



3D

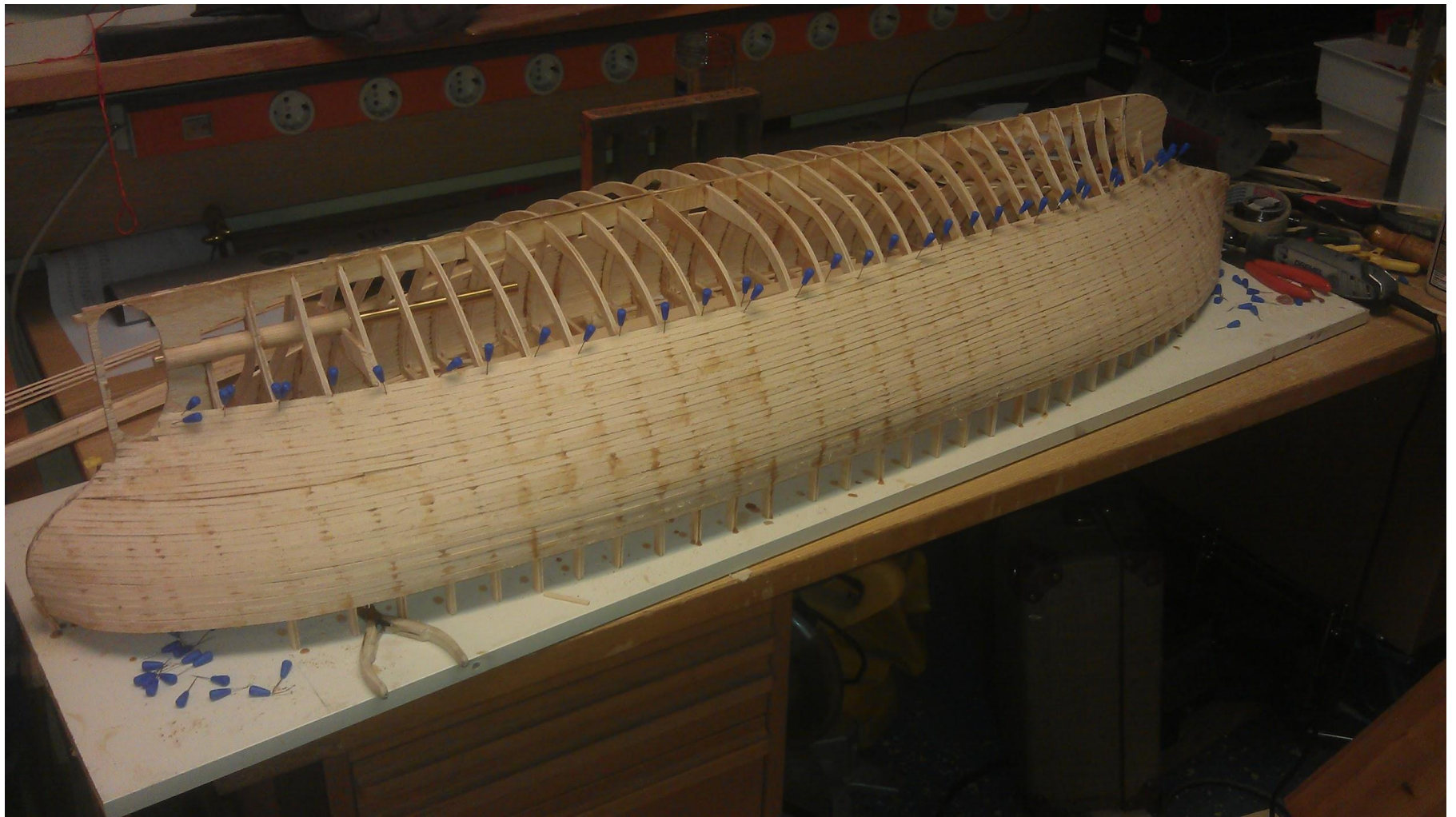
XYZ

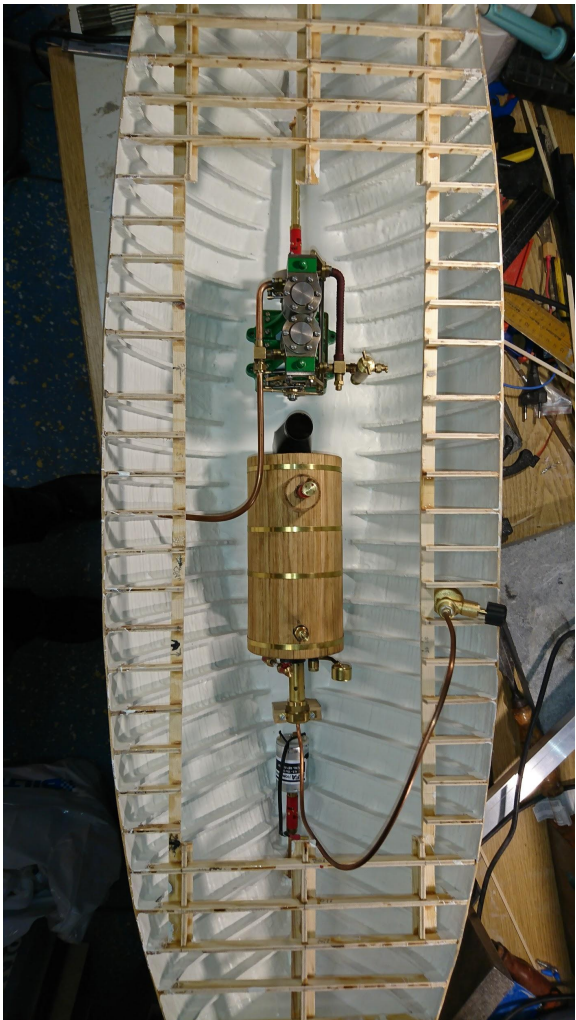
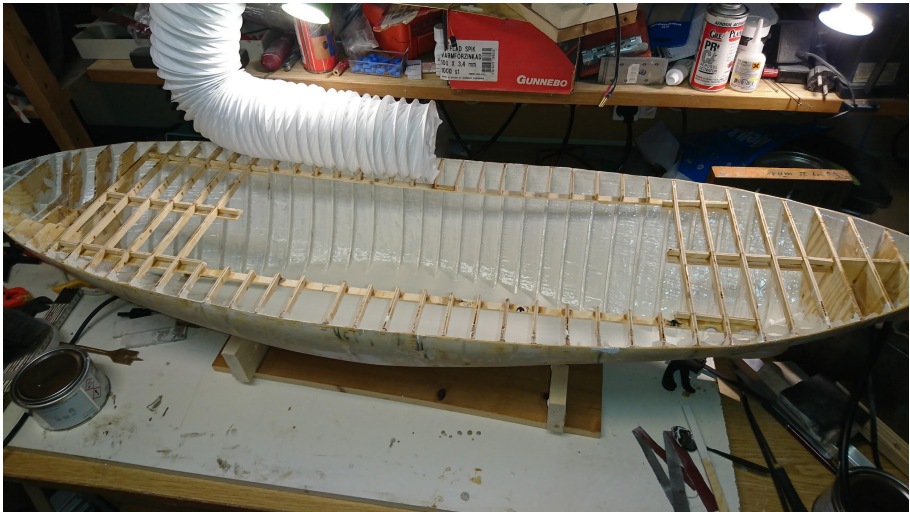
kjell.rothin@gmail.com



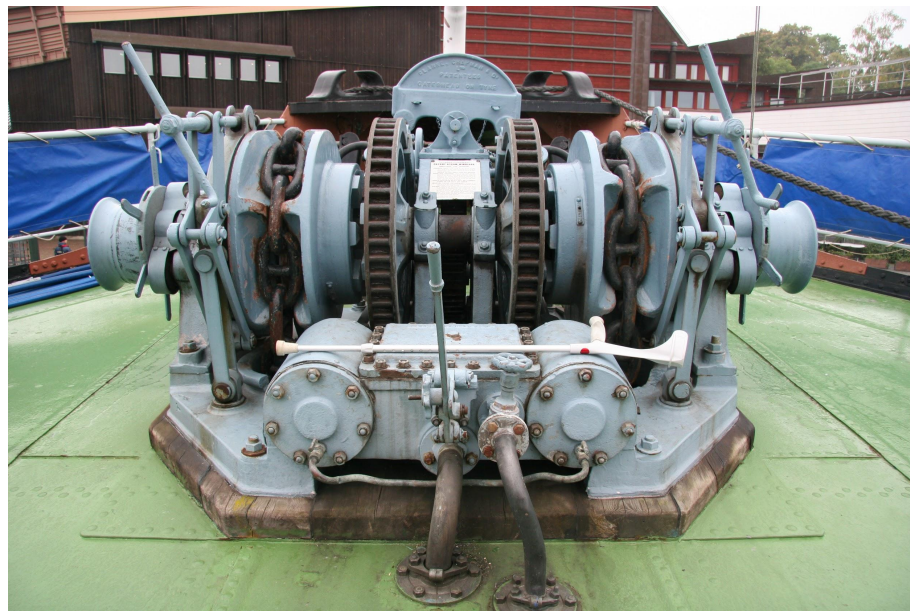


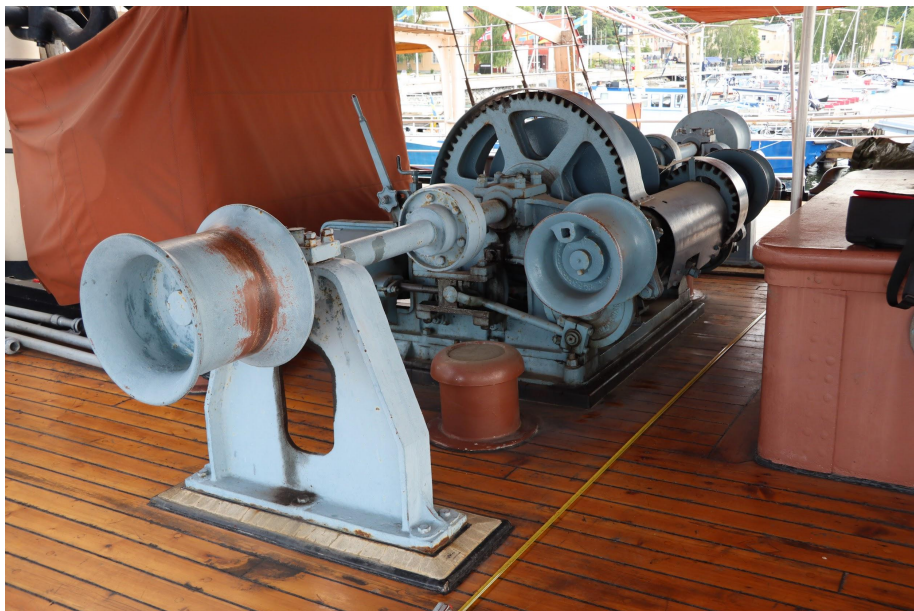












Fusion 360

Autodesk Fusion 360 interface showing a sketch of a rectangular part with dimensions 77.50 and 100.00. The interface includes a left sidebar with a file list, a top toolbar with various tools (DESIGN, SOLID, SURFACE, SHEET METAL, TOOLS, SKETCH, CONSTRAINTS, INSPECT, INSERT, SELECT, FINISH SKETCH), and a right sidebar with a SKETCH PALETTE and options.

