Automatically unfold virtually any sheet metal parts, and export to DXF/DWG
- Simultaneously view and edit folded and unfolded models
- Rapid bend table creation
- Adjust thickness, bend allowance, and material properties on any model
- Customize a form library to create edge and corner reliefs, hems, hinges, punches, louvers and many other forms

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