

Meeting 25 Sep

- Questions

1. Z-plate brackets → were holes further inside?
2. Z-plate margins → Cut 5 mm evenly? ✓
 - cut "U" shape around rails? ✓
 - How much space between Z-plate and bars, rails etc.? ?
3. Z-plate size? 450 mm now
4. Lead screw holes → screw holes not as in old design
5. Limit of motion in X/Y directions?
 $X \rightarrow \approx 60 \text{ cm}$ $Y \rightarrow \approx 30 \text{ cm}$
6. Ring:
 - which of the 3 designs? #1
 - inner diam - Δ ring = ? (guard from tube) (e.g. 2mm)
 - ✓ - width of ring = ? (e.g. 25 mm)
 - ✓ - width of slots = ? (e.g. 4°)
7. Bars:
 - length? > 50 cm to allow for motion in 2 directions
 - ✓ - Δ bar = ? (guard from rim) (e.g. 5 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)
↳ not really, bar length must be fixed bc. of thread
9. Z-rails:
 - need to be longer and account for height of X/Y assembly

- Trapezoidal lead screw nuts \rightarrow want **'antibacklash'**¹
- 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