Left Sidebar (File List):

- Sankt Erik
 - Brador 1/28/19 (Read-Only) V3
 - Brador 80 1/30/19 (Read-Only) V2
 - Dack 1/25/19 (Read-Only) V5
 - Dackskrök 1/18/19 (Read-Only) V4
 - Dackskrök 244 1/22/19 (Read-Only) V1
 - Dackskrökx6 1/21/19 (Read-Only) V3
 - Ek 115x40x5 1/18/19 (Read-Only) V4
 - Pollare2 12/12/19 (Read-Only) V1
 - Pollare botten 12/27/19 (Read-Only) V1
 - Pollare top 2 12/28/19 (Read-Only) V2
 - Pollare Top v2 9/1/17 (Read-Only) V1
 - Spel Stor 1/31/21 (Editable) V13
 - Test 1/16/19 (Read-Only) V1
 - Test plast 2/5/19 (Read-Only) V2

Top Toolbar:

- DESIGN (Dropdown)
- SOLID (CREATE)
- SURFACE (CREATE)
- SHEET METAL (CREATE)
- TOOLS (MODIFY)
- SKETCH (CREATE)
- CONSTRAINTS (MODIFY)
- INSPECT (MODIFY)
- INSERT (MODIFY)
- SELECT (MODIFY)
- FINISH SKETCH (MODIFY)

Right Sidebar (SKETCH PALETTE):

- Options
 - Linetype ☐
 - Look At ☐
 - Sketch Grid ☒
 - Snap ☒
 - Slice ☒
 - Show Profile ☒
 - Show Points ☒
 - Show Dimensions ☒
 - Show Constraints ☒
 - Show Projected Geometries ☒
 - 3D Sketch ☐
- Finish Sketch

Sketch Details:

- Part: Spel Stor v13
- Dimensions: 77.50 (width), 100.00 (height)
- Sketch Type: 2D
- Sketch Plane: TOP

Data People

Upload New Folder

Sankt Erik

Brädror
1/28/19
Read-Only V3

Brädror 80
1/30/19
Read-Only V2

Däck
1/25/19
Read-Only V5

Däckskrok
1/18/19
Read-Only V4

Däckskrok 244
1/22/19
Read-Only V1

Däckskroks6
1/21/19
Read-Only V3

Ek 115x40x5
1/18/19
Read-Only V4

Pollare2
12/12/19
Read-Only V1

Pollare botten
12/27/19
Read-Only V1

Pollare top 2
12/28/19
Read-Only V2

Pollare Top v2
9/1/17
Read-Only V1

Spel Stor
1/31/21
Editable V13

Test
1/18/19
Read-Only V1

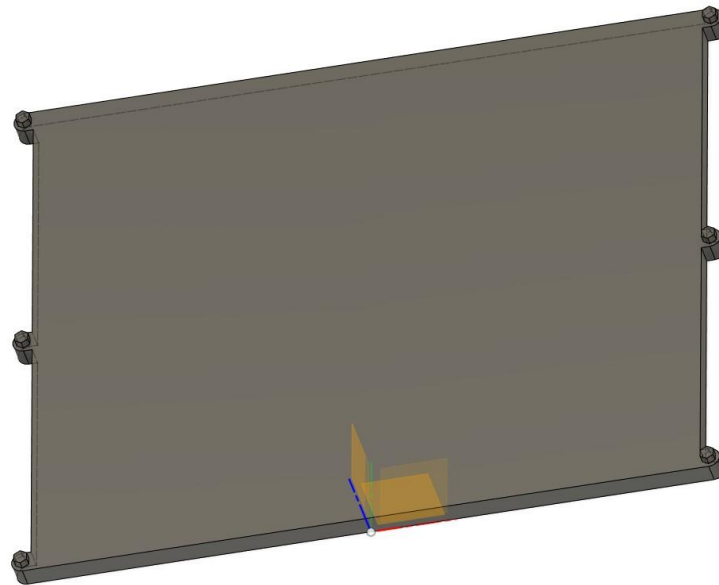
Test plast
2/5/19
Read-Only V2

DESIGN



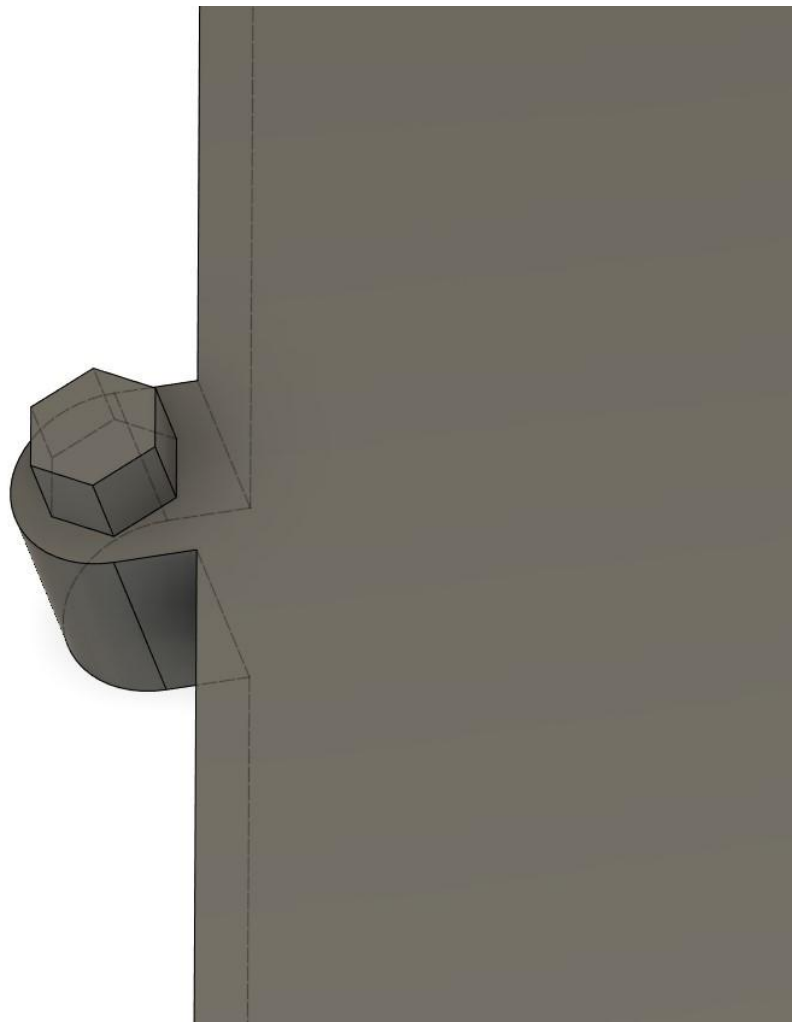
BROWSER

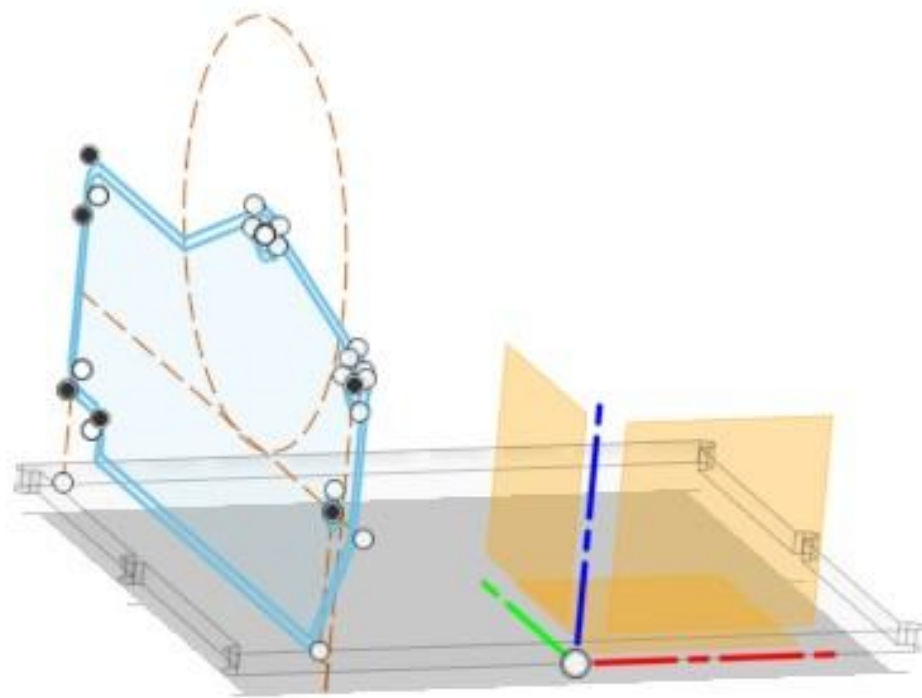
- Spel Stor v13
 - Document Settings
 - Named Views
 - Selection Sets
 - Origin
 - Bodies
 - Sketches
 - Construction
 - Sida1:1
 - Sida1(Mirror):1
 - Sida2:1
 - Sida2(Mirror):1
 - Trumma1:1
 - Trumma2:1
 - Skiva:1
 - Kugghyl1:1
 - Axel1:1
 - Trumma3:1
 - Axel2:1
 - Axel3:1
 - Kugghyl2 (1):1

