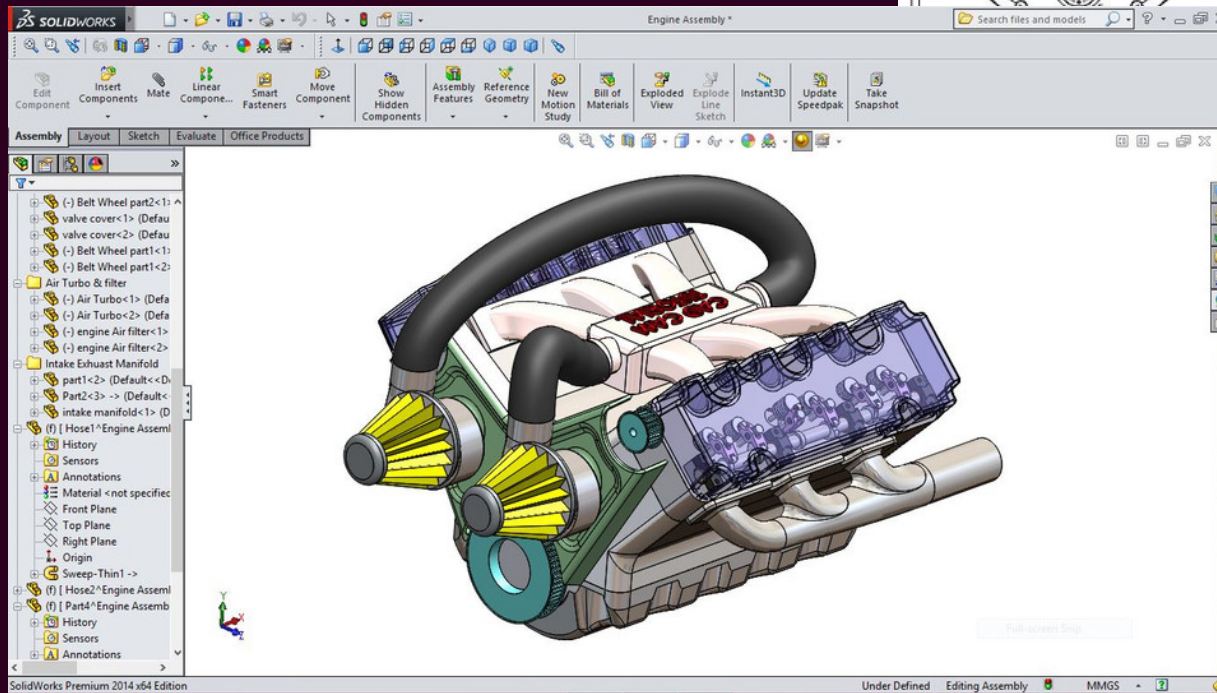
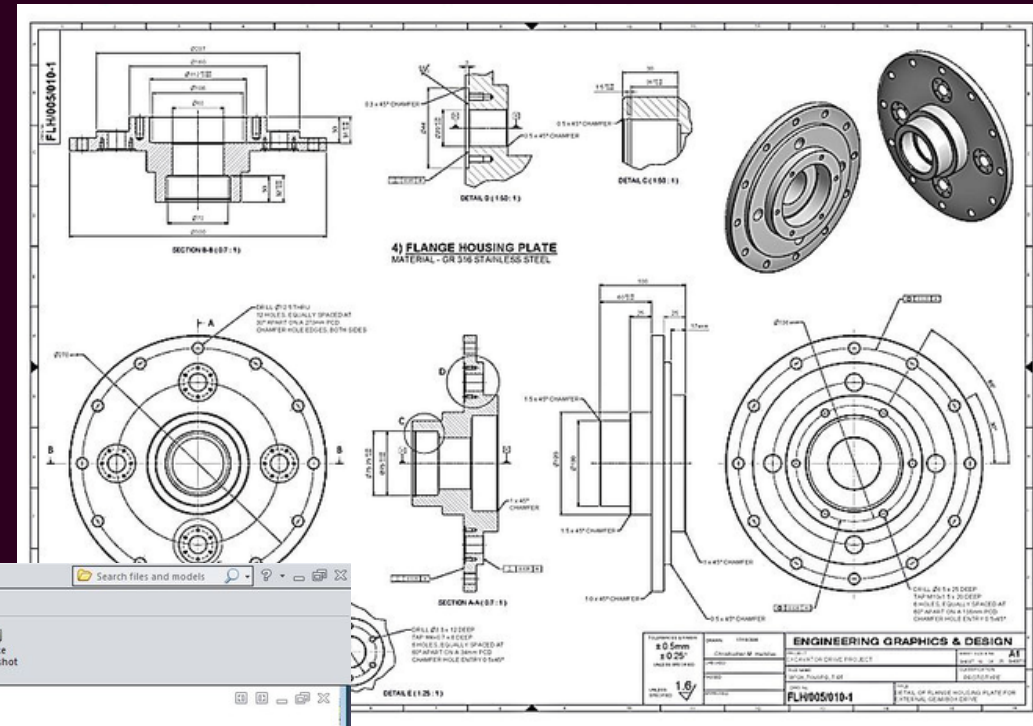


