

3D printing in Multi Jet Fusion technology – DESIGN GUIDELINES

➤ Hole Diameter

Minimum hole diameter is \varnothing 1 mm.

➤ Shaft Diameter

Minimum shaft diameter is \varnothing 1 mm.

➤ Wall Thickness

Minimum wall thickness is 0,5 mm for walls shorter than 10 mm. However we recommend a wall thickness of at least 1 mm.

➤ Printable Font Size

Minimum font size is 2,5 mm (7 pt) to ensure the readability of the printed text.

➤ Printable details

The smallest details are visible from a feature width of 0,2 mm.

➤ Slit between walls/embossed details

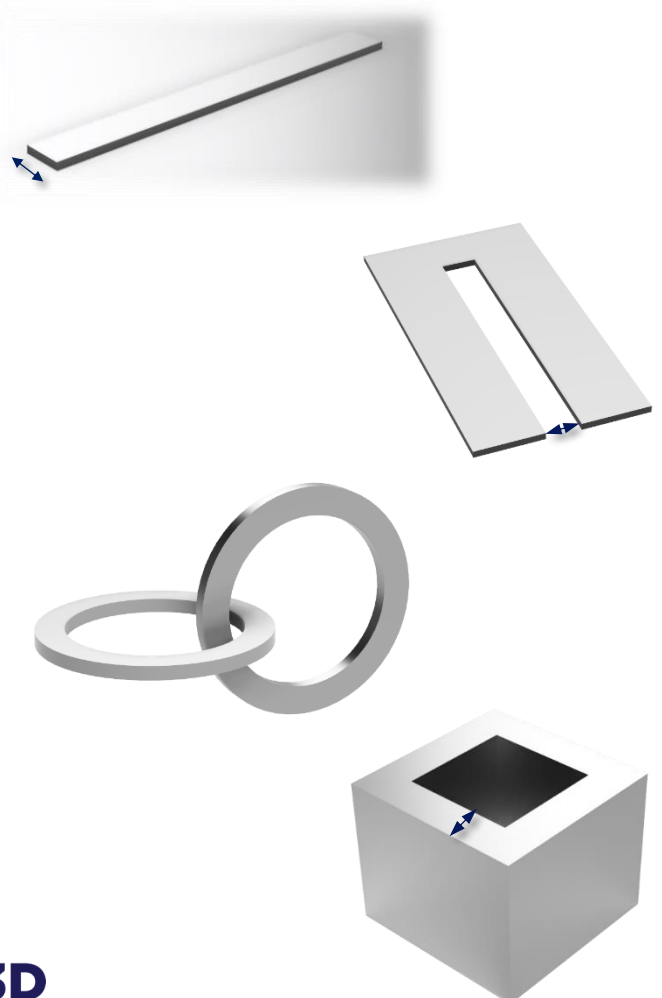
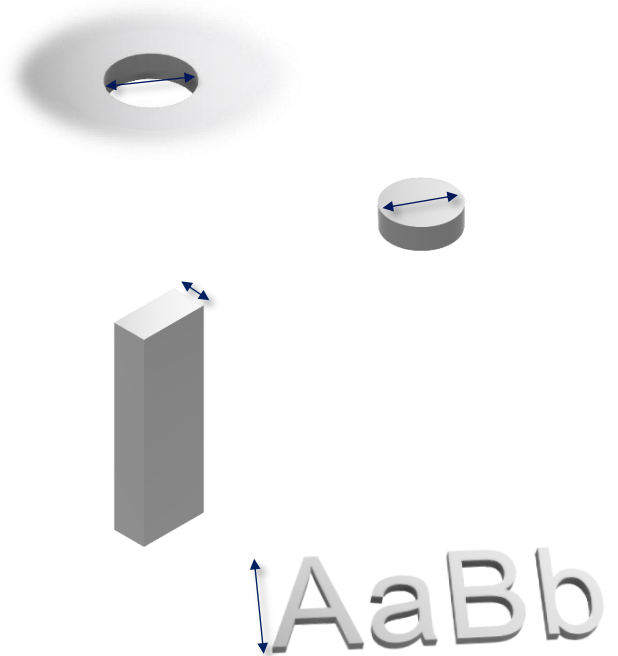
Minimum slit between features is 0,5 mm to provide space between the details

➤ Interlocking parts

You can print moving parts as assemblies with space between walls of 0,5 mm.

➤ Hollowing

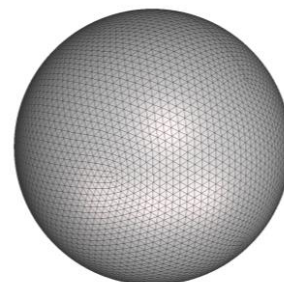
To optimize costs you can hollow the model with the minimum wall thickness of 2 mm.



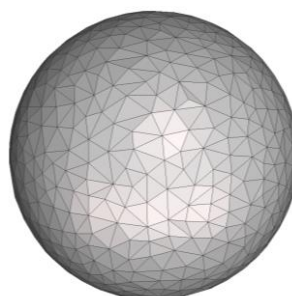
Exporting a model from CAD to STL

The quality of your STL files directly affects the outcome of your 3D printed parts. Good mesh quality ensures smooth surfaces and accurate detail.

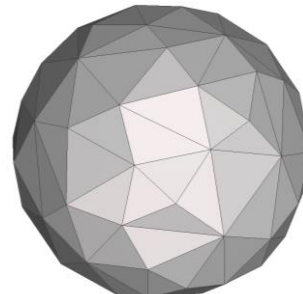
Keep in mind that with higher accuracy increases file size which may result in slower data transfer and processing. Further increases in mesh quality will not affect the print quality.



HIGH



MEDIUM



LOW

Deviation chord height

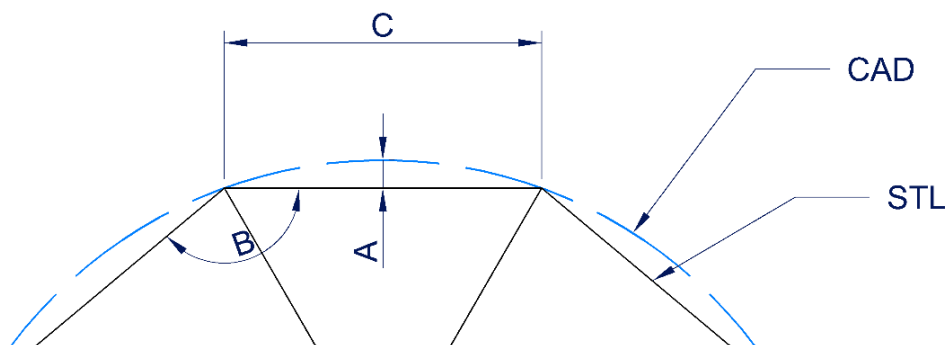
The deviation chord height is the maximum distance between the geometry of the 3D model and the surface of the STL file. A smaller deviation chord height results in a more accurate surface.

The recommended value for the chord height is 0.05 mm.

Angle tolerance

The angle tolerance is the maximum angle between the normal vectors of adjacent triangles.

The recommended value for the angle tolerance is 1.



- A - Deviation chord height
- B - Angle tolerance
- C - Mesh size