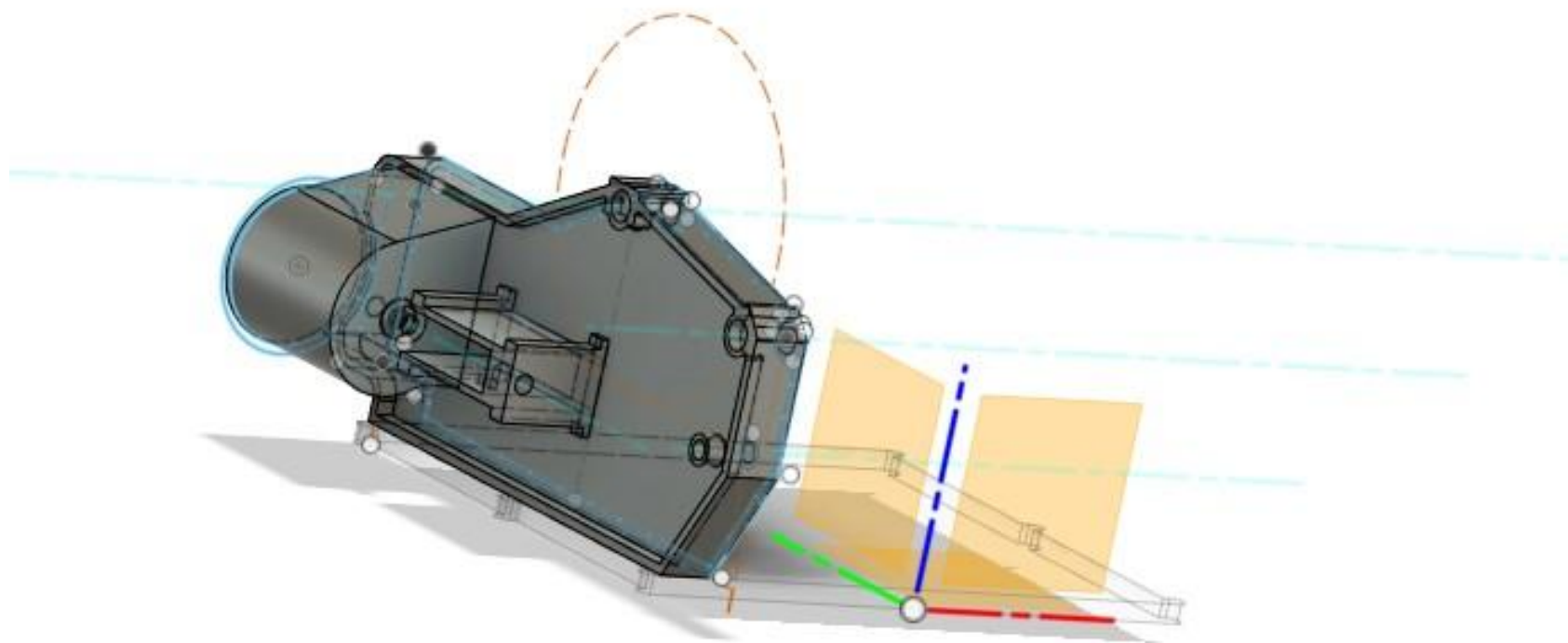


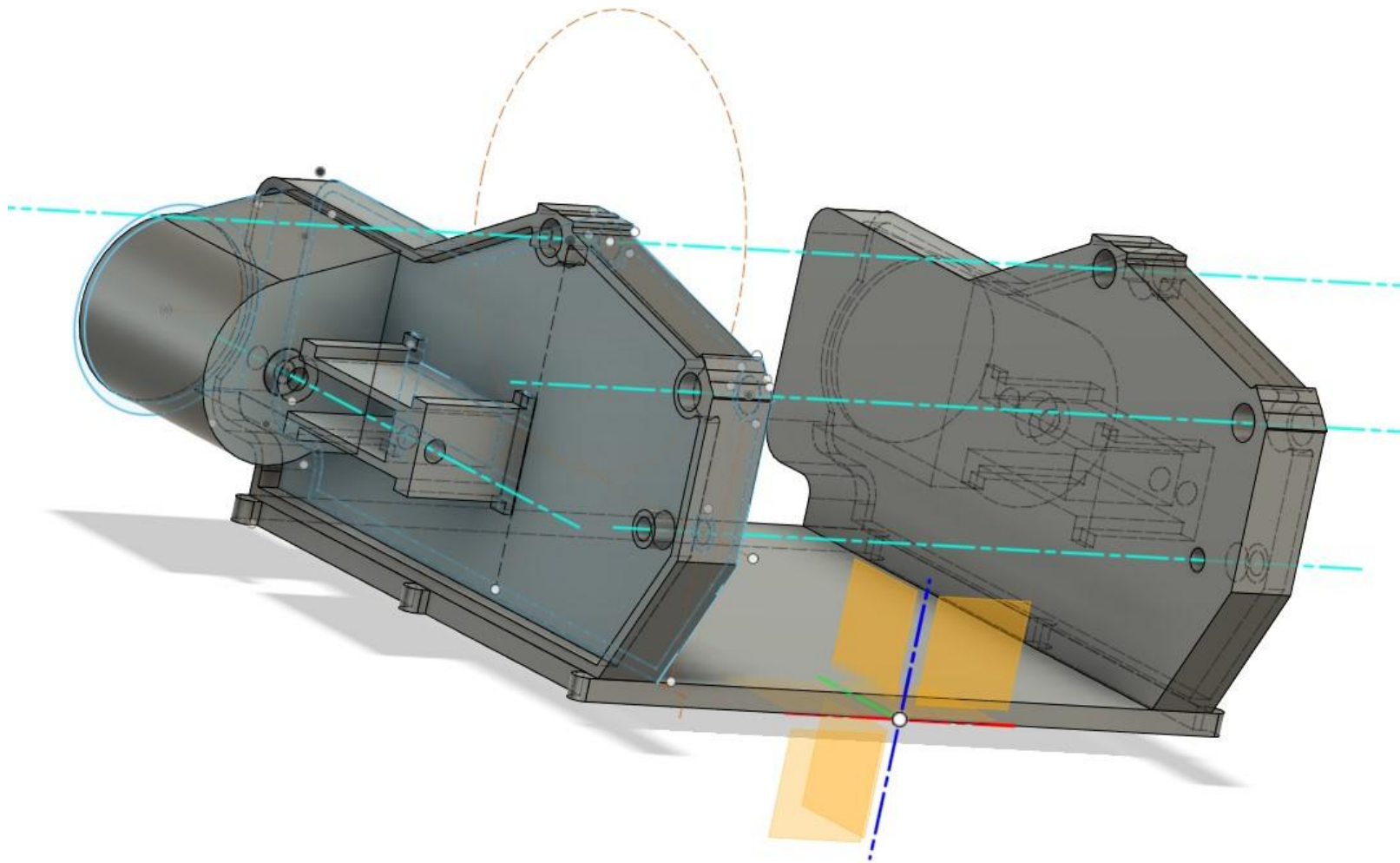
COMMENTS

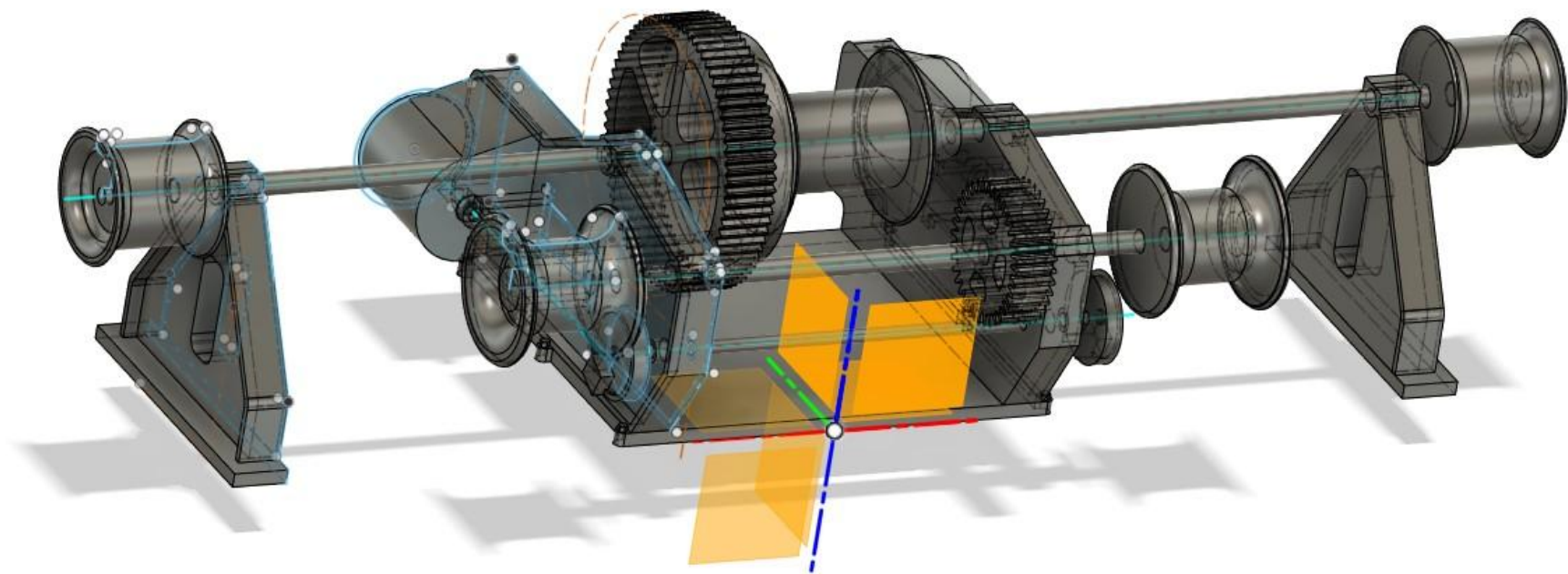


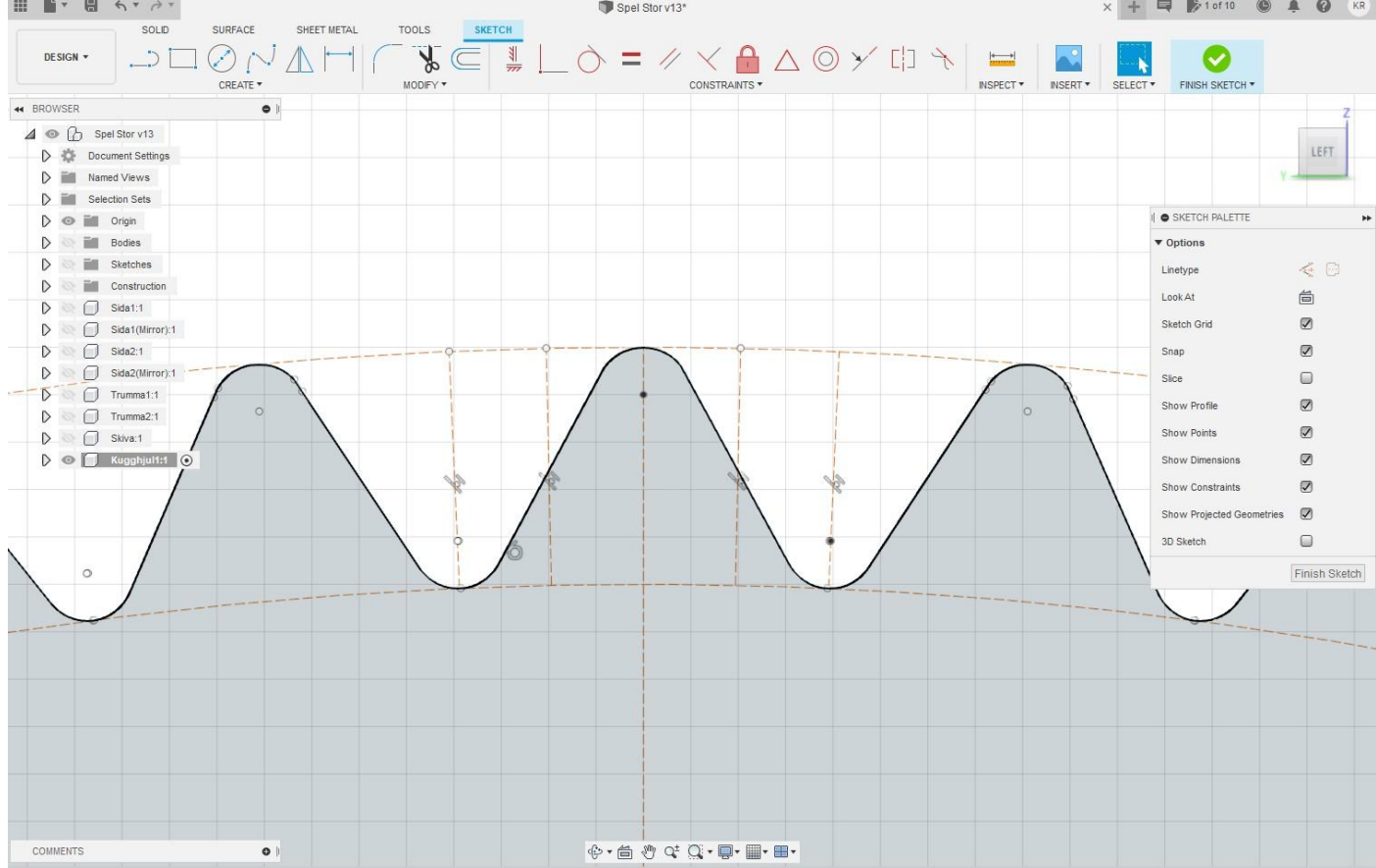




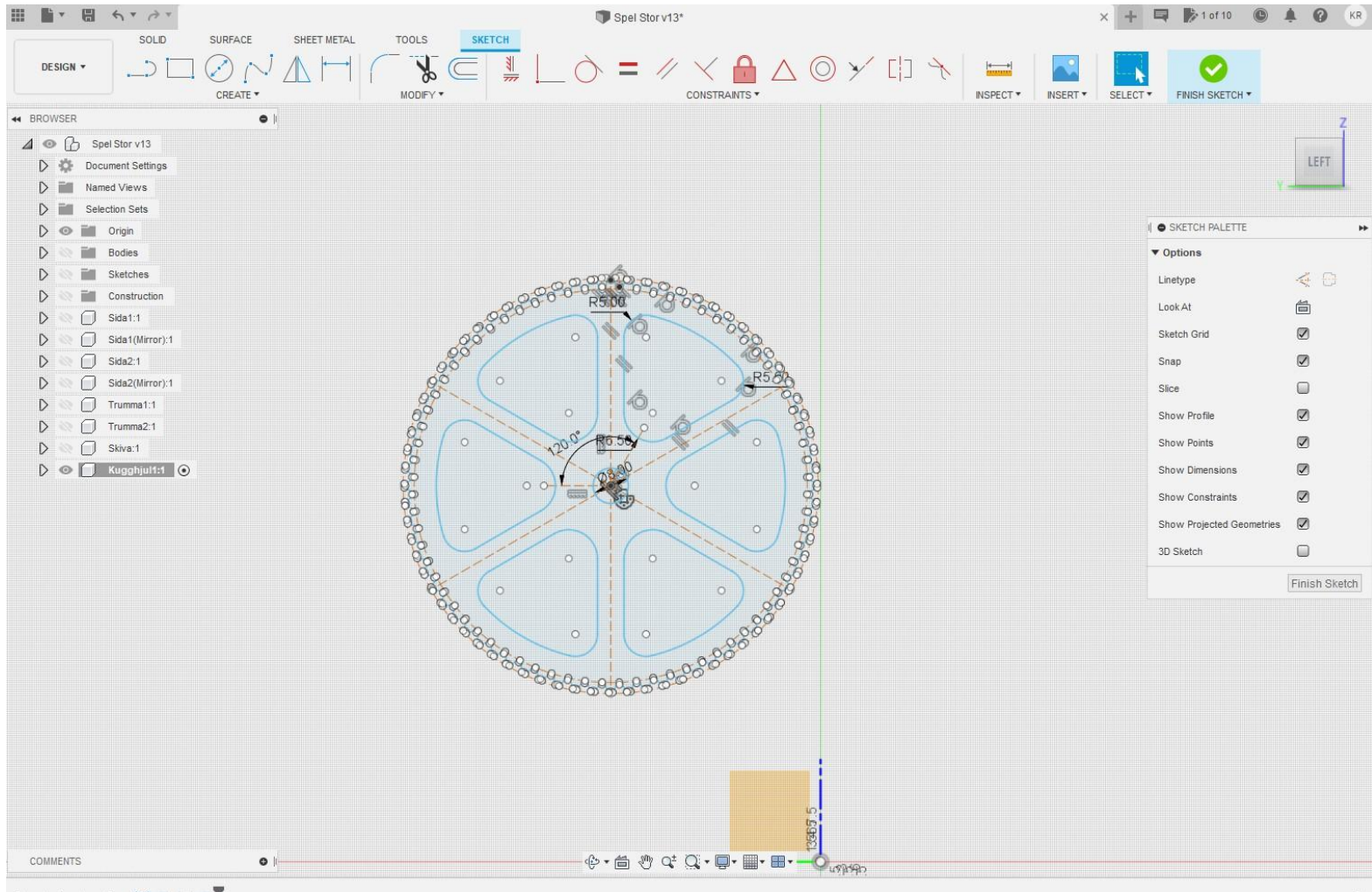


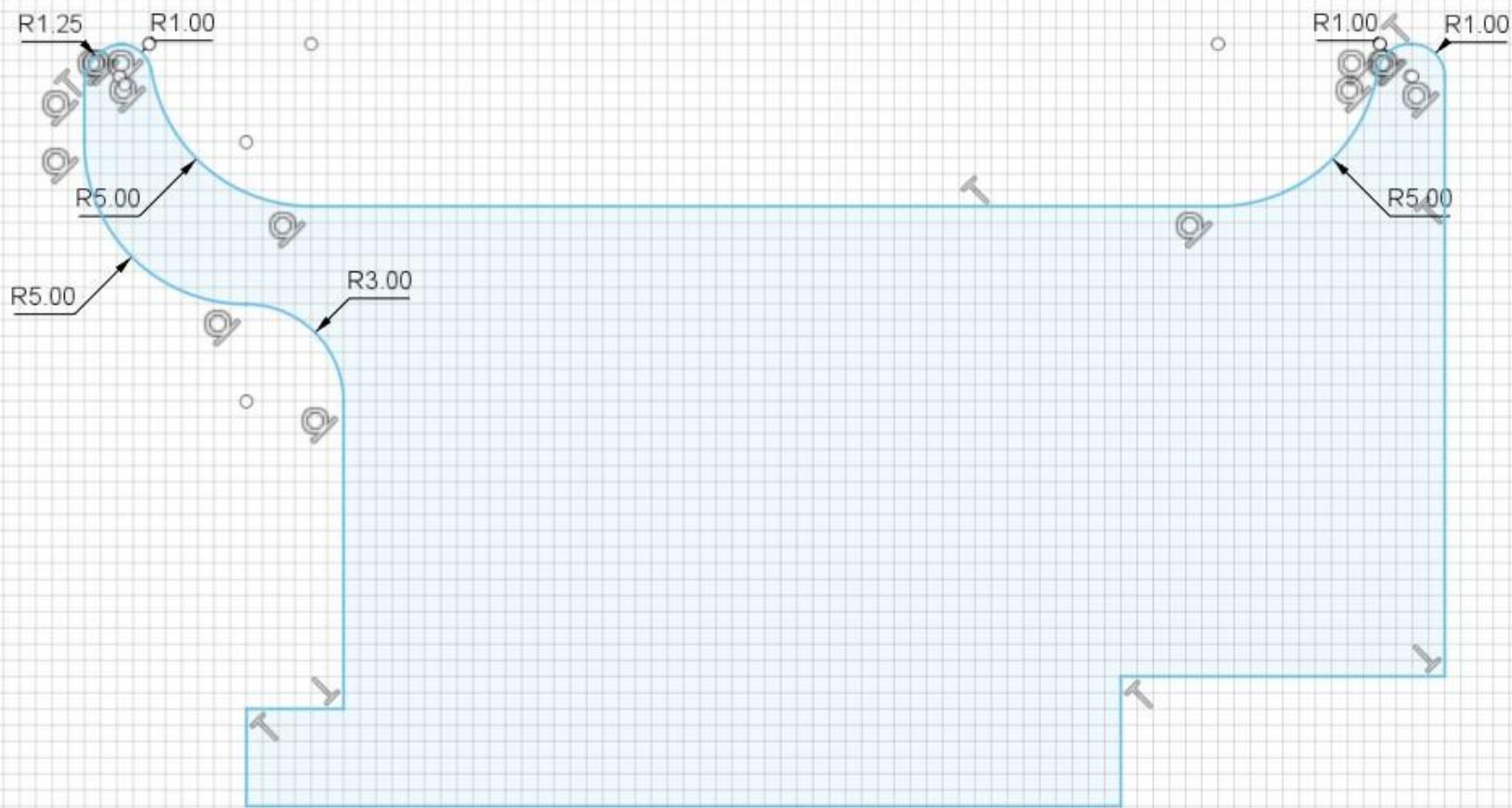






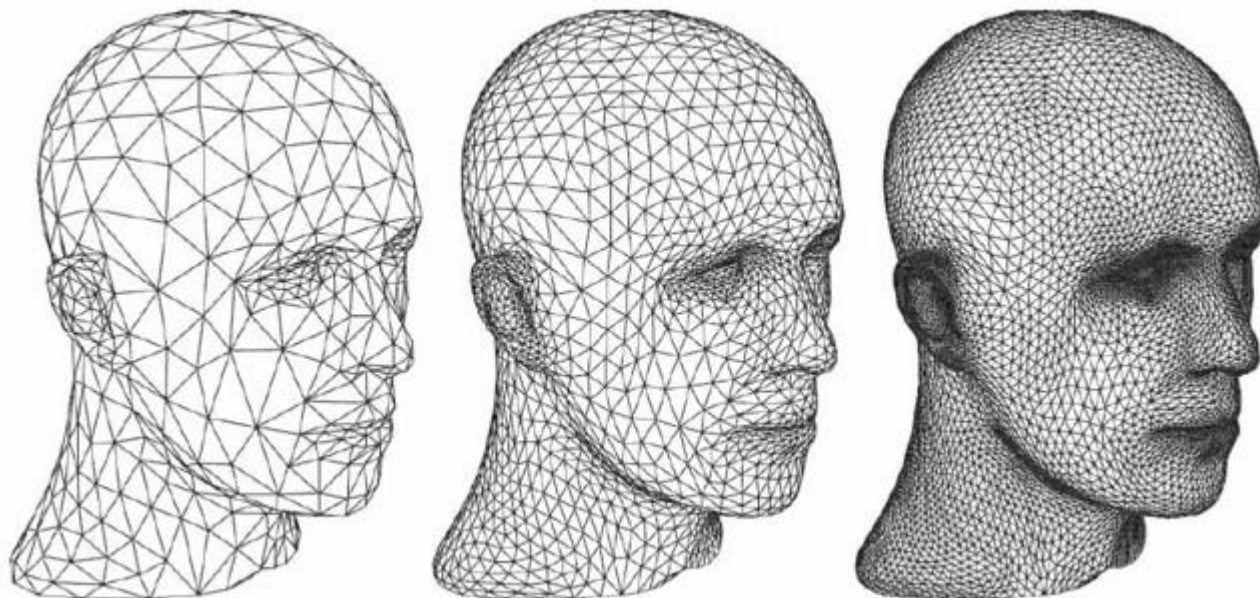