# CAD

- CAD vs graphic design
- Starting with tinkerCAD
- Production methods
- Working with onShape
- What more

# CAD vs graphic design

- CAD was born from simple drawings
- Goal : accuracy and production oriented



# CAD vs graphic design

- Graphic design was made for movies, games and art
- Goal : looking good, easy to animation and let artistic freedom

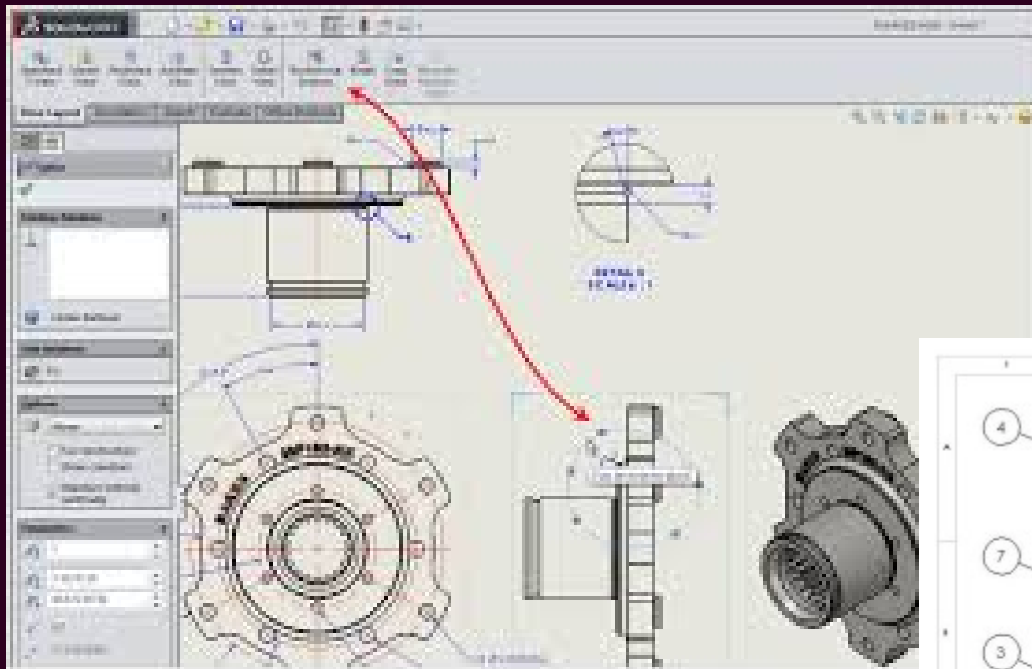


# And right between - TinkerCAD

- Really simple interface
- Main principle: adding and cutting with simple geometric shapes



# CAD oriented by production



| ITEM NO. | PART NUMBER                          | DESCRIPTION         | Default/ QTY. |
|----------|--------------------------------------|---------------------|---------------|
| 1        | 01-200-0002                          | SuspClevLower       | 1             |
| 2        | 01-200-0003                          | SuspClevLowerWasher | 2             |
| 3        | 01-200-0014                          | SuspClevLowerSpacer | 2             |
| 4        | HX-SHCS 0.3750-16-D-N-16x1.75x1.75-N |                     | 1             |
| 5        | HNUT 0.3750-16-D-N                   |                     | 1             |
| 6        | HX-SHCS 0.375-16x1.5x1.5-N           |                     | 2             |
| 7        | Preferred Narrow FW 0.375            |                     | 2             |

