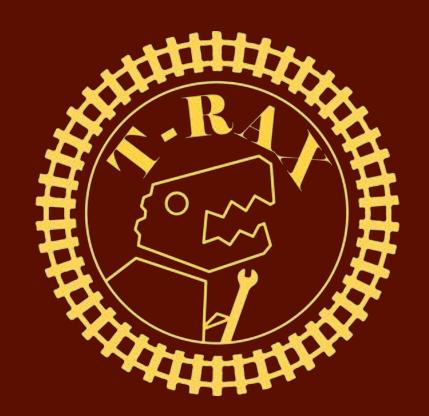
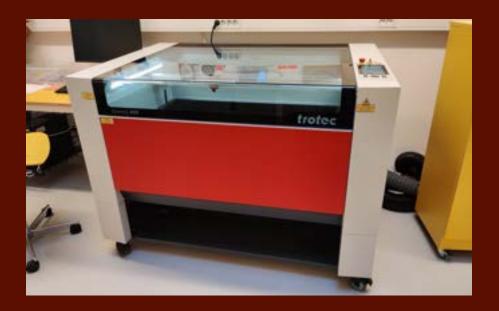
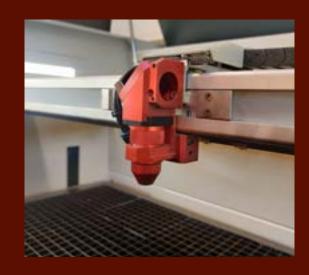
Laser Cutter Education



What is a Laser cutter?

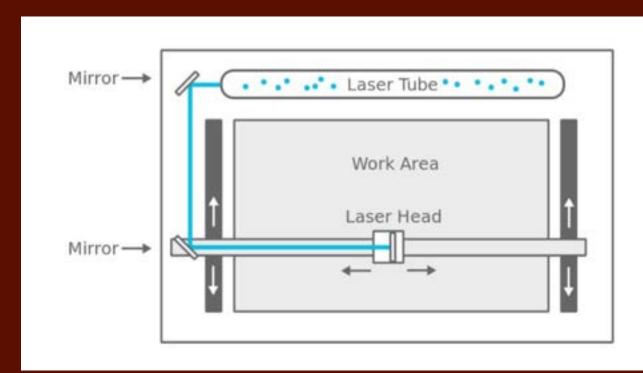
- Burns through materials with IR light
- Cutting and engraving







How it works



Safety

Never leave laser unattended when a job is running (firewatch)

Risk	Prevention action
Material catching fire	Only use approved materials available in FUSE rapid prototyping. Never leave the machine unattended while cutting or engraving
Dangerous fumes	Only use approved materials and turn on the filter unit.
Moving parts	Never use with lid open

Filter unit

Always turn it on before cutting or engraving





Interacting with the machine

- On/Off
- Emergency stop
- Set focus
- Move
- Job



Forbidden materials

- All materials that are not approved
- Dangerous to cut materials:
 - PVC (e.g faux leather)
 - Vinyl
 - Teflon
 - Polycarbonate (PC)
 - Composite materials (e.g carbon/glass fiber sheets)
 - Polypropylene (PP) and Polystyrene (PS) foam
 - Epoxy resins

Maintenance and repair

- Not allowed
- If something brakes/stops working
 - Put up the DO NOT USE sign
 - Fill out the error log (QR-code)

