

A successful prototyping project begins with the creation of a good .stl file. If the export settings in the CAD program are not set properly, your exported .stl file could have facets which will result in an inferior product. Below are some popular CAD programs and instructions on how to export a quality .stl file from each program.

Alibre

- File
- Export
- Save As >STL
- Enter File Name
- Save

AutoCAD

- Your design must be a three-dimensional solid object to output an STL file.
- Make sure the model is in positive space
- Set Facetres to 10
- At the command prompt type STLOUT
- Select Objects
- Choose Y for Binary
- Choose Filename

CADKey

- Choose Stereolithography from Export options
- Enter the filename
- Click OK

I-DEAS

- File >Export >Rapid Prototype File >OK
- Select the Part to be Prototyped
- Select Prototype Device >SLA500.dat >OK
- Set absolute facet deviation to 0.000395
- Select Binary >OK

Inventor

- Save Copy As
- Select STL
- Choose Options >Set to High
- Enter File Name
- Save

IronCAD

- Right Click on the part
- Part Properties >Rendering
- Set Facet Surface Smoothing to 150
- File >Export
- Choose .STL

ProE

- File >Save a Copy
- Set type to STL
- Set chord height to 0. The field will be replaced by minimum acceptable value.
- Set Angle Control to 1
- Choose File Name
- OK

Rhino

- File >Save As
- Select File Type >STL
- Enter a name for the STL file.
- Save
- Select Binary STL Files

SolidDesigner

- File >External >Save STL
- Select Binary mode
- Select Part
- Enter 0.001mm for Max Deviation Distance
- Click OK

SolidEdge

- File >Save As
- Set Save As Type to STL
- Options
- Set Conversion Tolerance to 0.001in or 0.0254mm.
- Set Surface Plane Angle to 45.00
- Save

SolidWorks

- File >Save As
- Set Save As Type to STL
- Options >Resolution >Fine >OK
- Save

Think3

- File >Save As
- Set Save As Type to STL
- Save

Unigraphics

- File >Export >Rapid Prototyping
- Set Output type to Binary
- Set Triangle Tolerance to 0.0025
- Set Adjacency Tolerance to 0.12
- Set Auto Normal Gen to On
- Set Normal Display to Off
- Set Triangle Display to On