

All Information About Creating 3D Files for 3D Printing

I don't have my own 3D files. Can You assist me?

As a professional 3D service provider, 3D Activation offers a comprehensive service, from 3D design to the finished 3D-printed object. We convert your 2D files (photos, drawings, etc.) into printable 3D files or create your desired 3D model using 3D scanning from a physical object.

Can I have my own 3D models printed?

Of course! We offer this additional service to our customers. Please visit the contact form, upload your 3D file, drawing, or images, and submit a request for your 3D print.

How can I create 3D models myself?

We bring your ideas to life. When modeling 3D files, please note the following:

- All models must be "watertight," meaning fully enclosed.
- No open areas or edges.
- For a smooth surface, the model should have a high polygon count.
- 3D surface objects should be defined as triangle or quad meshes.
- Components must be fully enclosed and can be "plugged" into the model.
- Minimum wall thickness: 0.7 mm (see materials).

We check every model before printing. If you need help revising or repairing it, our 3D graphic designers are happy to assist, starting at €65/hour or CHF 120/hour. Please contact our service team.

What wall thicknesses are possible in 3D printing?

The answer depends on the chosen material and the associated 3D printing process. Wall thicknesses range from 0.3 mm in metal printing to 2 mm in CJP printing with polymer gypsum or FDB processes using PMMA plastic or quartz sand. Specific requirements for wall thicknesses can be found on our website under Materials.

What should I consider when designing wall thicknesses?

For optimal model stability, we recommend a minimum wall thickness of 0.8 mm for both internal and external walls. This value, illustrated in the diagram below, refers to SLS printing with PA plastic. Different materials may require varying specifications, detailed on the Materials page.

How thick should embossed and recessed details be?

For accurate reproduction of embossed and recessed details in 3D models, a minimum thickness of 0.5 mm is recommended.

How do I upload my 3D model?

Fill out the contact form, click "Choose File," and upload your data. You will receive an email with further instructions from our customer service within 24 hours.

What 3D file formats can I upload to You?

We can process most common 3D file formats or convert them if needed. The following file types can be processed without additional effort:

*.3DS, *.asc, *.CATPart, *.dxf, *.exp, *.igs, *.model, *.obj, *.ply, *.prt, *.stl, *.stp, *.uvm, *.wrl, *.x_t, *.zpr.

For multicolored models, please send textures in a ZIP or RAR file.

Do I need an STL file for 3D printing?

STL (Surface Tessellation Language) has become the standard format for 3D printing. While some providers require this format, You also supports other file types, such as .obj files. We can also create printable 3D files from 2D data, such as photos or drawings.

What if textures and colors are lost when uploading 3D files?

For formats like .obj, ensure the files are compressed into a single .zip folder before uploading. This should prevent any loss of textures or colors.

What software do I need to create a 3D model?

To create 3D models for printing, you need 3D modeling software. Options range from beginner-friendly tools like Google SketchUp and Smoothie 3D to advanced CAD software like OpenSCad and Blender. For traditional drawing enthusiasts, Sculptiris is recommended. Advanced users may prefer paid programs like AutoCAD and Simplify 3D.

How is the price for a 3D model calculated at You?

The cost is determined by:

- Material volume: total and actual usage for the object.
- Machine runtime required for creating the model.
- Labor involved in the printing process.
- Material chosen for the print (e.g., silver costs more than plastics).
- Machine utilization: optimal scheduling lowers costs, while rush jobs may increase prices.

Will my 3D models be treated confidentially?

We guarantee that your designs and completed 3D models will remain confidential unless you permit otherwise. This can be assured contractually if desired.