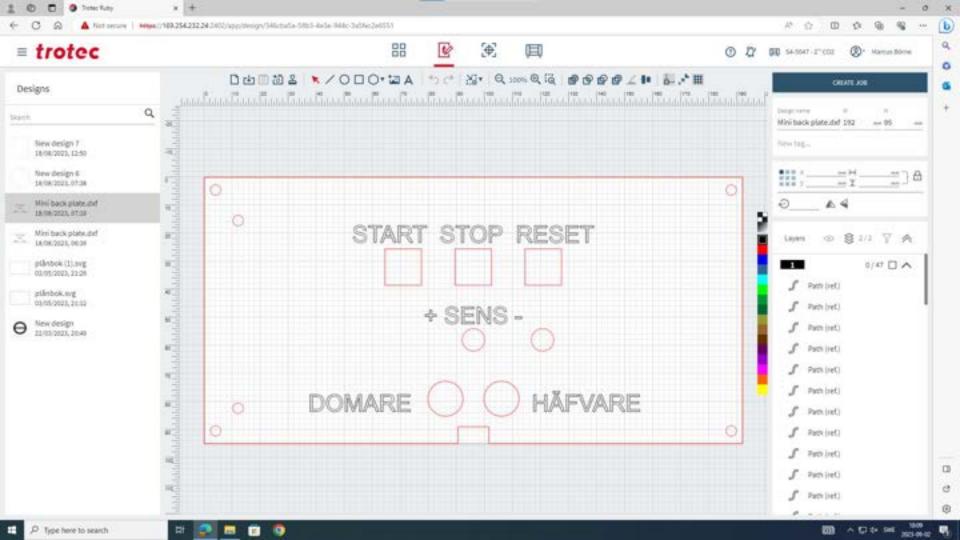


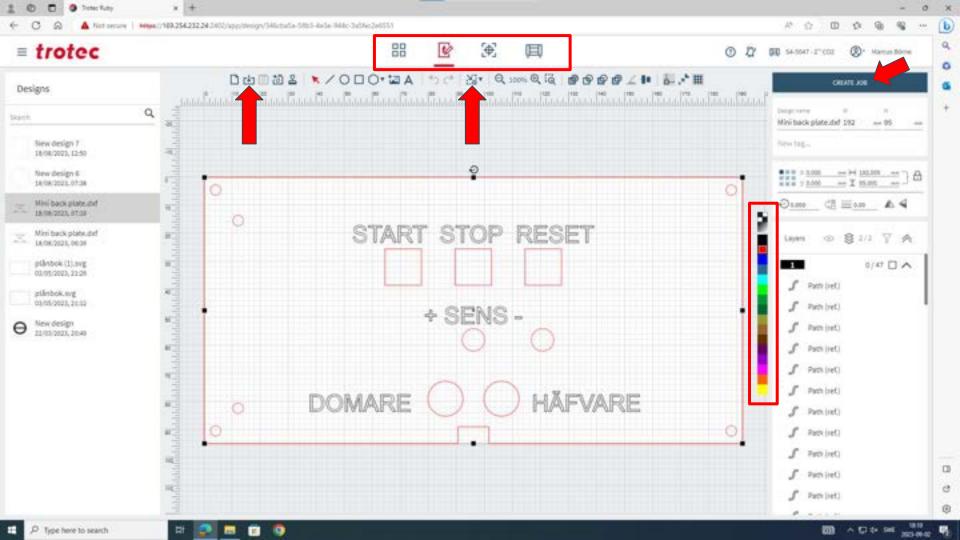
The program

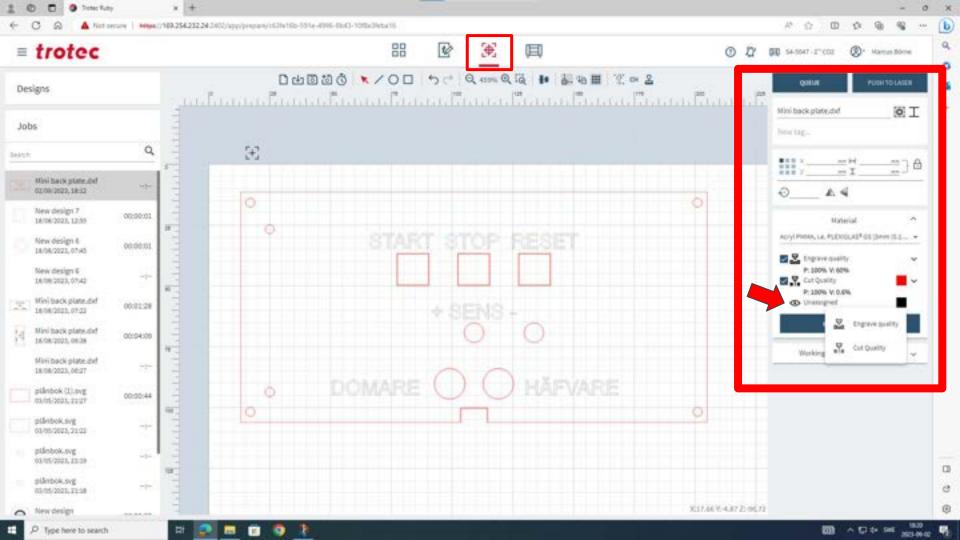
Trotec ruby

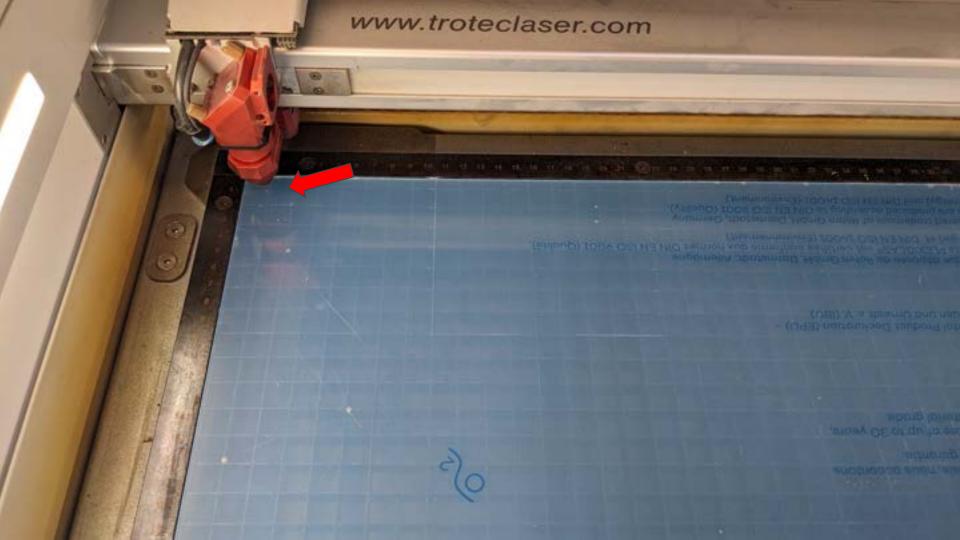
imports pdf, svg, png, jpg, cdr or ai (dxf with manual scaling)

