



spinderihALLERNE

FABLAB

FabLab

3D-PRINTER ULTIMAKER 2

BRUGERVEJLEDNING BASIC USER GUIDE



Marts 2016 March 2016

PROCESS FORLØB

PROCESS STEPS

3D-PRINTER ULTIMAKER 2

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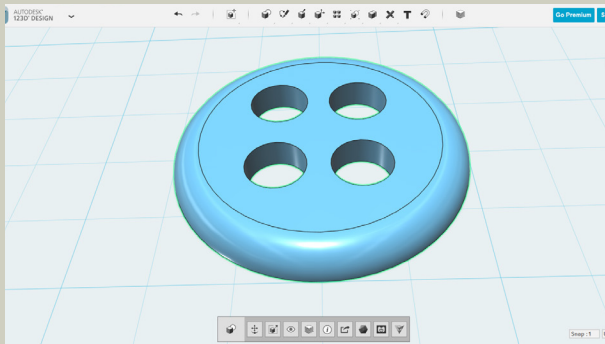


Modeller 3D figur

Model 3D object

1. Skab en 3D-model med CAD-/3D modellerings software som f.eks. 123d Design, Tinkercad, Google Sketchup, Blender, OpenSCAD, FreeCAD, Rhino eller Inventor.

1. Create a 3D-model with a CAD-/3D modeling- software such as for example: 123d Design, Tinkercad, Google Sketchup, Blender, OpenSCAD, FreeCAD, Rhino or Inventor.

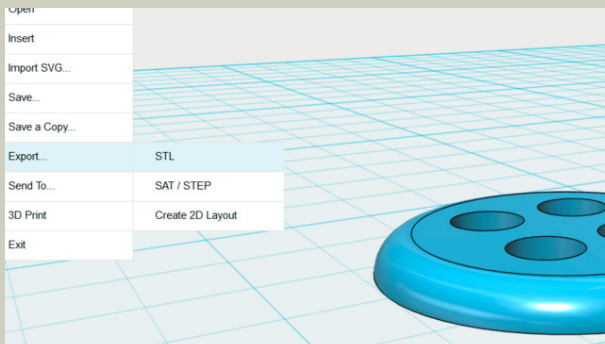


Alternativ: Download en eksisterende model fra en web platform som f.eks. YouMagine, Thingiverse, Yeggi, Instructables etc.

Alternatively: Download an already existing model from a web platform such as: YouMagine, Thingiverse, Yeggi, Instructables etc.

2. "Gem/Eksporter" din 3D-model som .stl format.

2. "Save/Export" your 3D-model as a .stl format

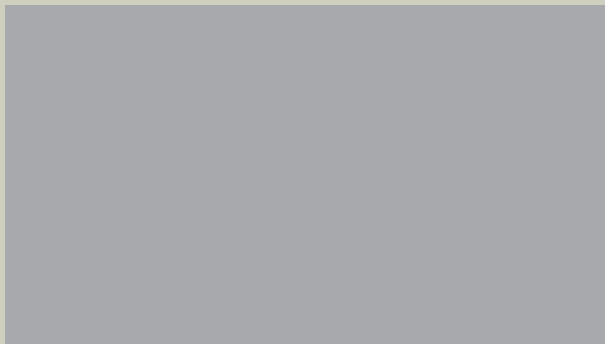


2

Indstil 3D-printerens parametre i CURA Set 3D-printer parameters in CURA

1. Importer din .stl fil til Cura.

1. Import your .stl file into Cura.



2. Vælg en af de følgende predefinerede printindstillinger:

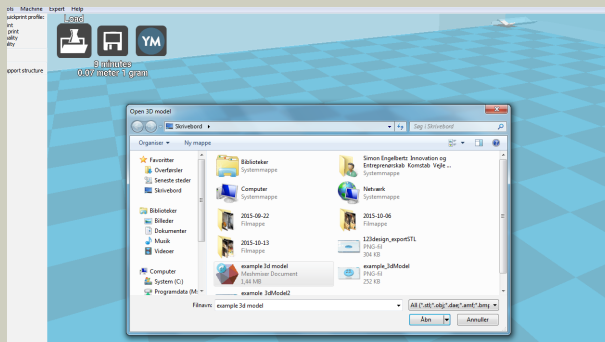
- Fast print
- Normal print
- High quality
- Ulti quality

2. Choose one of the following quality presets:

- Fast print
- Normal print
- High quality
- Ulti quality

3. Vælg "Print support structure" såfremt din model indeholder overflødig materiale (see here for more information about udhæng).