Circular Pattern







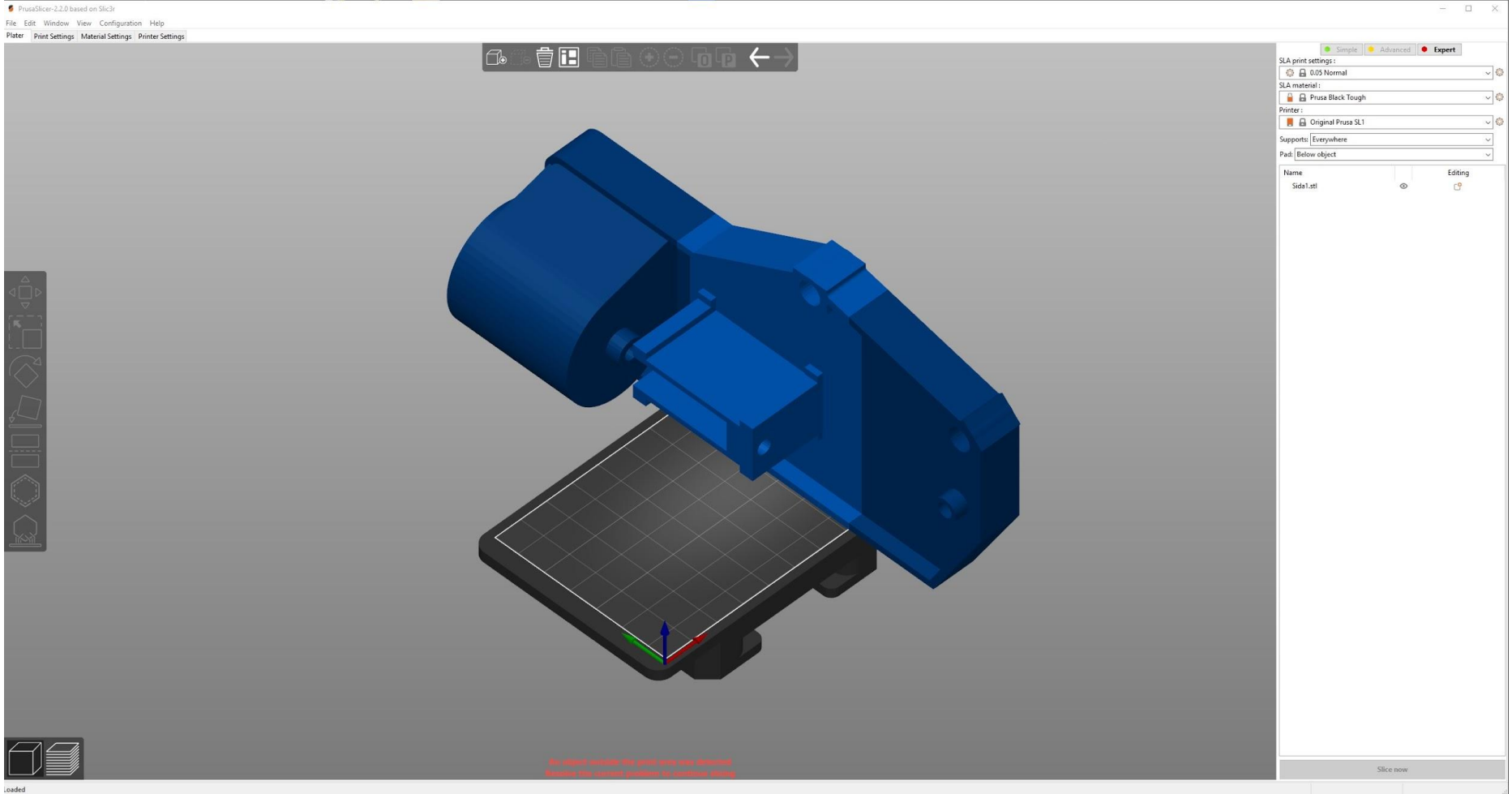
Revolve



STL fil

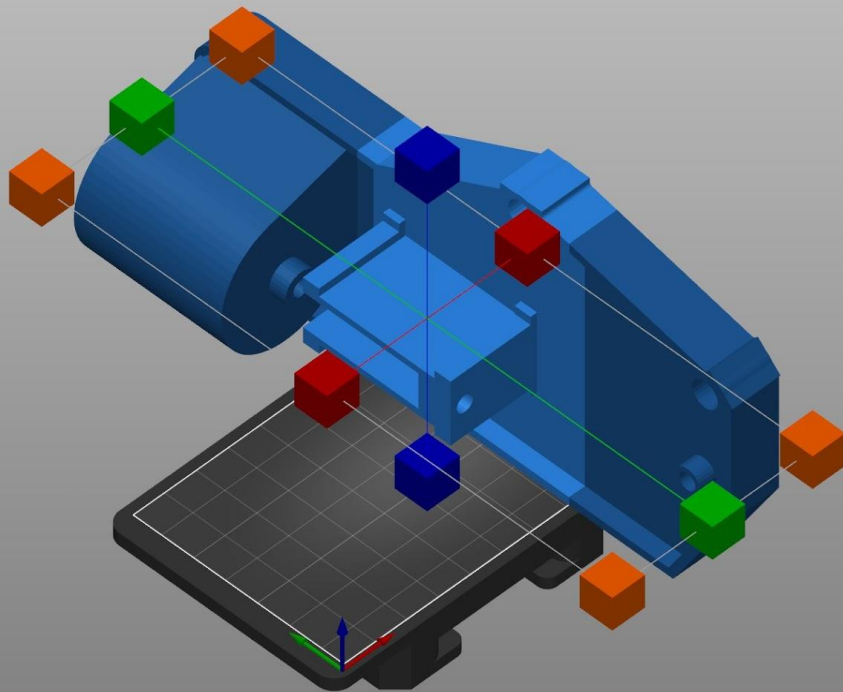
Slicer







Loaded



An object outside the print area was detected.
Rescale the model to fit the print area.
Remember that excessive protrusions in a complex model may

Simple Advanced Expert

SLA print settings:

0.05 Normal

SLA material:

Prusa Black Tough

Printer:

Original Prusa SL1

Supports: Everywhere

Pad: Below object

Name

Sida1.stl

Editing

Object manipulation

World coordinates	X	Y	Z	
Position:	60.48	34.02	42.87	mm
Rotate:	0	0	0	°
Scale factors:	100	100	100	%
Size:	52.5	168.04	85.74	mm

