

## Fabricatable machines

- Open informal research project anyone can use and contribute
- Lives on github.com/Fabricatable-Machines

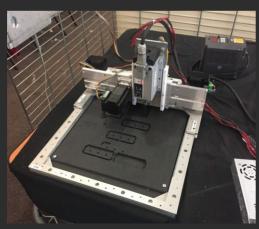
## Goals

- Enable people to make and play around with custom digital fabrication machines
- Focus on making as many parts of a machine as possible

# Favourite machines









# Humphrey1 versions



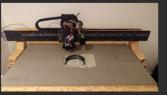
















# Whats is "Fabricatable"?

- Accesable techniques
- Simple and accesable BOM
- Focus on DIY over sourcing parts
- Complexity in CAD, simplicity in manufacturing and assembling
- Open source (files and toolchain)

## Fabricatable business

- Gentleman agreements with royalties
- Direct sales
- https://www.patreon.com/jensdyvik

#### Lessons learned

- DIY rails is mostly suitable for small light duty machines
- Segmented rails are tricky
- "CNC friendly rack and pinion" works well
- Gearing is still needed for stiff machines
- HPL sheets work well
- Electronics and wiring is a hurdle
- Alu extrusions + FDM is more accesible than large format machining



# Research paper

https://github.com/fellesverkstedet/fabricatable-machines/raw/master/publications/Fabricatable %20Machines%20-%20A%20Toolkit%20for %20Building%20DigitalFabrication %20Machines%20-%20TEI202.pdf

### Modules-Axes-Machines

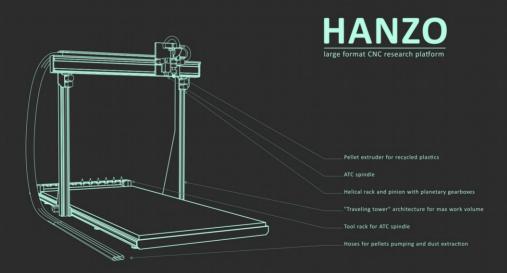
 https://github.com/fellesverkstedet/fabricatablemachines/wiki/Modules

# Humphrey2

 https://github.com/Fabricatable-Machines/ Humphrey2

## Hanzo

 https://github.com/Fabricatable-Machines/ Hanzo



# Contact

• jens@dyvikdesign.com