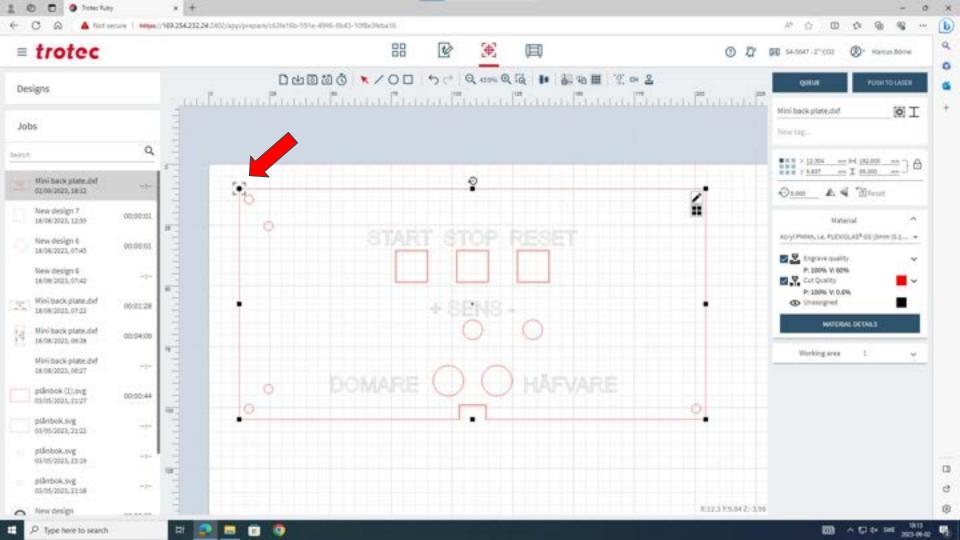


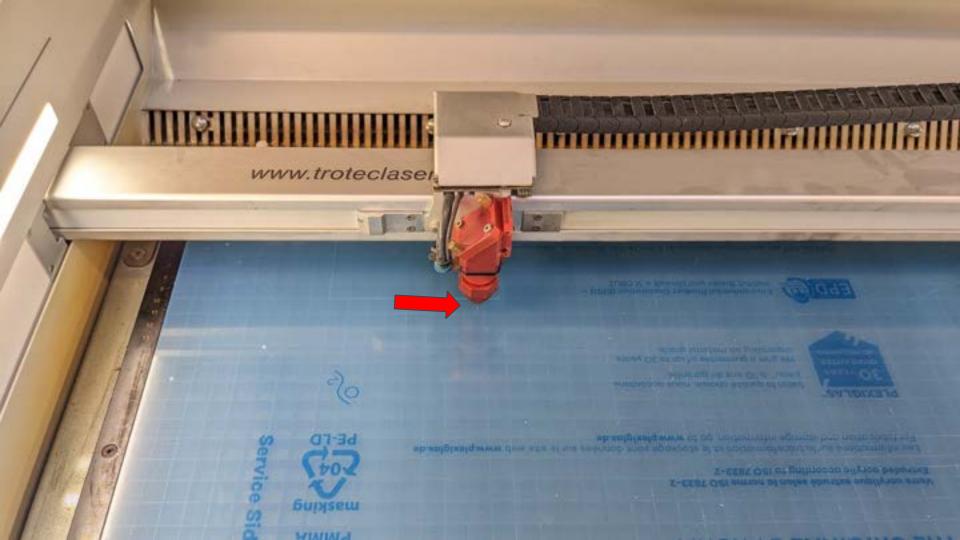


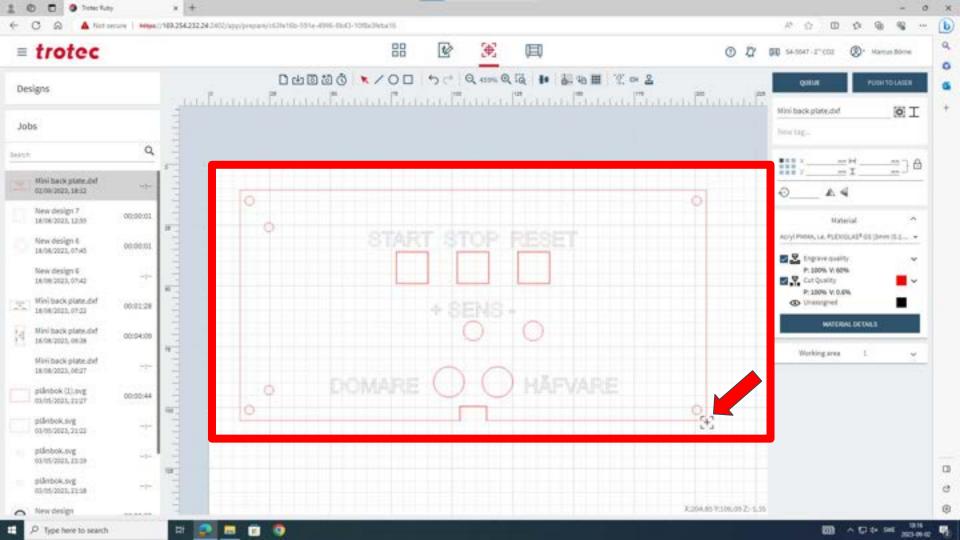








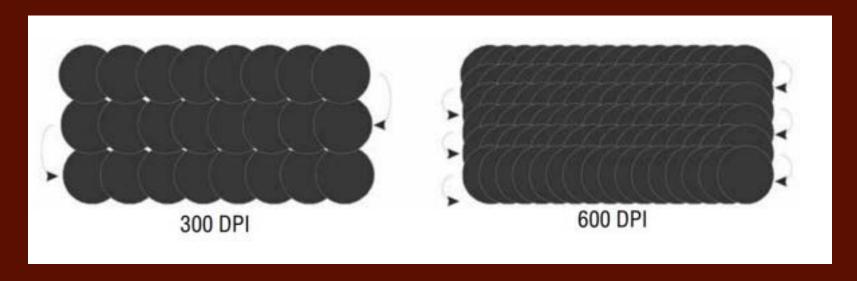




Engraving Resolution DPI (dots per inch)

Higher DPI, longer engraving time and darker

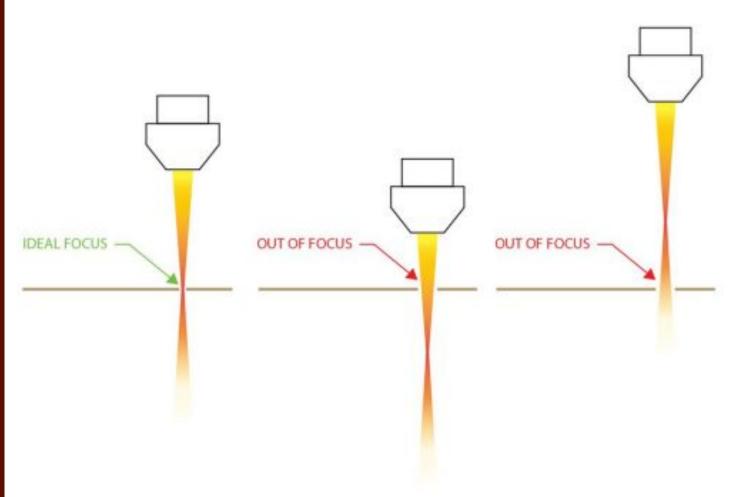
Lower DPI, shorter engraving time and lighter



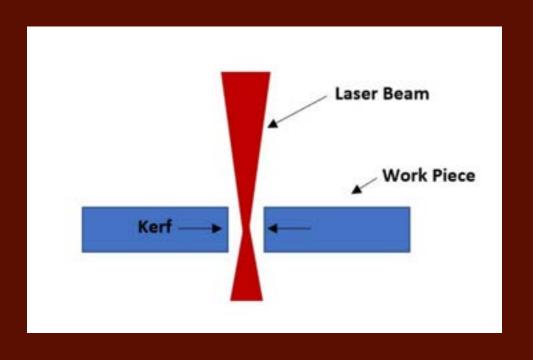
Focus



Click simultaneously



Kerf



Before use Checklist

- Reservation (not necessary)
- Area around laser is clutter free
- Nothing inside the laser cutter
- Focus is set
- Filter unit on