**LUDEWIG**  
ENGINEERING

**SuspClevLowerAssy**

ITEM NO: 01-200-0007 A4

DATE: 10/11

# Production methods

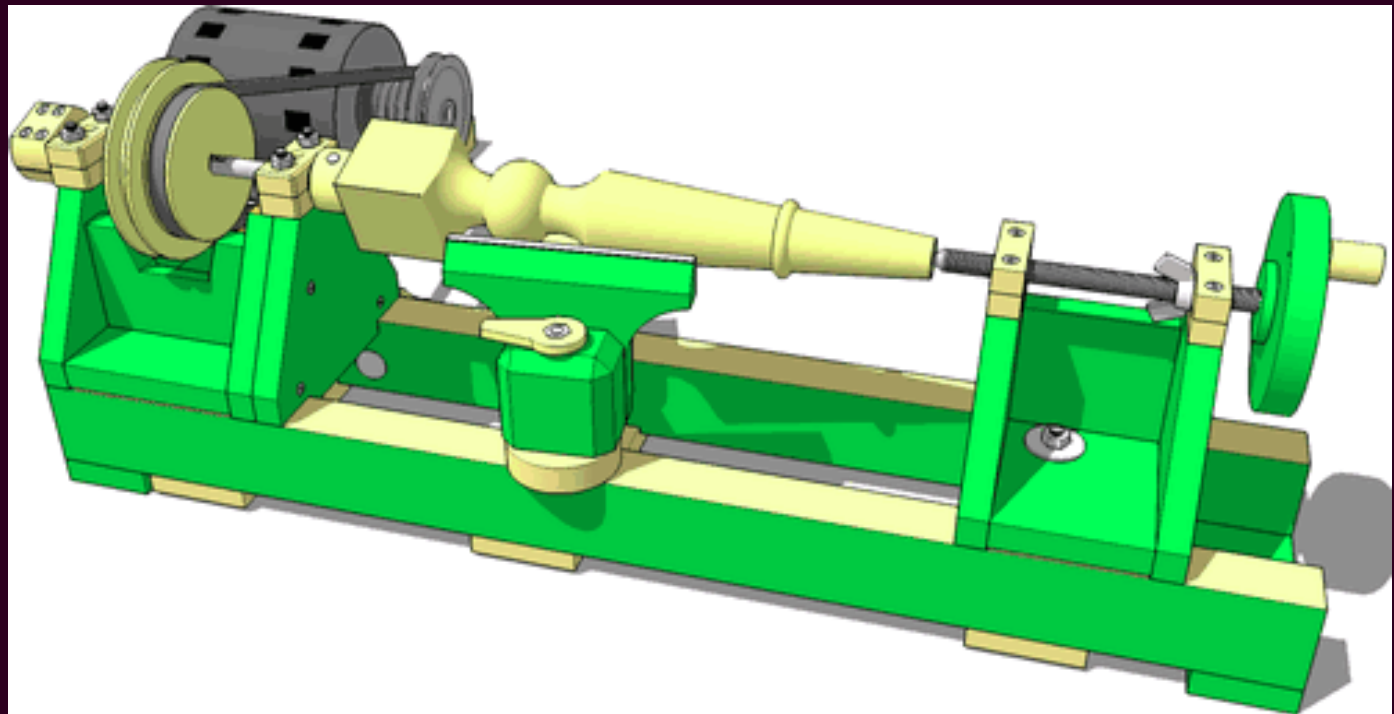
# Production methods

- Lathe
- Milling- lazer/water jet
- Molding and casting (heat/force/injection)
- By hand
- 3D printing
- Bending

