

SpaceClaim Engineer

3D for innovative engineering

SpaceClaim® Engineer is the world's fastest and most innovative 3D direct modeler. It enables engineers to easily create concepts and prepare 3D designs for prototyping, analysis, and manufacturing.

TODAY'S ENGINEERING CHALLENGE: MORE WORK, TIGHTER SCHEDULES, FEWER PEOPLE. TODAY'S ANSWER: SPACECLAIM.

SpaceClaim Engineer brings 3D solid modeling to the desktops of engineers and analysts who work in a 3D world but don't want to become experts in traditional feature-based CAD systems.

SpaceClaim helps engineers interact with CAD geometry in exciting new ways. Without becoming a CAD expert, you can make dramatic edits to models, conceptualize on-the-fly, and communicate quickly and easily with prototyping and manufacturing. This means that engineering teams can finish projects with ease, in a fraction of the time.

Direct Modeling revolutionizes the way you think about working with 3D solid models by letting you focus on what you are designing rather than the theory of your design process. Unlike with traditional feature-based CAD, you can reuse data or remix geometry from other designs, even those created in CAD systems. You can take a design where it needs to go, regardless of how it was built or the CAD system in which it was created.

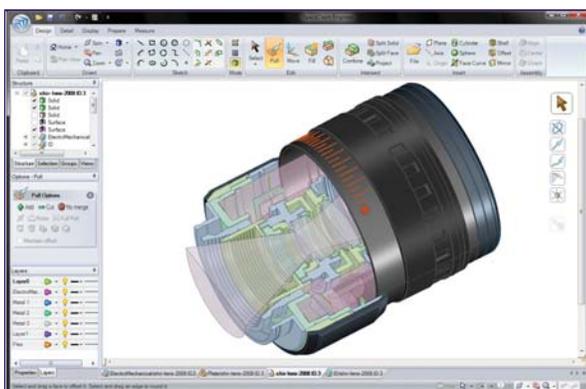
Create new concepts and share them with other engineers before entering the detailed design phase: together, you get the concepts right and avoid expensive last-minute design changes. From a blank slate, start drawing 3D shapes as easily and freely as you would on the back of a napkin. De-feature and simplify parts for analysis or manufacturing and optimize the design without being constrained by original modeling intent.

POWERFUL, STRAIGHTFORWARD 3D

- > Pull, Move, Fill, and Combine tools enable hands-on 3D design
- > Quickly create and iterate design concepts
- > Create solid models without the complexity of traditional feature-based CAD

RICH ENVIRONMENT FOR ENGINEERING

- > Create multi-discipline concept models for engineering consensus prior to detailed design
- > Perform what-if studies by editing designs, regardless of how they were created
- > Powerful capabilities that clean up imported geometry and simplify models for analysis



SpaceClaim acts as the nucleus of the conceptual design process, integrating data from electrical engineers, industrial designers, and engineering.



SpaceClaim's Pull, Move, Fill, and Combine tools let you work in 3D and cross sections to create new design concepts using existing data from any CAD system.

Intuitive tools such as Pull and Move let you directly select portions of the model and move them where you want. The Combine tool slices and divides parts into pieces and lets you merge in portions from other designs. The Fill tool cleans up small features and fills holes. Together, these direct modeling tools let you get your job done without resorting to traditional CAD.

FEATURES

INDUSTRY-LEADING DIRECT MODELING

Direct modeling tools scale from simple shapes to complex blends and variable section sweeps. Pull and Move tools work on both faces and edges, allowing maximum flexibility. Add hints for thin walls, mirrored, concentric, rounded, and chamfered geometry.

3D CROSS SECTION CREATION AND MANIPULATION

Draw 3D extruded, revolved, and swept geometry without ever leaving a 2D cross section. Sketch out a new concept and get a solid 3D design without having to perform extra work. Import a complex assembly, section through it, and immediately edit the section using the same Pull and Move tools you use in 3D.

PARAMETERS WITHOUT CONSTRAINTS

Change the value of a dimension, simply by selecting what you want to move and editing the value: your geometry goes to the right place. There's no need to set up complicated systems of constraints. Different users can set up and save their own sets of dimensions so that others can work with the model the way they want.

FLEXIBLE ASSEMBLY STRUCTURE

Turn a part into an assembly or vice versa. Create assembly structure *before* you've drawn a shape, or draw a dozen parts and create the structure later. Never worry about inter-component relationships preventing changes. Export subassemblies into external files for reuse in other designs, or incorporate an existing design for unique customization without impacting other designs.

DESIGN IN ANY CONTEXT

The same tools work to edit assemblies, parts, drawing views, and 3D markups enable you to create and make changes wherever you see the need. You don't have to worry about switching to the right mode.

DESIGN THIN PARTS WITH DIRECT MODELING

For thin-walled parts such as flexible PCBs and sheet metal, the Pull and Move tools focus on making designs that can be cut and folded. SpaceClaim automatically generates a flat pattern with compensated bend allowance.

SYSTEM REQUIREMENTS:

Operating Systems: Microsoft Windows XP with Service Pack 2; Microsoft Windows Vista
Video Card: Requires Full Direct X 9c, February 2007 edition or greater; hardware support, 64MB or graphics memory or higher; Shader 2.0 hardware support, 32 bits per pixel, 1024x768 minimum resolution; latest graphics driver
CPU: Pentium 4 2.0 GHZ or Athlon 2000+ or faster; 32-bit (x86) or 64-bit (x64) processor
RAM: Minimum: 512MB RAM (32-bit); 1Gb RAM (64-bit)

FITS INTO YOUR EXISTING DESIGN PROCESS

- > Work with popular common formats: ACIS, STEP, IGES, ECAD, Rhinoceros, CGR, DWG, DXF, STL, OBJ, XAML, VRML, and 3D PDF (requires Adobe Acrobat 9 Pro Extended)
- > Works with many leading CAD, CAE, and CAM tools (e.g., SpaceClaim works seamlessly with ANSYS Workbench and GAMBIT, ALGOR, CFdesign, VisualCAM/VisualMILL; many SpaceClaim customers use COMSOL)
- > Includes a plug-in for direct integration with Rhinoceros
- > Create high-quality solids to drive detailed-design in CAD

OPTIONAL MODULES

- > Data Exchange Package I: Pro/ENGINEER, Autodesk Inventor, CATIA v4, VDA
- > Data Exchange Package II: SolidWorks, Parasolid, NX
- > CATIA v5 Data Exchange
- > JT Open Data Exchange
- > TraceParts standard parts Library
- > Bunkspeed HyperShot photorealistic rendering



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