

3D-Printing

From design to print

*Using the print example of a
"Remote Control Carrier"*



3D Printing of a Product of your Choice

Today's Objective:
Everyone will experience the
3D printing process



Overview of 3D Printing Process

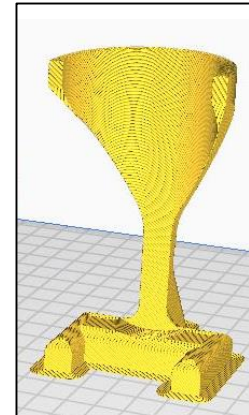
Step 1: Design

3D program or
existing 3D file



Step 2: Slice

convert design
model into gcode
file



Step 3: Print

Start
3D print



Process 3D-Print (Step 1)

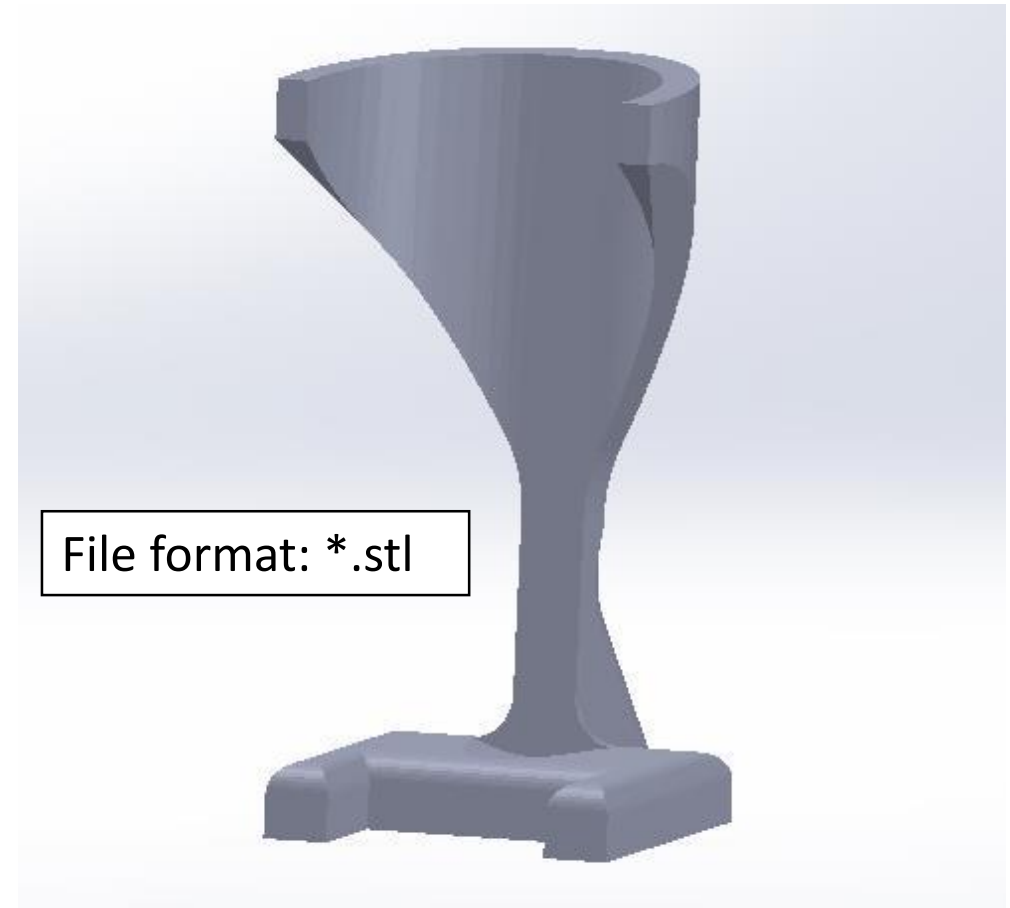
Example: Carrier for a remote control

Step 1: Design

Creating a solid model using CAD software, such as Inventor, Solid Works, TinkerCAD, etc.

Alternative:

