

SciFi Fibre Mats, 20th Mar 2017

Boma Wheels

for Dortmund (wheel 1, 6, 8)

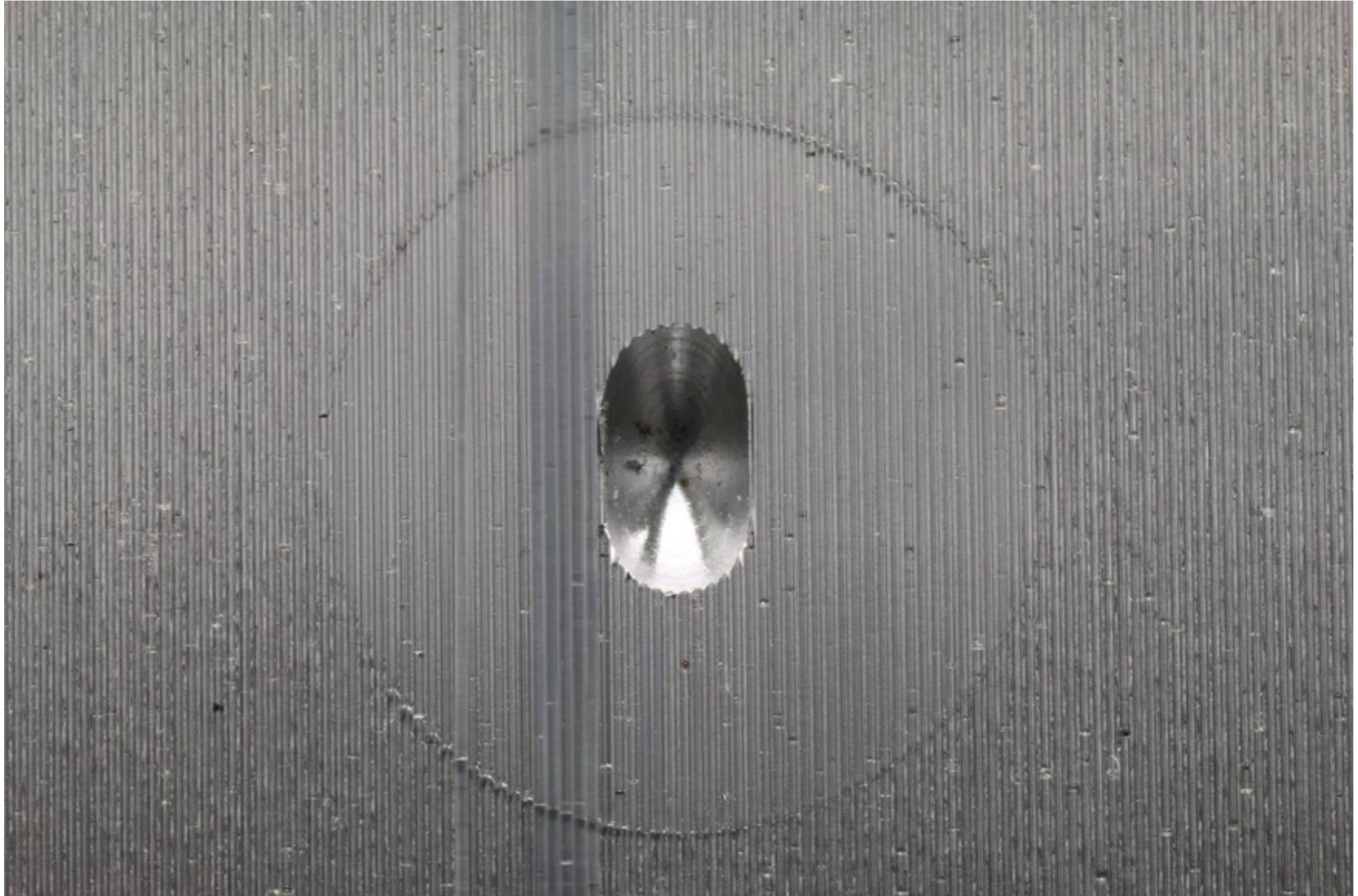
Robert Ekelhof
for the Dortmund team

Test in Dortmund

