

## PROPERLY PREPARE YOUR FILE FOR 3D PRINTING

To guarantee the best possible result for your 3D project it is very important that the model file is prepared correctly, as **it will not be possible to verify the file you send**.

We recommend you read the specifications and make sure your file meets them.

### ACCEPTED FILE FORMATS

If you want a color print, accepted file formats are: .3mf / .wrl

If you want a monochromatic print (gray) the accepted file formats are: .stl / .obj

### RECOMMENDED MODELING SOFTWARE

The software recommended for preparing the print file are: Solidworks, NX, Rhino, Inventor, Maya, Blender, Catia. The recommended software for optimization and job preparation (mesh creation) are: 3D Builder, Netfabb, Magics, 3-matic, N-Topology, Rhino.

### ORIENTATION OF THE OBJECT

The object to be printed must be oriented so that the side that must have a higher visual quality is facing downwards. It is also important to consider that geometric figures (e.g. circles, rectangles, etc.) will be more precise if positioned in the XY plane.

In the event that the file contains geometric figures on several sides, the figure that must have the highest priority must be oriented facing downwards.

### WALL THICKNESS

The minimum thicknesses accepted for monochromatic parts are 0.3 mm and 0.5 mm.

The minimum thicknesses accepted for coloured parts are 0.5 mm and 1 mm.

#### HORIZONTAL PARTS (XY plane)

- The walls of the object to be printed must have a minimum thickness of 0.3 mm for monochromatic short walls oriented in the XY plane.

- The walls of the object to be printed must have a minimum thickness of 0.5 mm for coloured short walls oriented in the XY plane.

#### VERTICAL PARTS (Z plane)

- For monochromatic short walls oriented in the Z plane, the minimum thickness is 0.5 mm.

- For coloured short walls oriented in the Z plane, the minimum thickness is 0.5 mm.

For parts with a high aspect ratio (> 10: 1), it is necessary to increase the wall thickness, or to add ribs or fillets to reinforce the part.

### EMBOSSSED OR DEBOSSSED ENGRAVIN

For the best possible result, any text, number, or drawing included in any part of the object, whether embossed or debossed, should have at least 1 mm of depth or height.

The minimum accepted font size (letters and numbers) is 6 pt (with 100% scale). The positioning rule also applies to engravings: better quality on the lower side.

### CANTILEVER COMPONENTS

For the best possible result, any text, number, or drawing included in any part of the object, whether embossed or debossed, should have at least 1 mm of depth or height. The minimum accepted font size (letters and numbers) is 6 pt (with 100% scale). The positioning rule also applies to engravings: better quality on the lower side.

### DIMINUIRE IL PESO DELL'OGGETTO

To reduce the weight of an object there are two possible solutions:

- Make lattice structures with a minimum gap of 5 mm between the parts of the lattice.
- Prepare drain holes in specific points of the object, so that the unfused material inside can be removed, thus obtaining a hollow object. The minimum diameter of the drain holes is 5 mm.

The model file that the user uploads and sends for quotation must already include these solutions.

### TOLERANCE

To ensure correct assembly between parts after printing, it is necessary to leave gaps of at least 0.5 mm (+/- 0.2 mm tolerance for each part) between interface areas that should fit together.