

Meeting 25 Sep

- Questions

1. Z-plate brackets \rightarrow move holes further inside?
2. Z-plate margins \rightarrow cut 5 mm evenly? \checkmark
 \rightarrow cut "U" shape around rails? \checkmark
 \rightarrow How much space between Z-plate and bars, rails etc.?
3. Z-plate size? 450 mm now
4. Leadscrew holes \rightarrow screw holes not as in old design
5. Limit of motion in X/Y directions?
 $X \rightarrow \geq 60 \text{ cm}$ $Y \rightarrow \geq 30 \text{ cm}$
6. Ring:
 - Which of the 3 designs? #1
 - check inner diam - $\Delta_{\text{ring}} = ?$ (guard from tube) (e.g. 2 mm)
 - \checkmark - width of ring = ? (e.g. 25 mm)
 - \checkmark - width of slots = ? (e.g. 4°)
7. Bars:
 - length? $> 50 \text{ cm}$ to allow for motion in Z direction
 - \checkmark - $\Delta_{\text{bar}} = ?$ (guard from rim) (e.g. 15 mm)
 - drill 6 mm - screw hole diam? (e.g. 6, 8 mm)
8. Can we cut parts / drill holes after we received them? (e.g. shorten bars if need)
8. Z-rails:
 - \rightarrow not really, bar length must be fixed bc. of thread
 - need to be longer and account for height of XY assembly

- Trapezoidal lead screw nuts \rightarrow want 'anti backlash'^u
- X-carriage \rightarrow small bracket \rightarrow make it out of metal?
- Z-brackets \rightarrow include threads for holes connecting to Z-plate
 \rightarrow holes in Z-plate \rightarrow 7 mm
- Bar holes ϕ in ring & bottom plate \rightarrow ask Nico
 - bar slot length \rightarrow make it wider
 - motor slots \rightarrow keep ϕ , lengthen