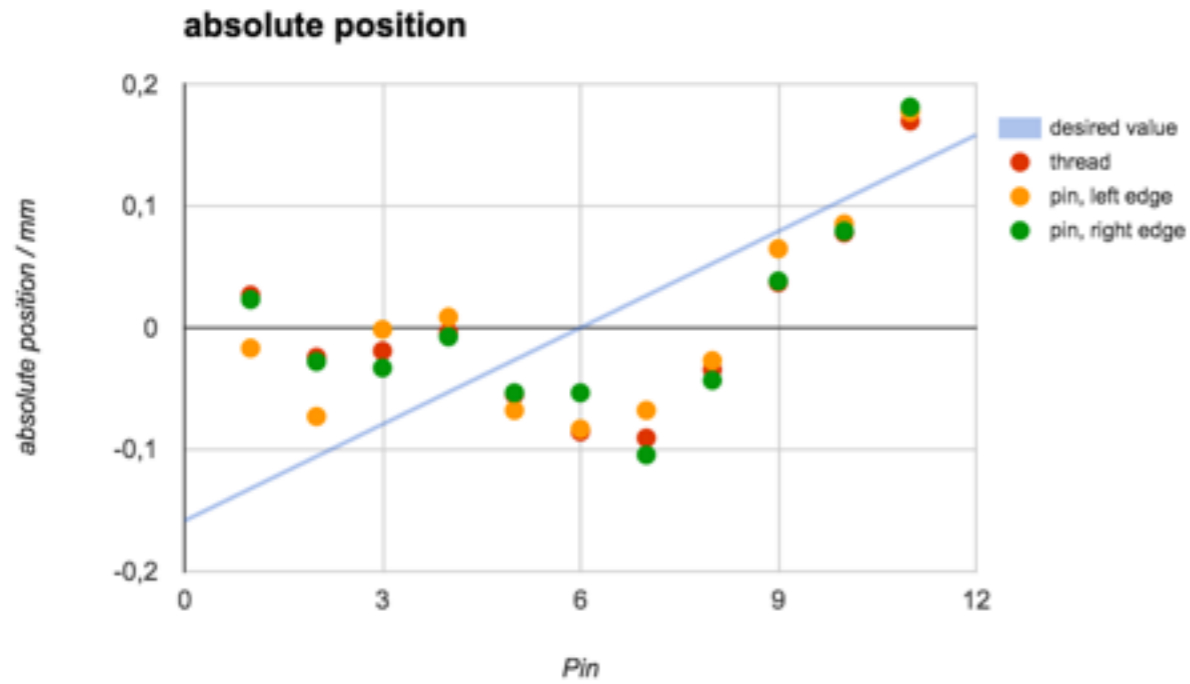
- wobbling
 - optically (photos)
 - mechanical
- pin position
 - optically (photos)
- pin width
 - mechanically (Johansson gauge)