3. Click on "Print support structure" if your model contains any overhang (see here for more information about overhang).



3

Eksporter Gcode til SD kort

Export GCode to SD card

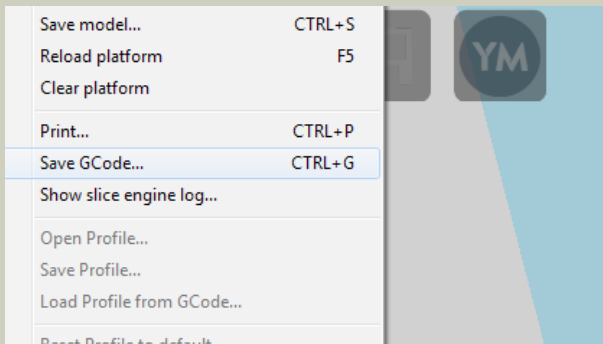
1. Tag SD kortet fra en Ultimaker og indsæt det i din computers SD kortlæser.

1. Insert the SD card from one of the Ultimakers into your computer's SD cardreader.



2. Klik på disk ikonet for at gemme din models GCode på SD kortet, eller gå til "File" og vælg "Save GCode". Vælg herefter SD kortet som drev destination.

2. Click on the disk icon to store the GCode of your model to the SD card OR go to "File" and "Save GCode". Chose the SD card as your destination source.



3. Fjern herefter SD kortet fra din computers kortlæser.

3. Eject SD card from your computer's cardreader.

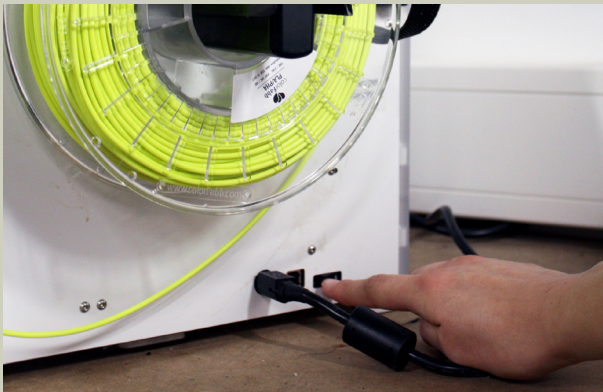


4

Påbegynd 3D-printning Start 3D-printing

1. Tænd 3D-printeren.

1. Turn on the 3D-printer.



2. Tag en limstift. Påfør et tyndt lag lim på glaspladen på det sted, hvor din 3D-model skal printes. Dette vil gøre det nemmere at fjerne din 3D-model fra pladen efter print.

2. Put a thin layer of glue from the glue stick onto the glass plate in the area where your 3D-object will be printed. This will simplify the process of getting off your 3D-object from the glassplate.



3. Tag SD kortet ud af din computers kortlæser og indsæt det i en Ultimaker.

3. Take SD card out of your computer's card reader and put it into the SD slot of one of the Ultimakers.



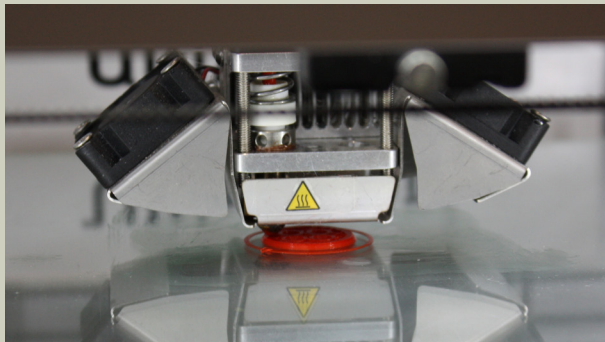
4. Benyt "push" og "rotate" knappen på din Ultimaker for at navigere til "Print" og tryk derefter knappen til "enter". Vælg din fil og tryk på knappen for at påbegynde printprocessen.

4. Use the push and rotate button on the Ultimaker to navigate to "Print" and press Button to enter. Then scroll to your file and press Button to start printing process.



