

## Data Sheet

# SpaceClaim Engineer for 3D Printing

## Streamline your 3D printing process

SpaceClaim Engineer's intuitive interface allows users to create, edit, and prepare models for 3D printing faster and more efficiently than before. With a new module — STL Prep for 3D Printing, we've upgraded that functionality to allow users to work directly with STL files and have automated many prep tools for 3D printing.

Use SpaceClaim Engineer and its STL Prep for 3D Printing module to:

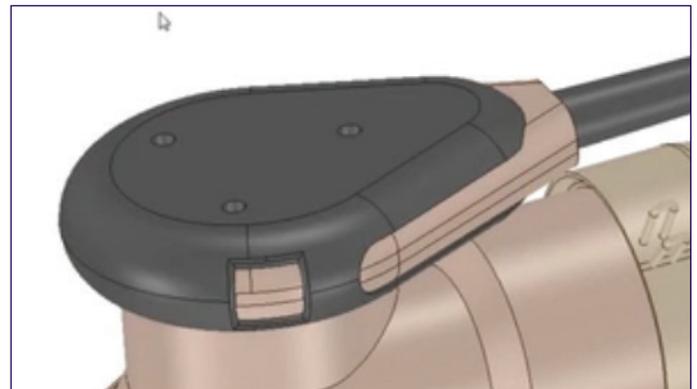
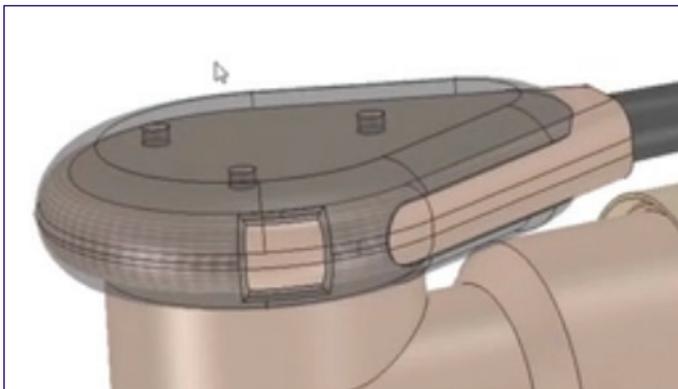
- Create, edit, and repair 3D models
- Analyze, edit, and repair solids and STL files for 3D printing
- Work with any CAD file

SpaceClaim Engineer is a flexible, intuitive, and powerful tool for all your 3D printing needs

### Challenges in 3D Printing

Typically prototype engineers and others responsible for 3D printing constantly send models back and forth with designers for repairs and edits to ensure a successful print. In order to repair and edit for 3D printing on their own, engineers need to spend over \$10,000 on multiple products. At best, the current design process can be tedious and slow, making it difficult to turn around designs quickly to print prototypes, thus delaying time to manufacture.

There are many solutions in the market today that do 3D modeling well or provide strong 3D printing preparation tools, but none do both well. And, because these solutions are very difficult to learn and use, engineers struggle to relearn the software each time they need it, thus extending project timelines and increasing lead times. This broken process means companies are forced to juggle different solutions to get all the functionality they need, or they are forced to heavily rely on the CAD engineers for editing and repair, creating a bottleneck within the process.



Turn surfaces into solids.

## SpaceClaim Engineer is the Solution

SpaceClaim Engineer's 3D modeling and 3D printing prep capabilities frees companies from buying expensive solutions or relying on a broken back and forth process with CAD designers. SpaceClaim Engineer delivers this powerful functionality in an intuitive interface, too, that doesn't mandate daily dedication to understand. With SpaceClaim Engineer, users can manipulate solids to:

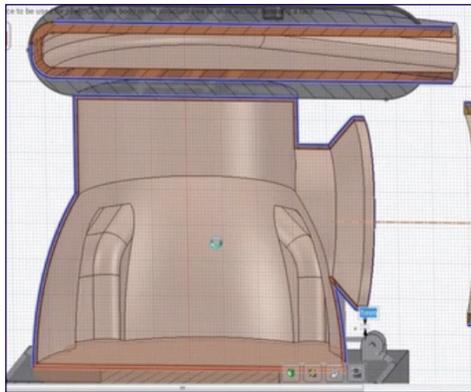
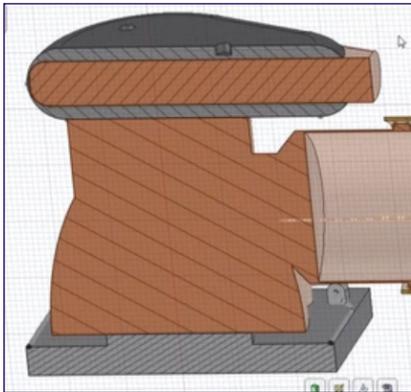
- Shell models to minimize waste
- Scale models
- Split models for better printing, adding pins, lips, mortise, or joints as needed
- Save & Export STL.

With our new STL Prep for 3D Printing module, customers can also work directly with STL files to do everything mentioned above, plus decimation/reduction and automated verification and repairing of STL for intersections, watertightness, misaligned normal, co-incident triangles, and other errors. Users can combine STL models with other STL models or solids created directly in SpaceClaim Engineer, too.

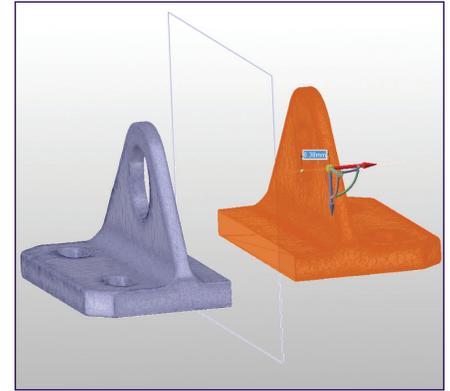
SpaceClaim Engineer can import other faceted formats such as OBJ, AMF, and STL in addition to nearly any CAD file. In future releases, SpaceClaim will extend this import capability to other formats such as JT, cgr, and VRML.

## The Future of the 3D Printing Process

No longer is it necessary to be stuck inside a broken process full of bottlenecks and inefficiencies. No longer do engineers need to be constrained by the very tools bought to help them. SpaceClaim Engineer and it's STL Prep for 3D Printing module cleans up the bottlenecks, increases efficiencies, and puts the power of 3D editing and repair into the hands of every 3D printing engineer who needs it.



Shell models quickly and easily.



Copy or move meshes.