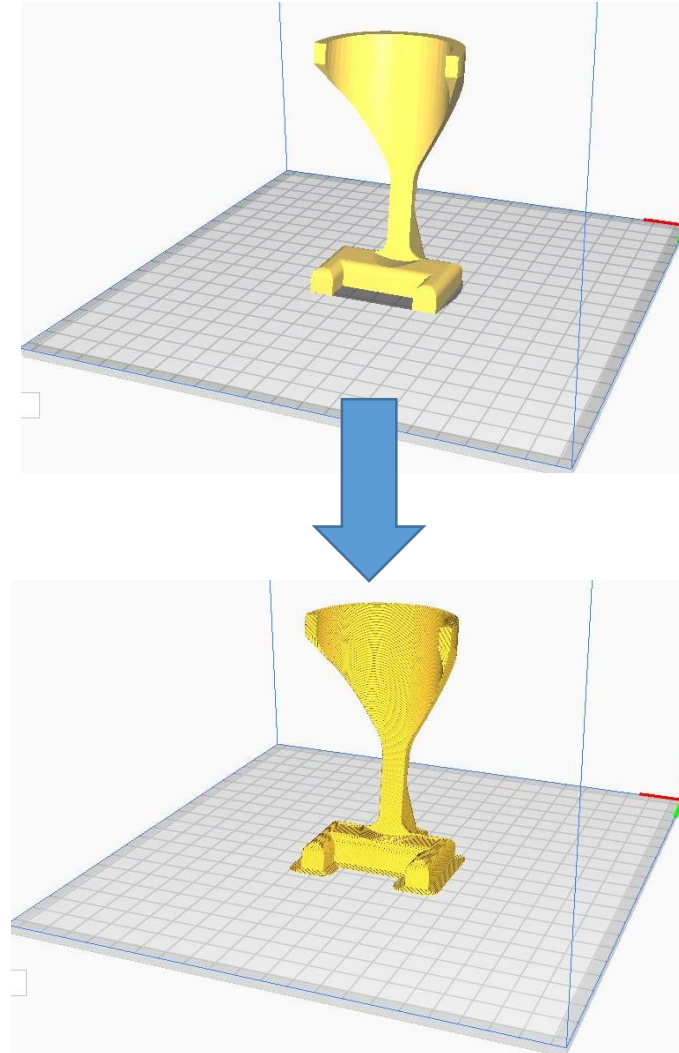
→ download solid models from the Internet. (e.g. www.thingiverse.com, ...)



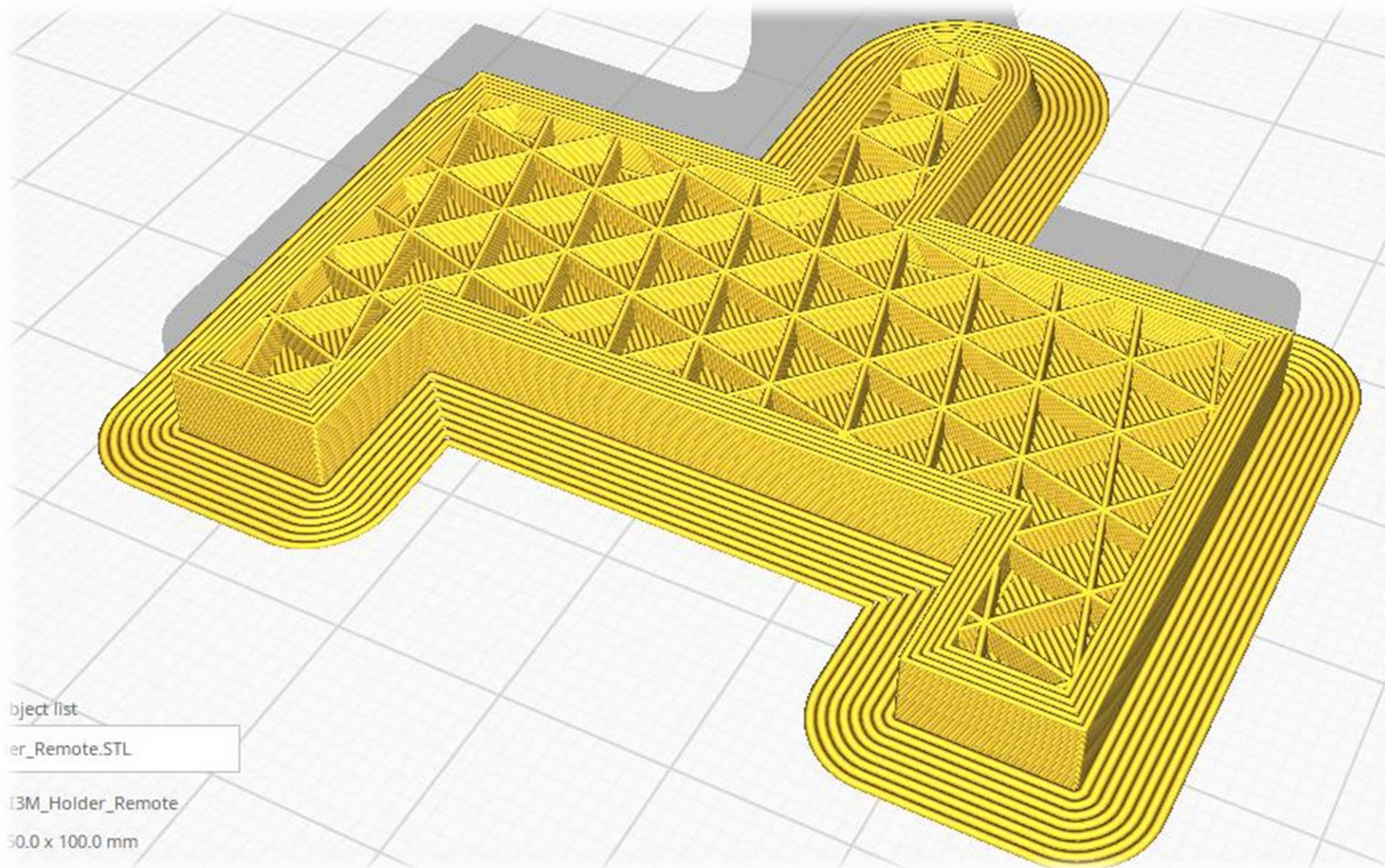
Process 3D-Print (Step 2)

Step 2: Conversion to gcode file (slicing)

The solid model must be converted into a printable path using a slicer software.
(e.g. Ultimaker Cura, Canvas, Prusaslicer).



