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3D-Printing

From design to print

Using the print example of a
"Remote Control Carrier"

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3D Printing of a Product of your Choice

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

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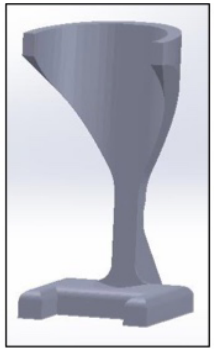
Overview of 3D Printing Process

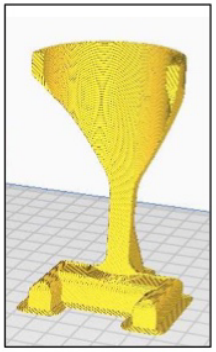
Step 1: Design

3D program or existing 3D file



Step 2: Slice

convert design model into gcode file



Step 3: Print

Start 3D print

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Process 3D-Print (Step 1)

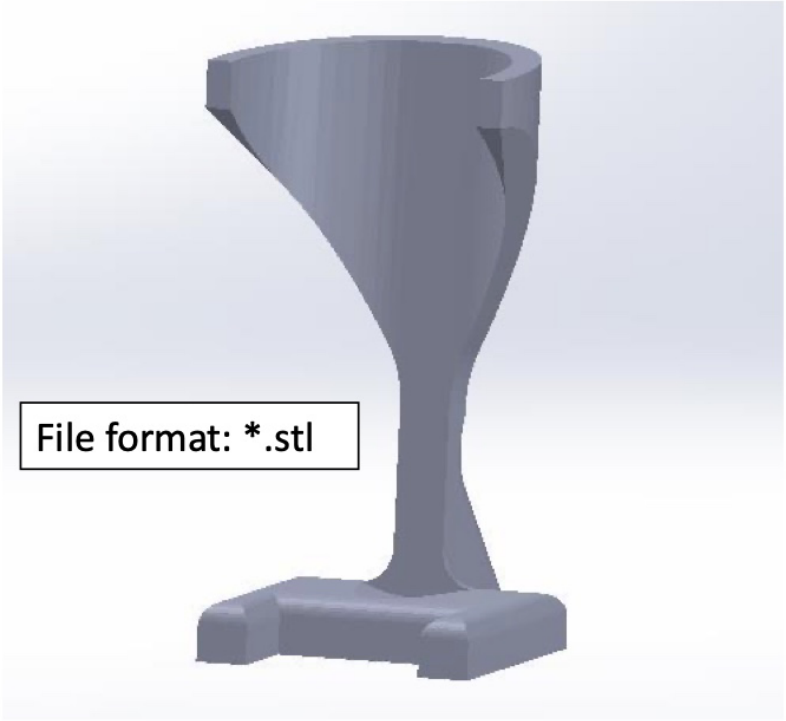
Example: Carrier for a remote control

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, ...)



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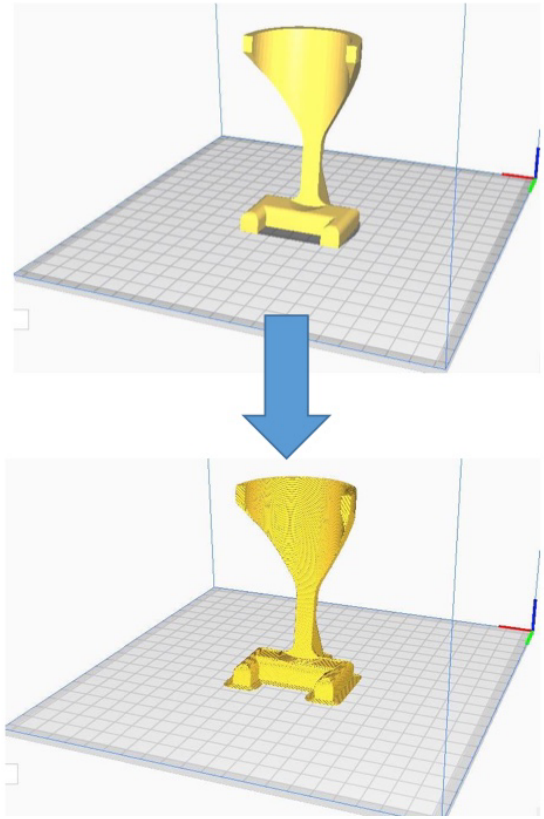
Process 3D-Print (Step 2)

