

## ANSYS® SpaceClaim Direct Modeler for Early Concept Design



ANSYS SpaceClaim Direct Modeler (SCDM) makes it quick and easy to create a myriad of models, turning rough ideas into insightful designs. It's never a chore to try a new approach with ANSYS SpaceClaim because the tools are so simple to use. Model all of the options proposed at brainstorming sessions and mock up those back-of-the-napkin sketches in 3D. ANSYS SCDM is also ideal for companies that work with clients who send out RFPs. Impressive visuals can be created fast, allowing the client to see the finished model before the bid is even won, giving companies a leading edge to ultimately win more bids.

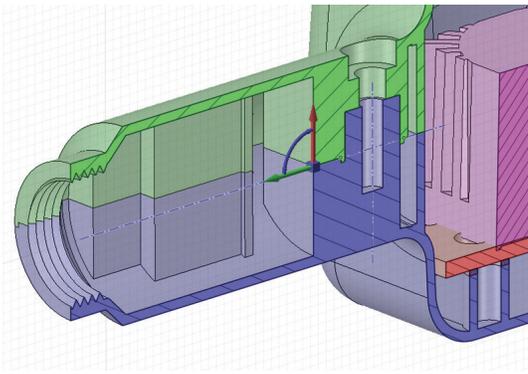


Figure 1. Easily edit the model without restructuring features

Use ANSYS SpaceClaim Direct Modeler to:

- Brainstorm ideas freely, without worrying about the underlying technology
- Work with any CAD or proprietary files, including 2D and 3D designs as well as any models using standard file-types
- Draft lots of ideas in less time
- Create high-quality models quickly, for RFPs with tight deadlines

### Challenges in Early Concept Design

Creating the best model involves exploring several possibilities upfront. Ideas often come in several formats: some hand drawn, others as PowerPoint slides, or Sketchup files. Several ideas might be worth exploring, but that's not possible if the company's modeling software only works with a proprietary file format.

It can also be a long, complicated endeavor to create a single model without the right tools. If there's a tight deadline to ship a product or submit a bid, there's no time to fiddle with a feature-tree based modeling program. It's time consuming to have to consider the downstream effect of every edit, let alone have to recreate the model 4 or 5 times. Yet, when designs aren't made up-front it's hard to estimate material costs. Bids also look a lot less compelling. Without photo-realistic visuals and costing details, win rates drop.

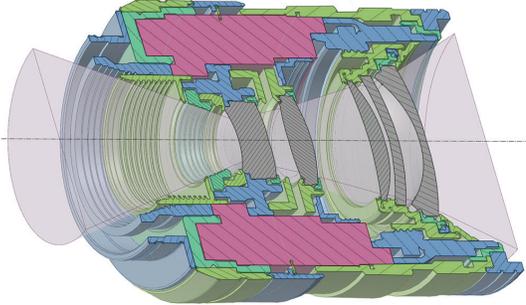


Figure 2. Design multiple concepts from scratch, such as this lens, in less time than traditional platforms

### **ANSYS ANSYS SpaceClaim Direct Modeler is the Best Choice for Early Concept Design**

ANSYS SCDM adds value to any project, by easing innovation. Users can freely brainstorm model ideas, without worry about the underlying technology. ANSYS SpaceClaim Direct Modeler does not constrain your imagination by limiting what you can change on the model as you go. ANSYS SCDM is an ideal tool for users who want a powerful tool that allows them to think creatively on the fly.

In addition, there's no need to fret about file formats. Users aren't tied down to a particular file type, so ideas can come from anywhere. Multiple file types – including 2D models and STL files – can be imported and used to create a single idea. Old models can also be easily cleaned up before being incorporated into a new concept.

With ANSYS SpaceClaim Direct Modeler's intuitive user interface, anyone can be up and running in a week as opposed to months. Four simple tools – Pull, Move, Fill, and Combine – cover 80% of the functionality needed to create and edit 3D models.

By simplifying the process of early concept design, ANSYS SCDM eliminates the bottleneck normally encountered with other software packages. Models can be made fast, so that deadlines are met. Make the most of brainstorming sessions, by modeling ideas quickly and easily.

ANSYS SpaceClaim Direct Modeler also improves win rates. Clients are impressed by the speed and quality of the models mocked-up in ANSYS SCDM and with our partner Luxion, users can deliver photorealistic images of their designs using KeyShot. By expediting the creative process, ANSYS SpaceClaim Direct Modeler can increase the number of bids a single team can submit.

With ANSYS SpaceClaim Direct Modeler, a model can always be easily modified. If a company's workflow includes bringing simulation upfront into the design process, ANSYS SCDM makes it easy to move on to this next step and then edit the models based on the results of the analysis.

Once the final design is agreed upon, the model can then be sent to the CAD experts for a finalized detailed design for manufacturing and documentation.



Figure 3. ANSYS SpaceClaim customer Perplexus's concept model of 3D puzzle game

**The Future of Early Concept Design with ANSYS SpaceClaim Direct Modeler**  
ANSYS SpaceClaim Direct Modeler is poised to change the way people view the creative process, by simplifying early concept design. Staff normally intimidated by CAD software can effectively express their design ideas with ANSYS SpaceClaim, creating impressive visuals for persuasive bids or quickly mock up an idea for a new project.

Only ANSYS SCDM offers the ability to transform a company's product development cycle, with inexpensive, easy to use tools. Reinvent the process of invention, with ANSYS SpaceClaim Direct Modeler.

**To learn more about ANSYS SpaceClaim Direct Modeler, please visit**  
<http://www.ansys.com/Products/Workflow+Technology/ANSYS+Workbench+Platform/ANSYS+SpaceClaim> today!

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