Process 3D-Print (Step 2) – Slicing example



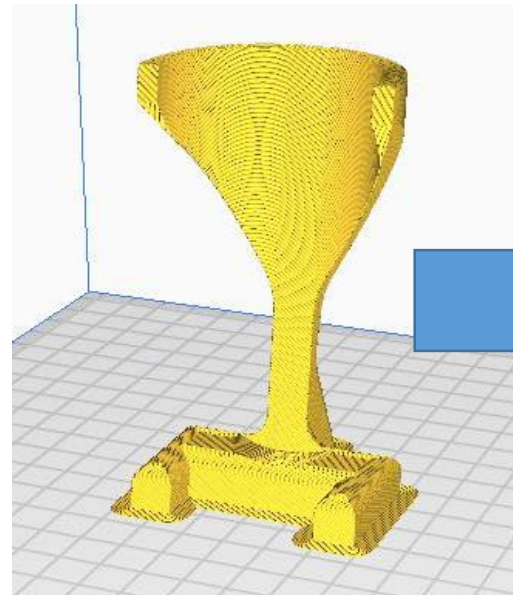
Process 3D-Print (Step 3)

Step 3: Printing

The *.gcode file must be sent to the printer (e.g. via SD card or via octoprint)

and ...

... start printing!

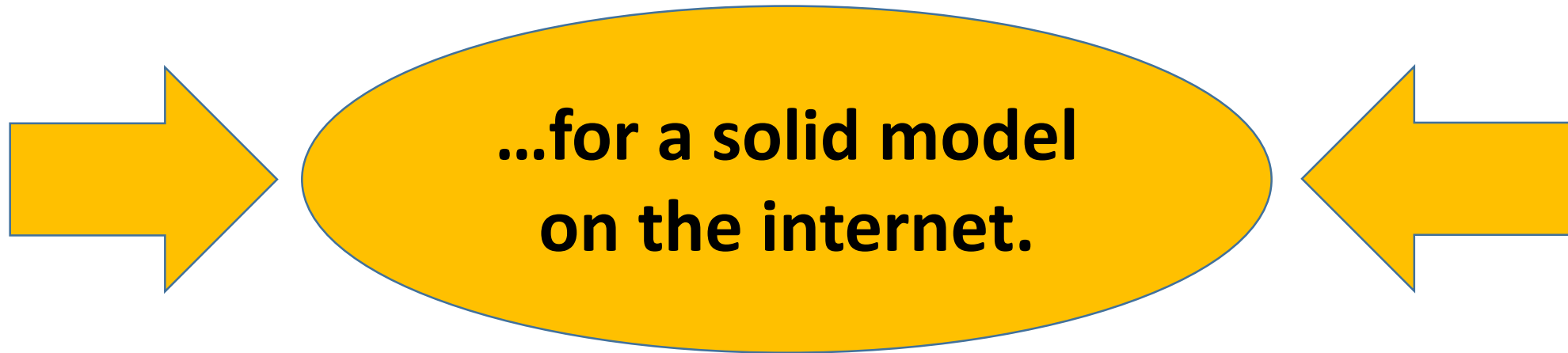


File format: *.gcode



Real 3D product

Now it's up to you to look...



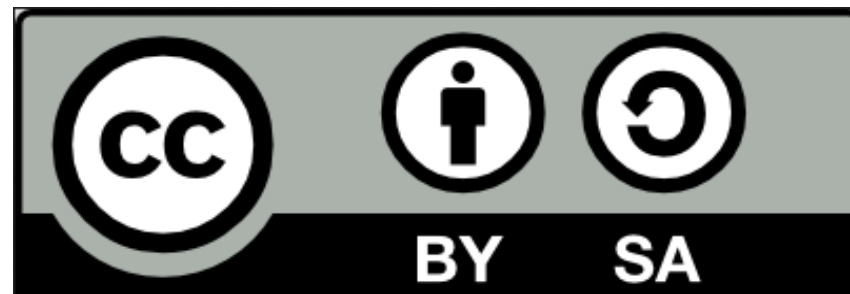
www.thingiverse.com

www.yeggi.com

www.grabcad.com

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- This project has been funded with support from the European Commission.
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Co-funded by the
Erasmus+ Programme
of the European Union