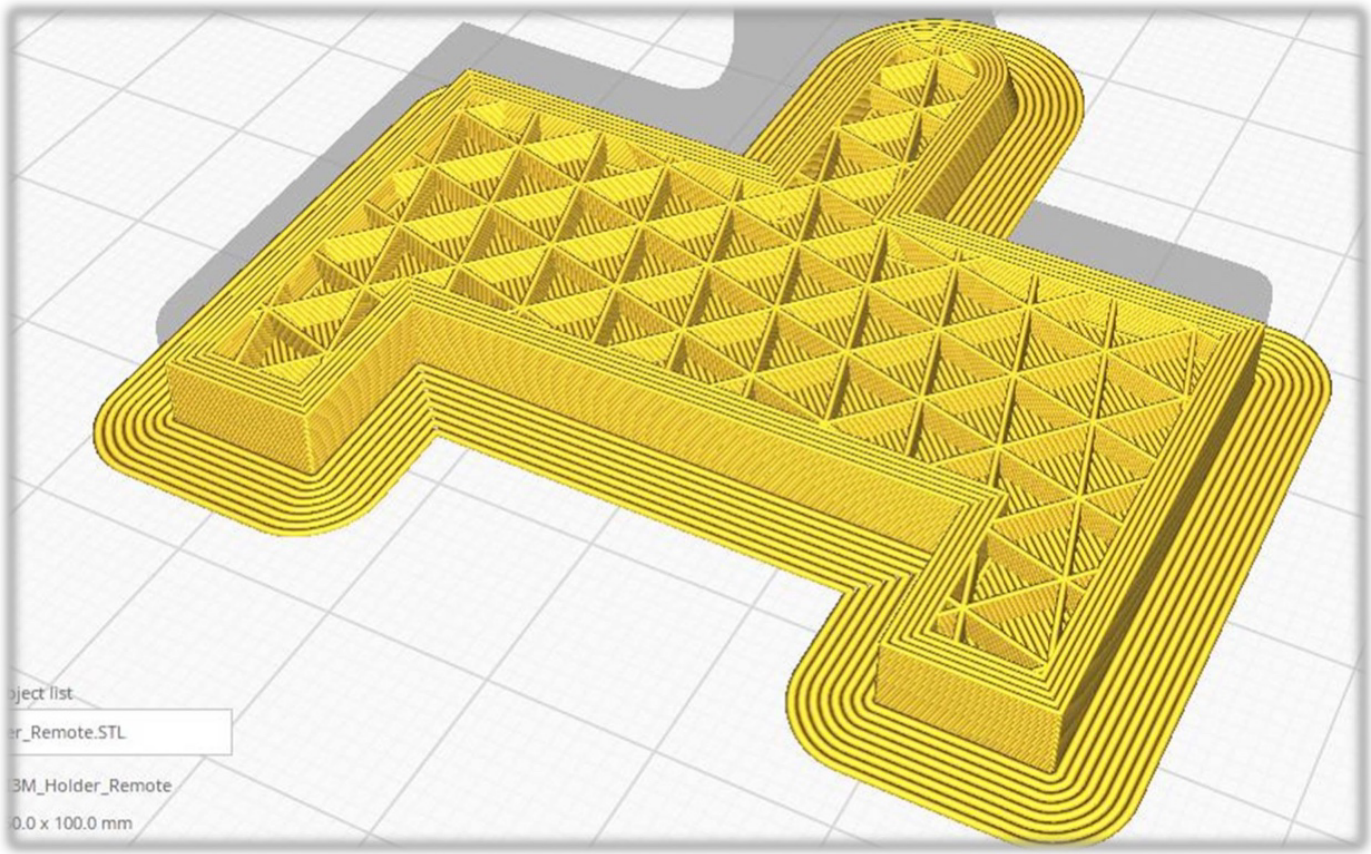
Step 2: Conversion to gcode file (slicing)