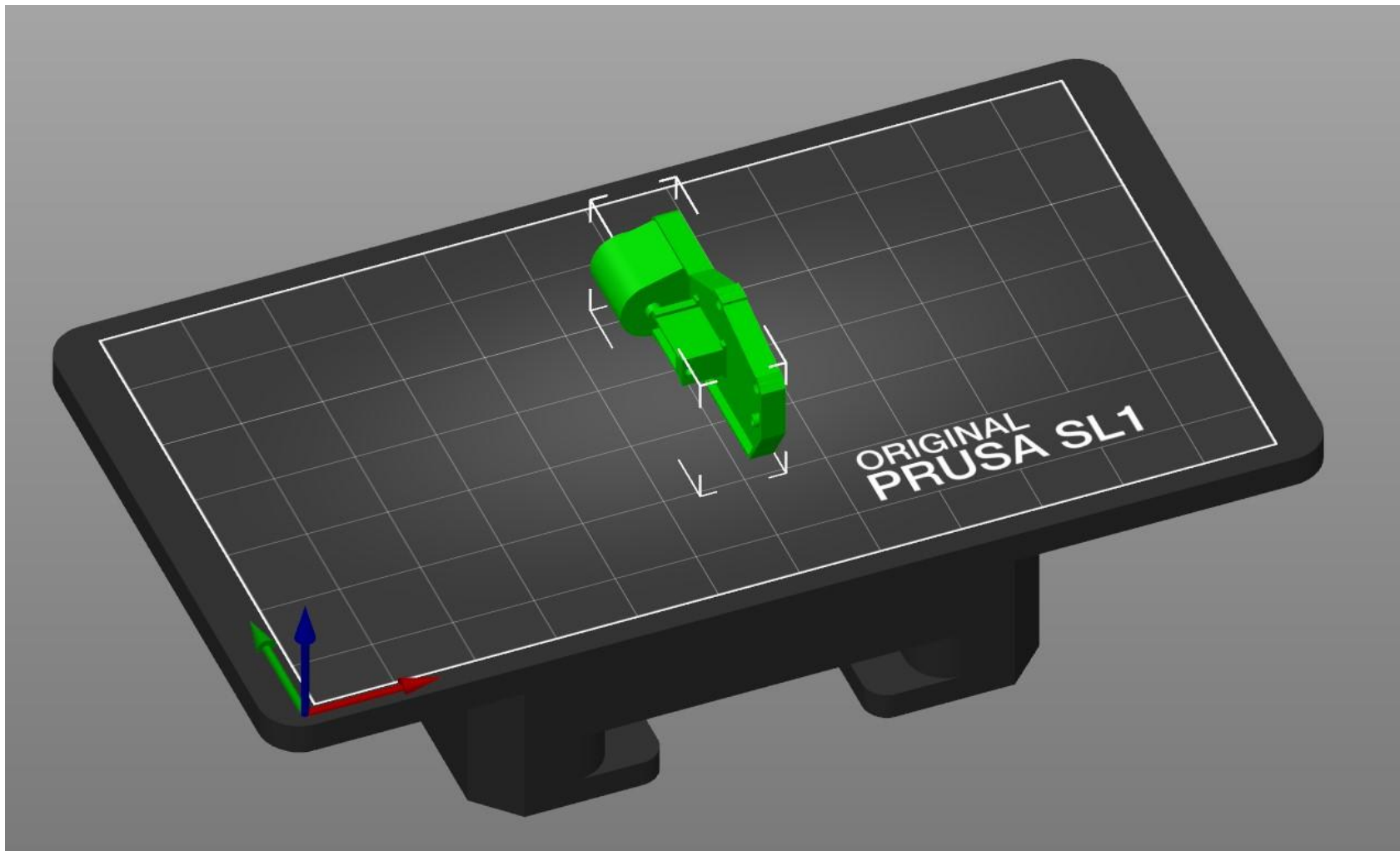
Info

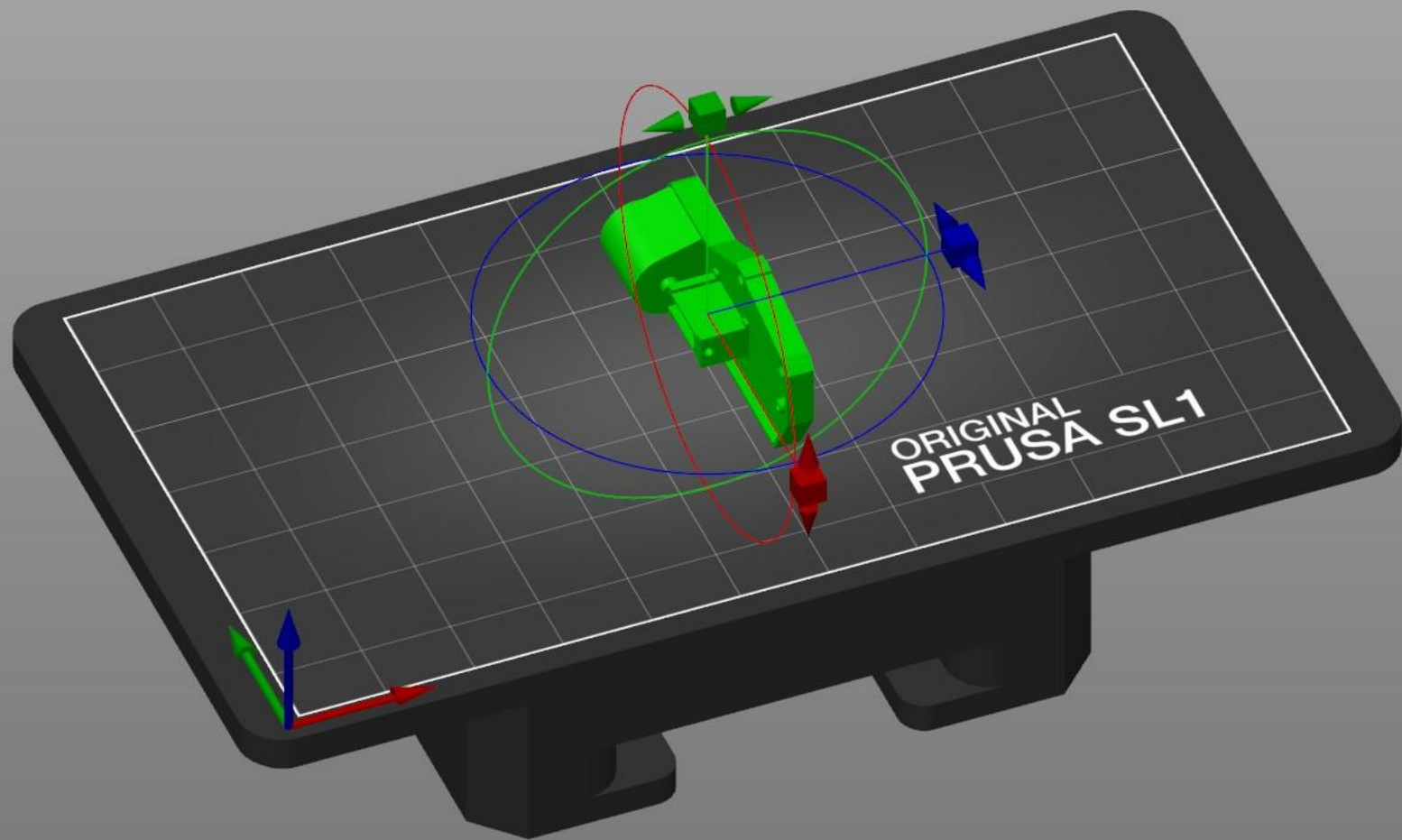
Size: 52.50 x 168.04 x 85.74

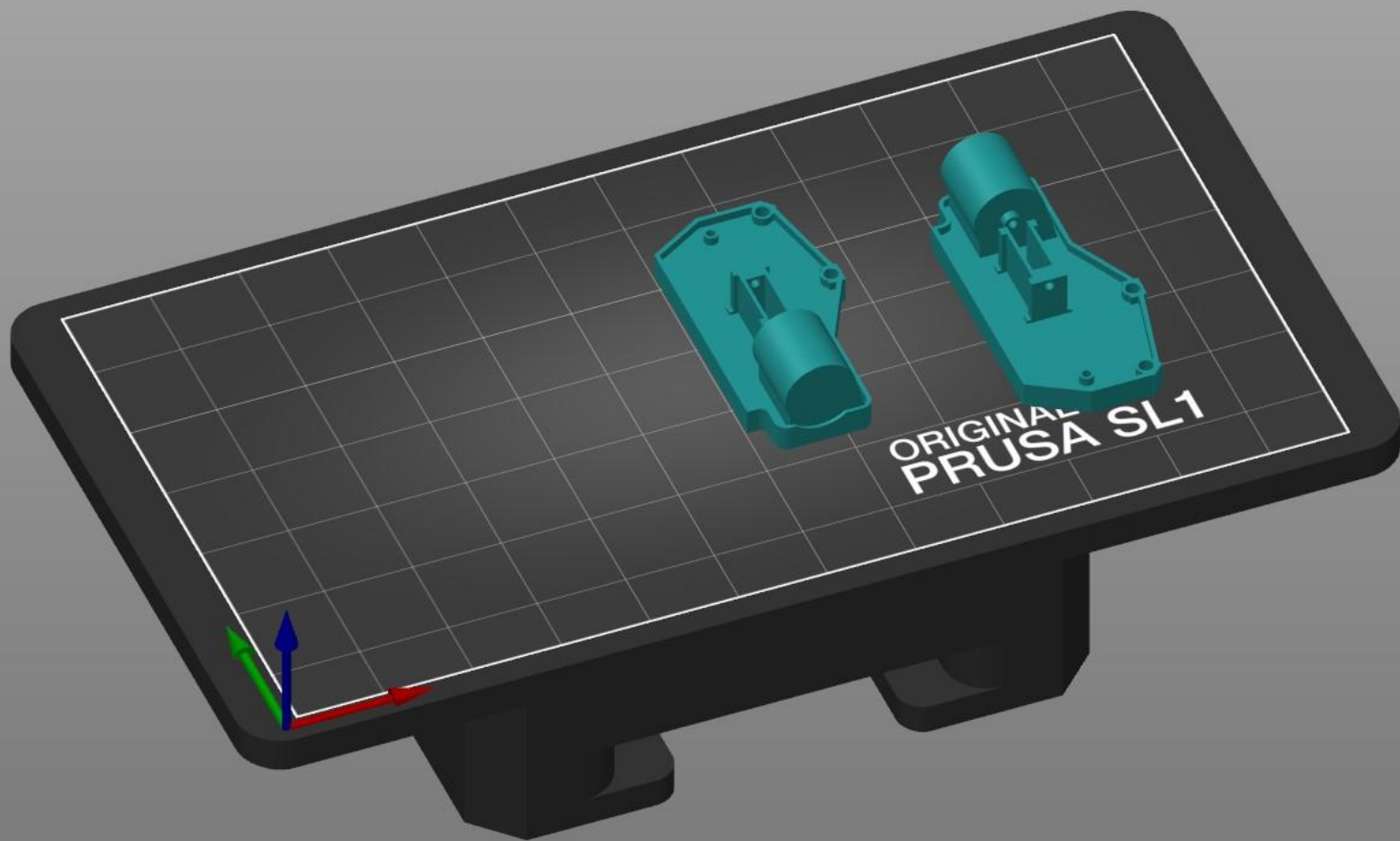
Facets: 1868 (1 shells)

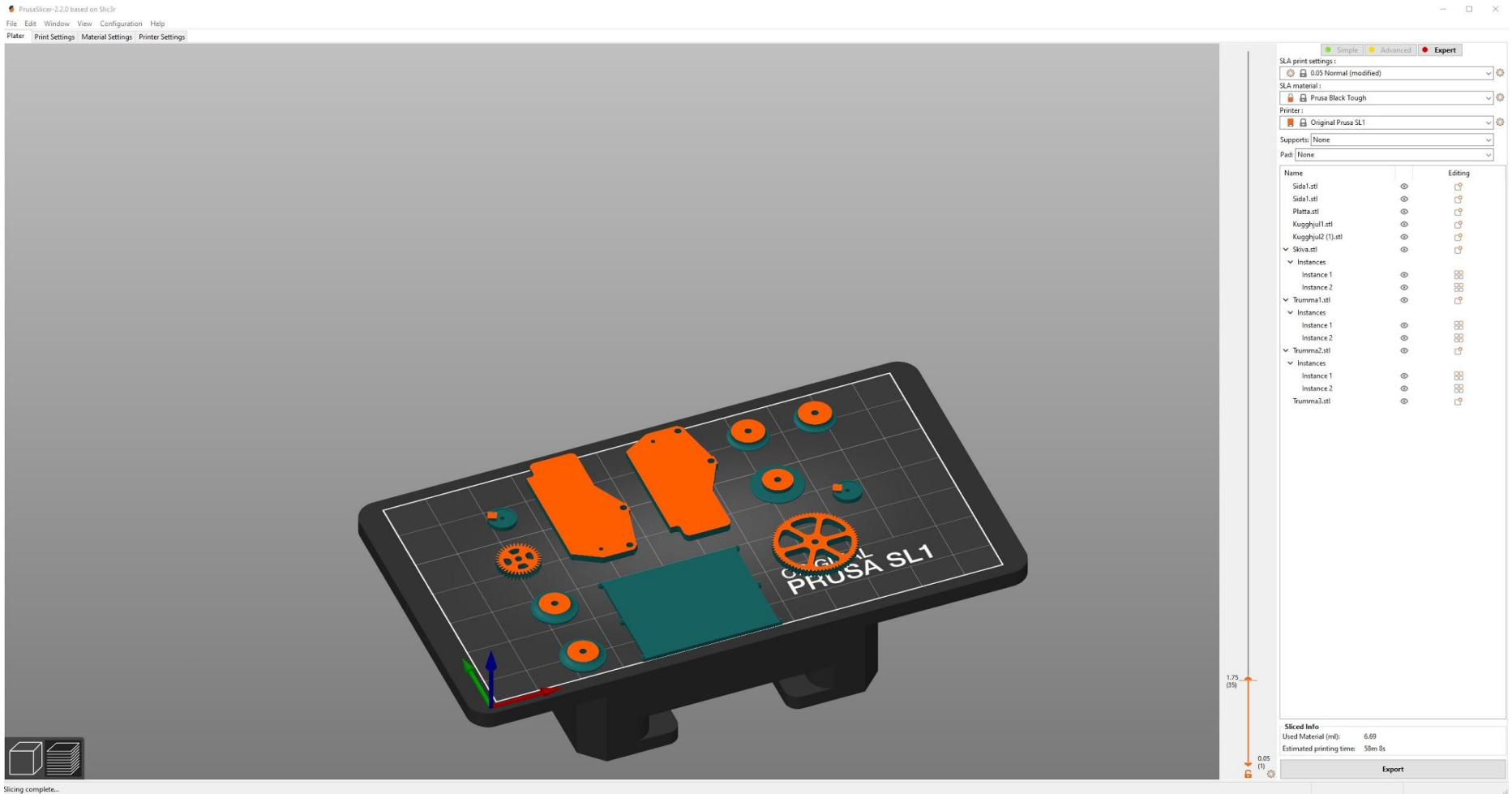
Manifold: Yes

Slice now









Slicing complete...