# lathe

<https://www.youtube.com/watch?v=5tCZRxfz5jA> •

<https://www.youtube.com/watch?v=Za0t2Rfjewg&t=232s> •



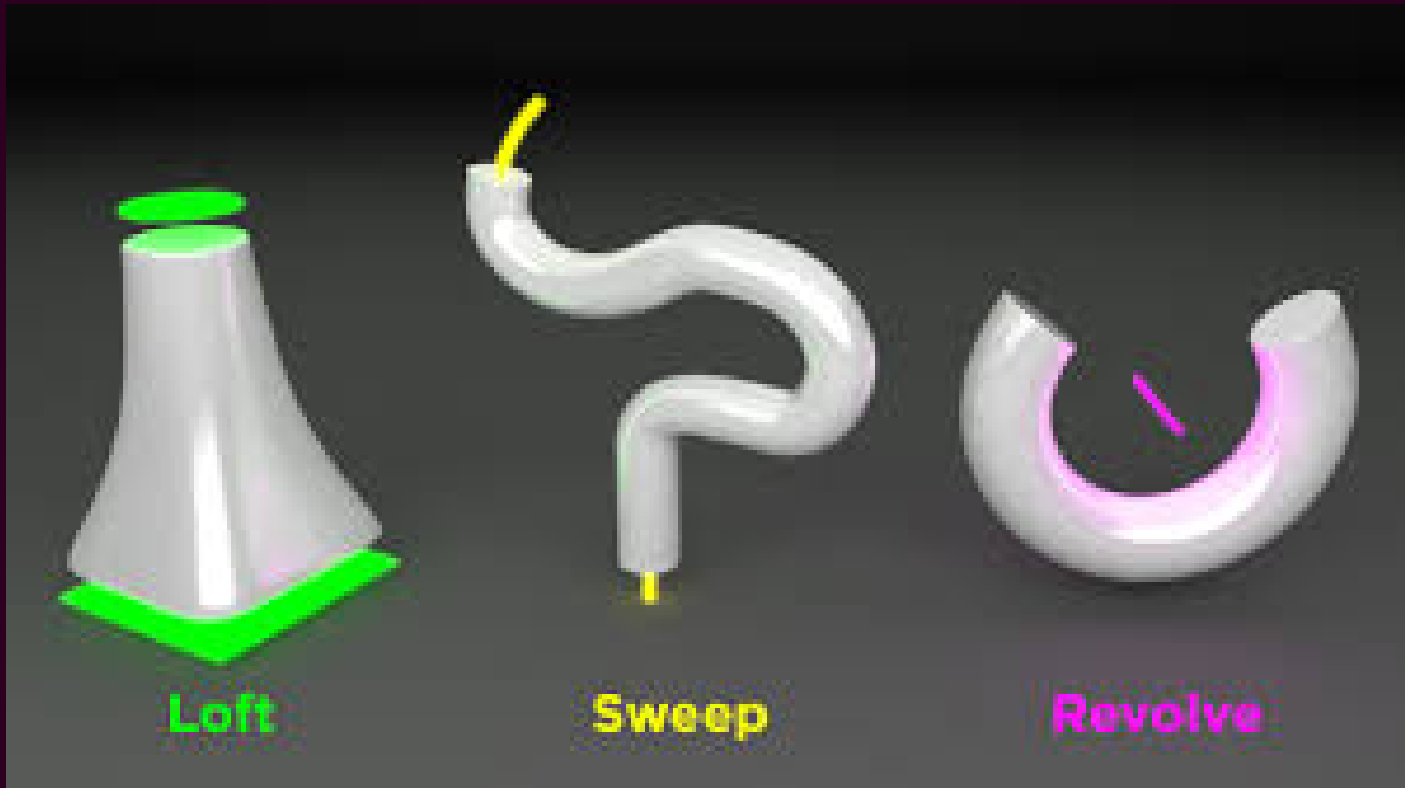