5. Forlad ikke 3D-printeren før din 3D-model er færdigprintet. Hold øje med print processen, så du kan nå at afbryde den, såfremt printet ikke bliver som ønsket.

5. Don't just walk away and wait until the 3D-printer is done with your print. Have an eye on the printing process once in a while in order to be able to intervene early enough if the print is not turning out the way you wanted it to be.



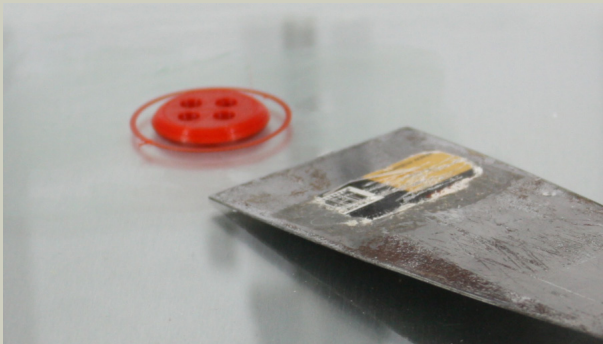
5

Fjern den printede model og sluk for 3D-printeren

Remove printed object and turn of 3D-printer

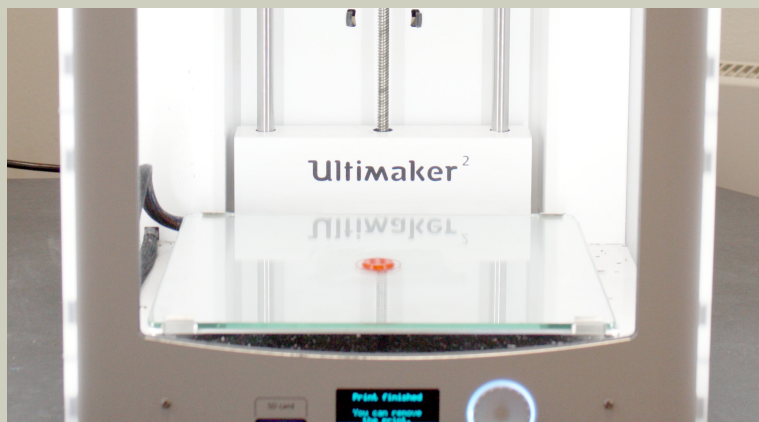
1. Vent 5 minutter med at fjerne din 3D-model fra printpladen, når den er færdigprintet, så den kan nå at køle ned.

1. When the print is done wait for ca. 5 minutes before you take your printed 3D-object from the printing plate in order for the printing plate to cool down.



BASIS SPECIFIKATIONER BASIC SPECS

3D-PRINTER ULTIMAKER 2



Specifikationer for Ultimaker 2

Print teknologi	Fused filament fabrication (FFF)
Bygge volumen	23 x 22,5 x 20,5 cm
Lag opløsning	- 20 mikrometre (ultrahøj opløsning) - 60 mikrometre (høj opløsning) - 100 mikrometre (medium opløsning) - 200 mikrometre (lav opløsning)
Glødetrådens diameter	2.85 mm
Dyse diameter	0.4 mm
Print hastighed	30 mm/1 - 300 mm/s
Rejse hastighed	30 mm/1 - 350 mm/s
Fil typer	STL / OBJ / DAE / AMF
Support til netværksoperativsystem	Windows (XP 32 bit / 7+), Ubuntu Linux (12.04+) & Mac OS X (10.6 64bit +)

Find flere informationer omkring Ultimaker 2 her: <https://ultimaker.com/en/support/view/16554-user-manual>

Specifications for Ultimaker 2

Print technology	Fused filament fabrication (FFF)
Build Volume	23 x 22,5 x 20,5 cm
Layer resolution	- 20 micrometre (Ultra high resolution) - 60 micrometre (High resolution) - 100 micrometre (Medium resolution) - 200 micrometre (Low resolution)
Filament diameter	2.85 mm
Nozzle diameter	0.4 mm
Print speed	30 mm/1 - 300 mm/s
Travel speed	30 mm/1 - 350 mm/s
File types	STL / OBJ / DAE / AMF
Operating system support	Windows (XP 32 bit / 7+), Ubuntu Linux (12.04+) & Mac OS X (10.6 64bit +)

For more details about the Ultimaker 2 specs have a look here: <https://ultimaker.com/en/support/view/16554-user-manual>