1.75
(35)

0.05
(1)



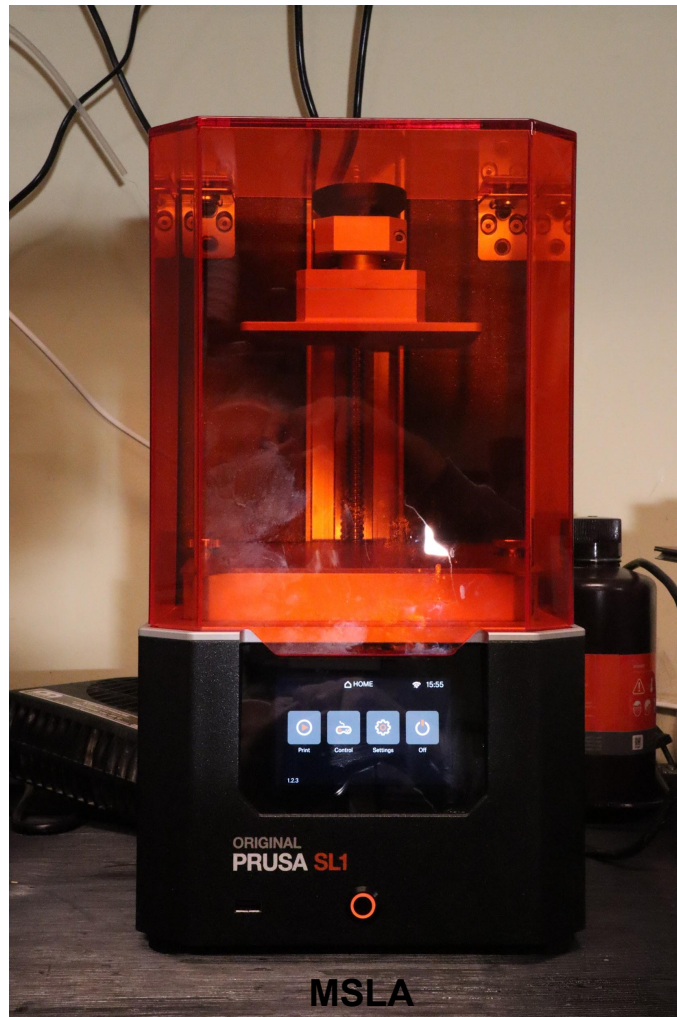
Sliced Info

Used Material (ml): 6.69

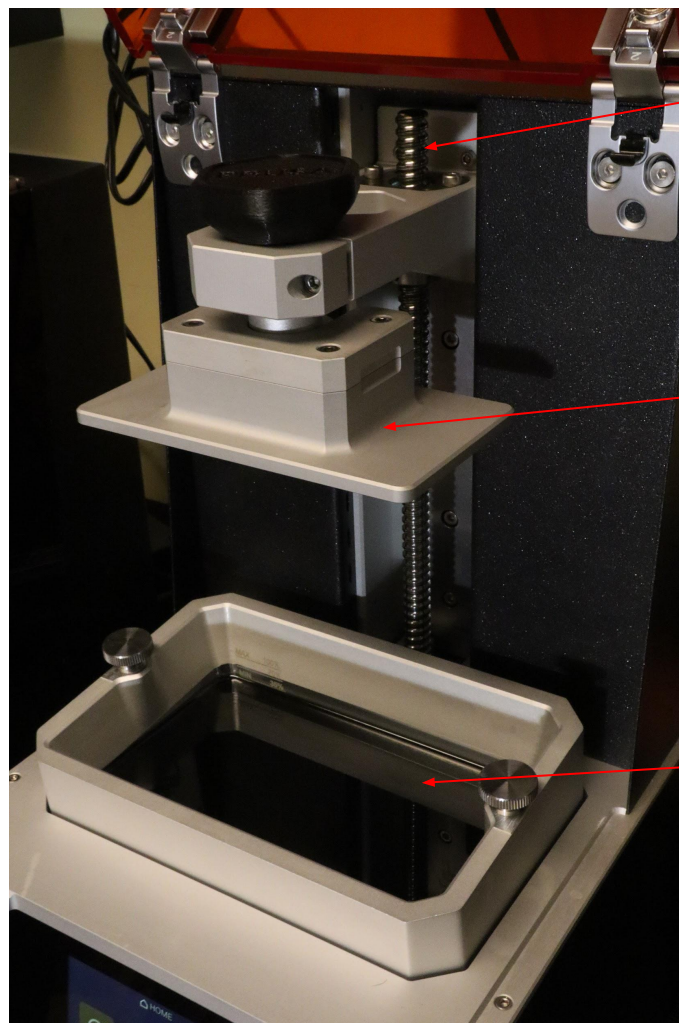
Estimated printing time: 58m 8s

Export





SLA Stereolithography



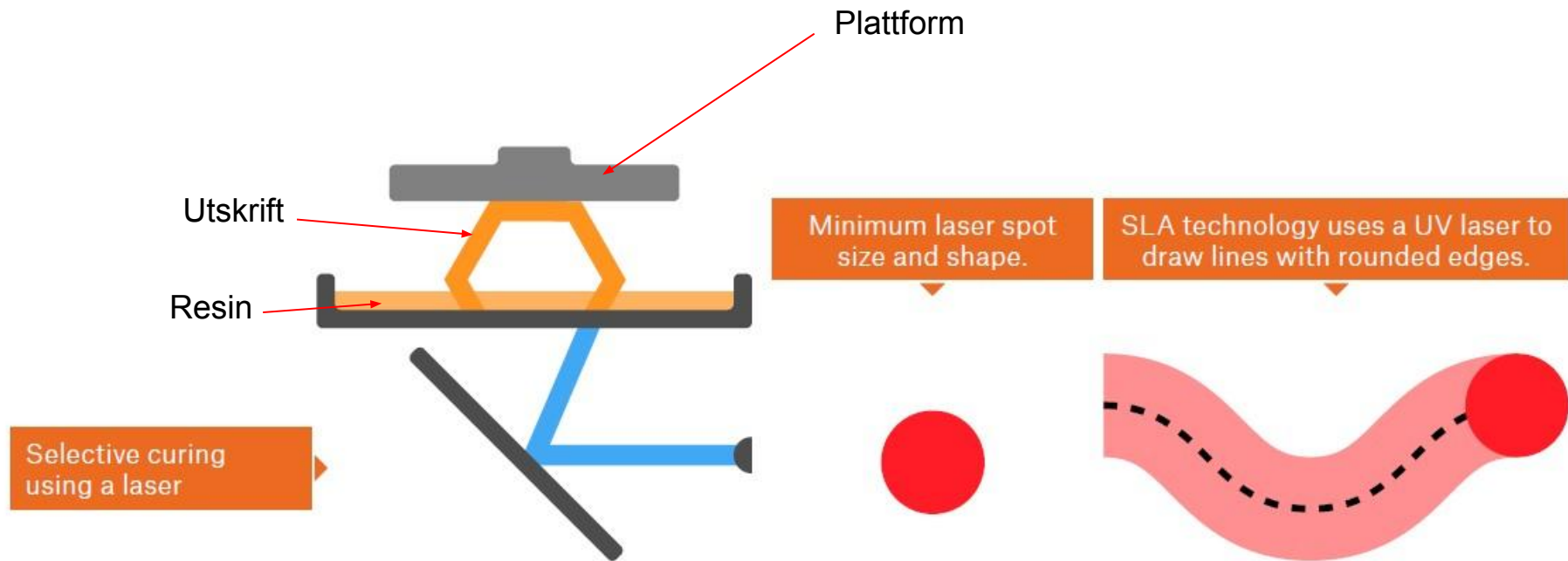
Trapetsskruv

Plattform för utskriften
yta 130x80x160h

Resintank med en
genomskinlig botten
FEP-film



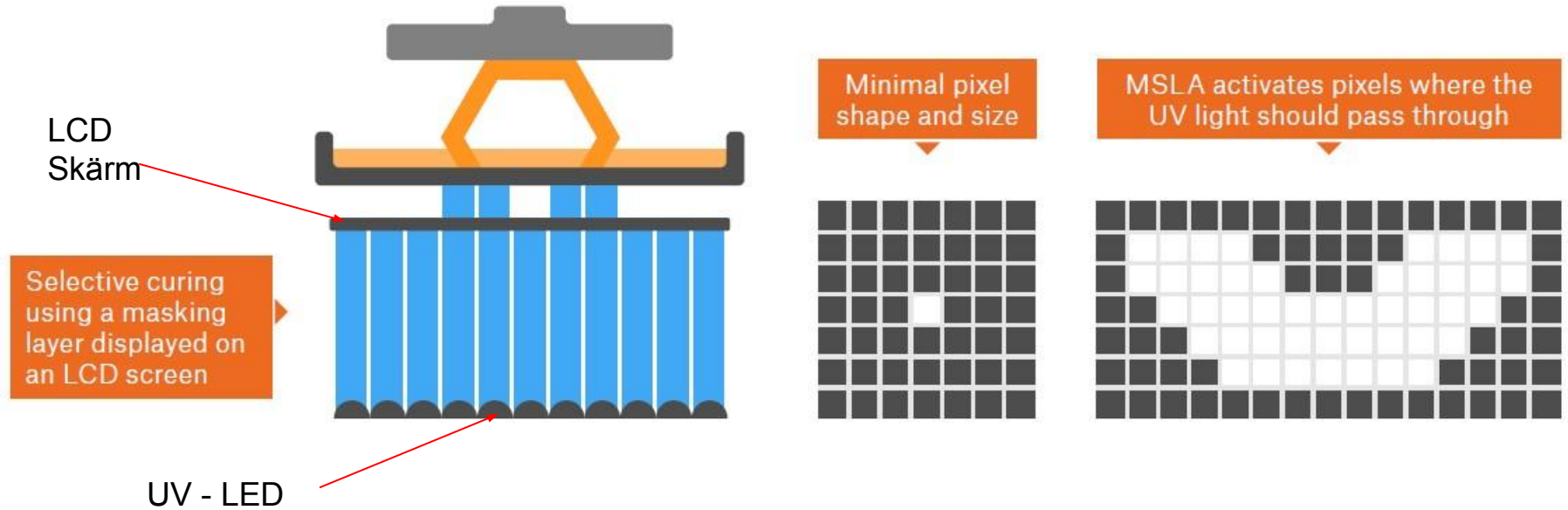
FEP



SLA - Laser



DLP (Digital Light Processing) SLA



MSLA (Masked Stereolithography)



Tvättning med IPA (Normalt med vinylhandskar på)