# milling

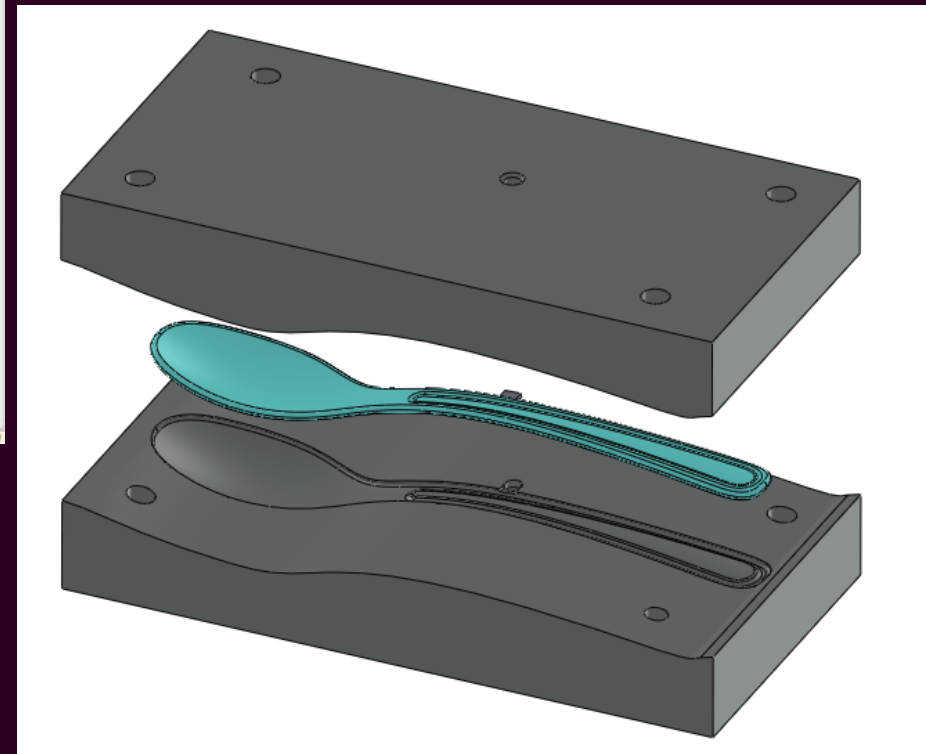
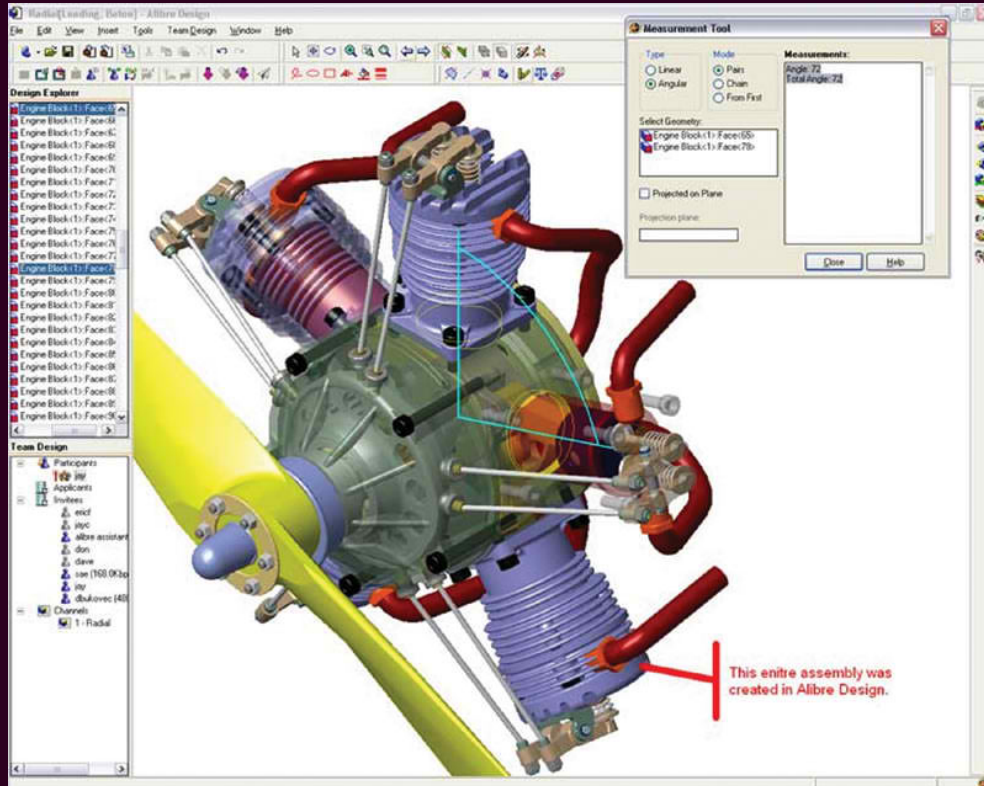
<https://www.youtube.com/watch?v=9rlwyGOPb0o> •



# Lets go CADing



# Assembly, drawing and more



תודה רבה !