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



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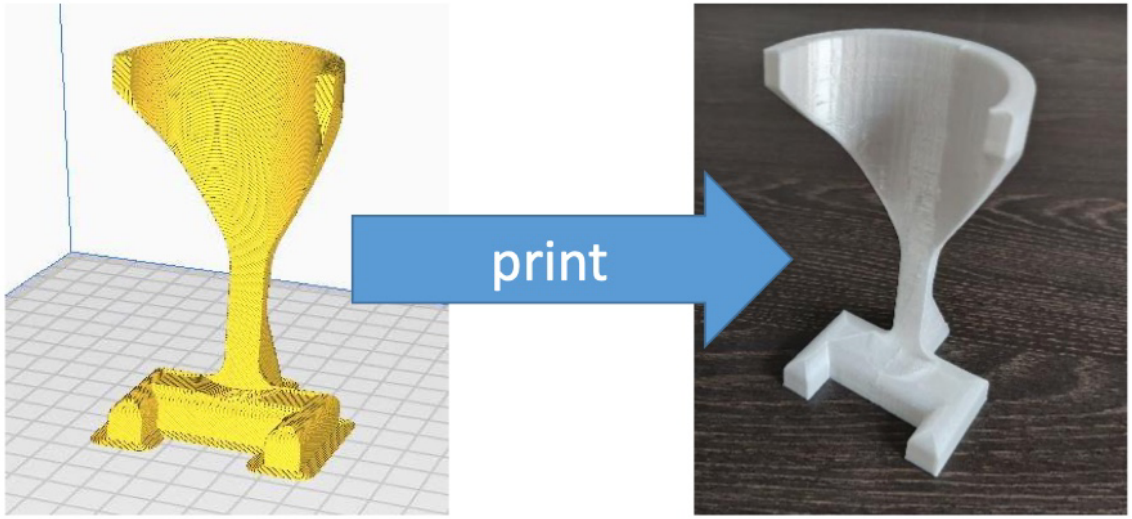
Process 3D-Print (Step 3)

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

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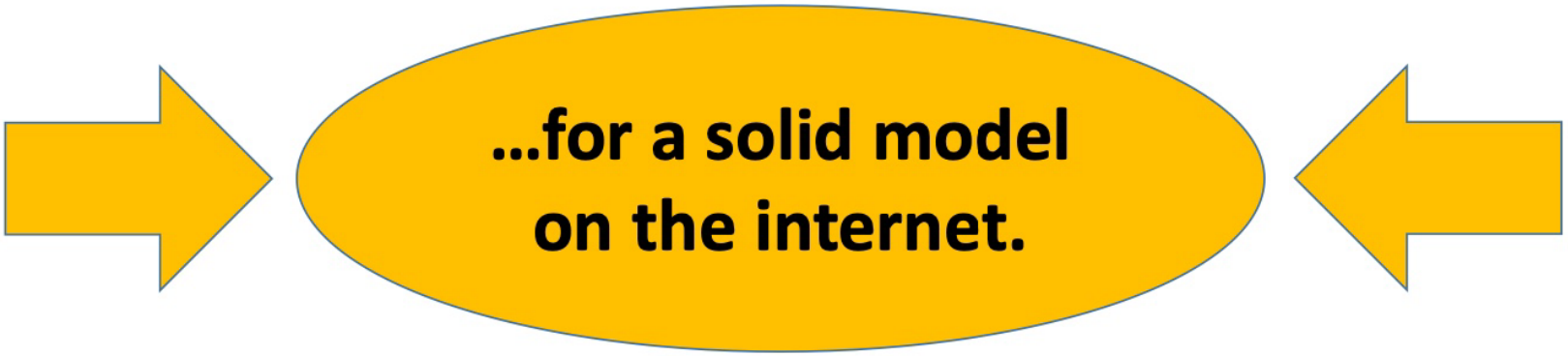
Now it‘s up to you to look...



www.thingiverse.com

www.yeggi.com

www.grabcad.com