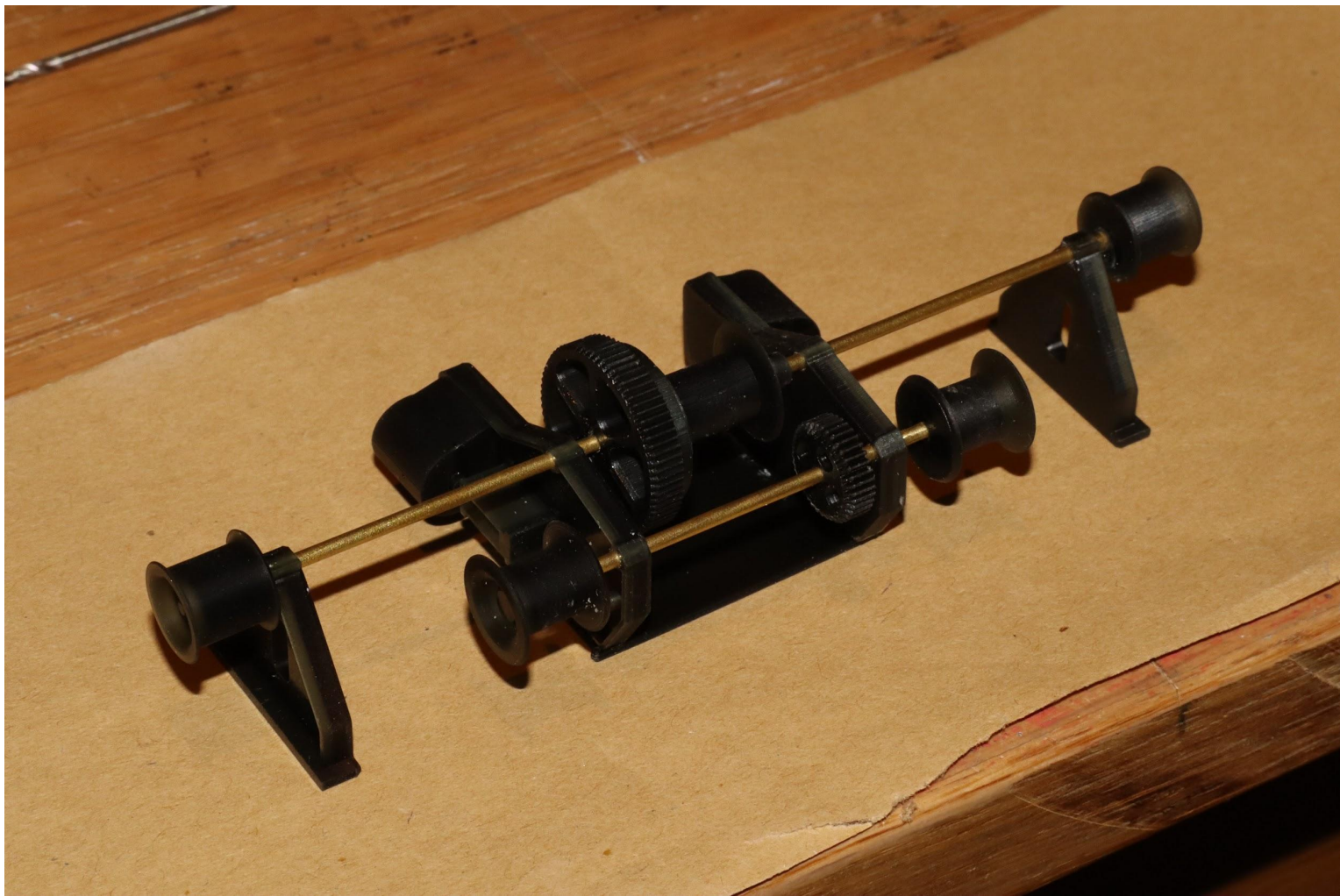


Dags att pillra loss bitarna



Tvätt och Härdning

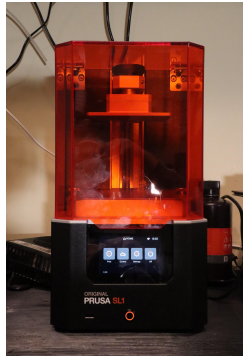








Resin ca 500:-/L många olika färger inte så många typer ABS
liknande 800:-, Flexibel, vattentvättbar, Dental 1400:-

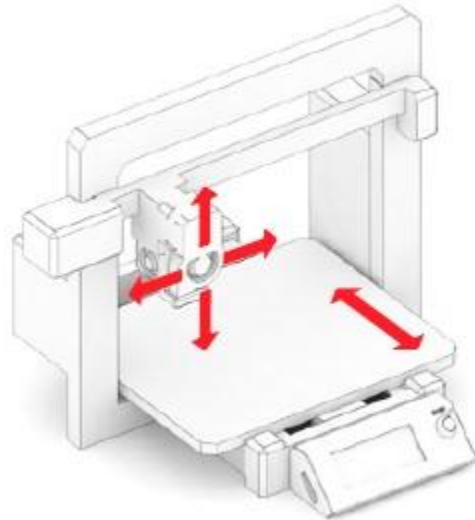


Skrivare 2000:- och upp 100.000:-

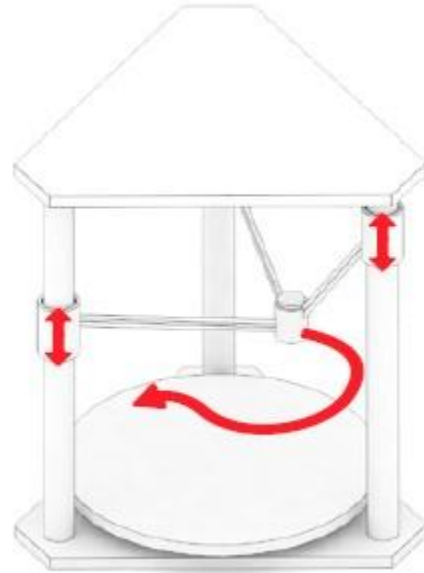


Tvätt och härdning 1500:-
Går bra att härda i solen

FFF/FDM



Cartesian



Delta



Polar

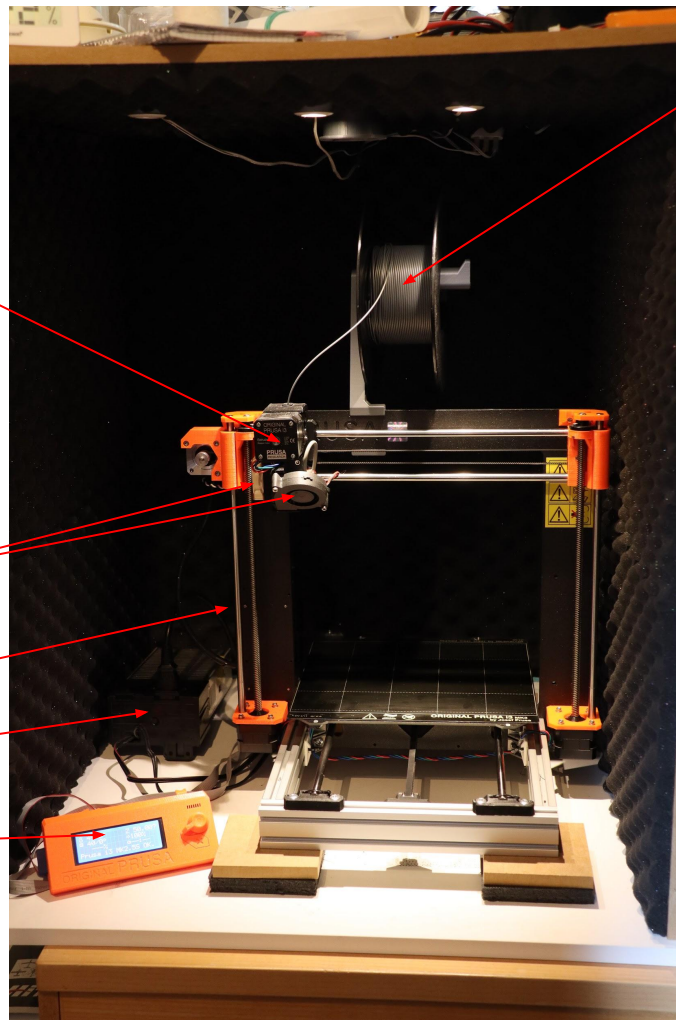
Extruder

Fläktar

Elektronik

Kraftaggregat

Display

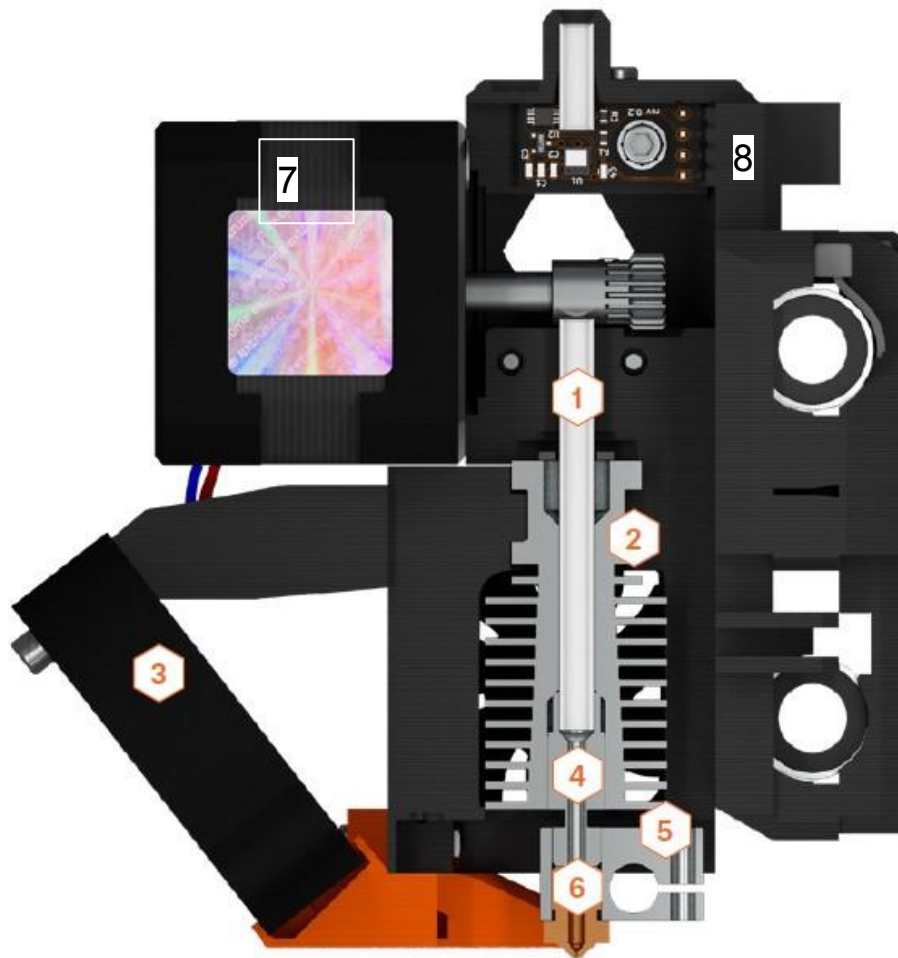


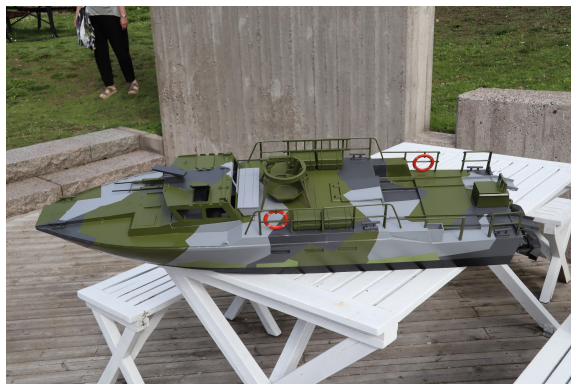
Filament 1,75 mm (1kg 340m)
2,85 mm

5st Stegmotorer

Skrivyta 220x220x220
500x500x500

1. PTFE Tub
2. Kylfläns
3. Print Fläkt
4. Värme blockering
5. Värmare
6. Nozzle mässing, hårdmetall 0,2-0,8
7. Stegmotor
8. Filament sensor





Min Stridsbåt 90



Torbjörns Phoenix



Irinas Andrea Doria



Åkes Robotroddare



Troligen världens mest utskrivna, över 2.000.000 nedladdningar från thingivers



Finns även som RC



HMS Gotland



Olle Skölds Nordhavn 52

www.depronized.com



Förr eller senare

- Skrivare 2000:- och upp
- Filament 200:-/kg och upp

PLA, PETG, ABS, ABS+, TPE/FLEX, ASA, CARBON, HIPS, Metal koppar mässing brons , **NYLON**
PC, PEEK, PEI, PEK, PP, PPSU, PVA, PVB, Wood

Och många färger

Ritprogram (CAD)

- Thinkercad Lättanvänt
- Autodesk Fusion 360 (youtube Lars Christensen)
- SketchUp
- SolidWorks
- Blender
- OpenSCAD
- Meshmixer
- Microsoft 3D Builder
- Rhinoceros 3D
- FreeCAD

Slicer program

- Cura
- PrusaSlicer
- Simplify3D
- OctoPrint
- Slic3r

STL

- Thingiverse www.thingiverse.com
- PrusaPrinters www.prusaprinters.org
- YouMagine www.youmagine.com
- Pinshape www.pinshape
- MyMiniFactory www.myminifactory.com
- Cults www.cults3d.com
- CGTrader www.cgtraders.com
- TurboSquid www.turbosquid.com
- Fab360 www.fab360.net
-