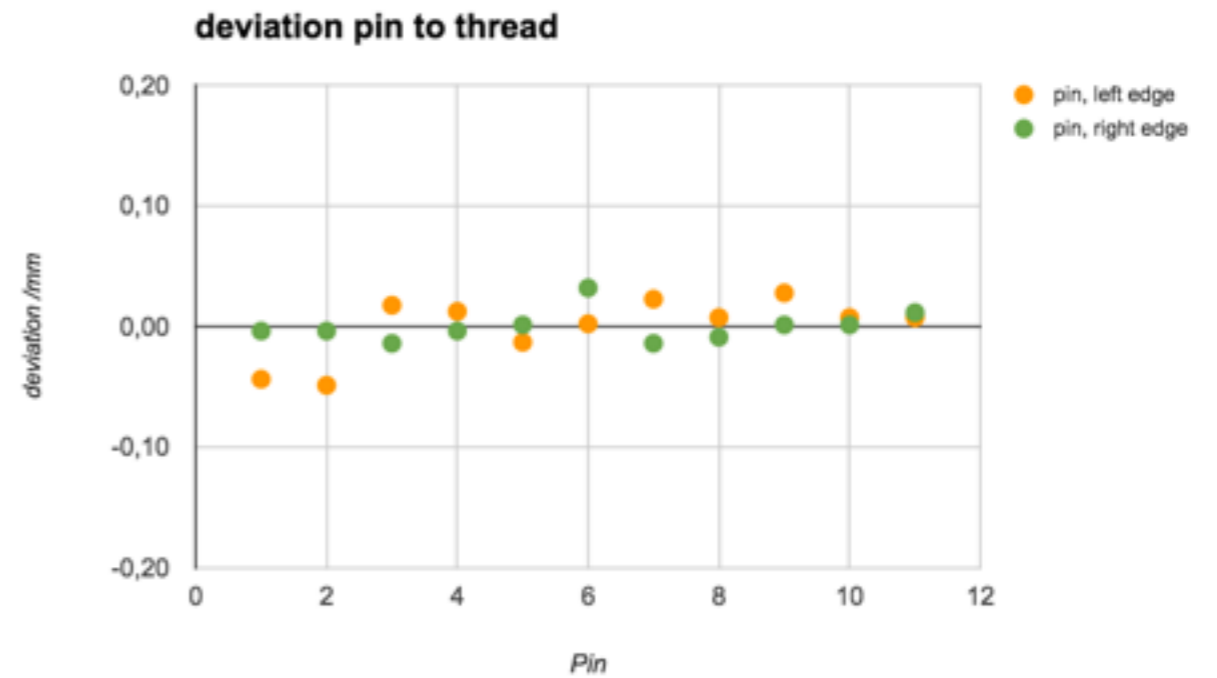
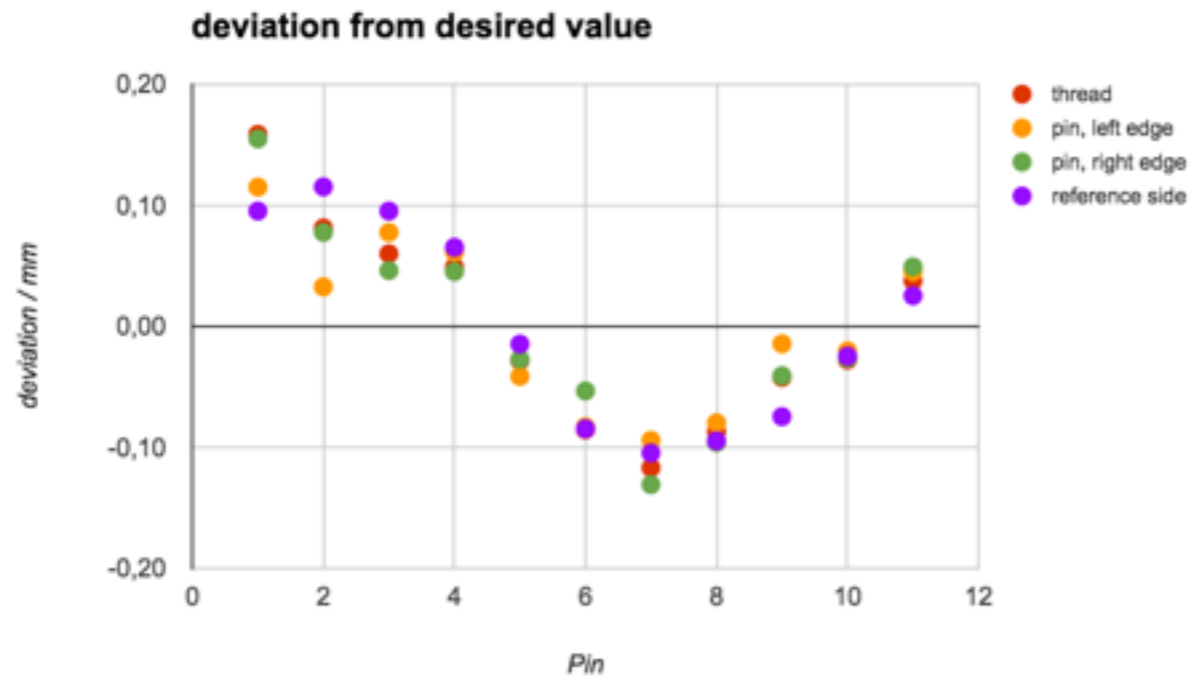
pin to thread alignment



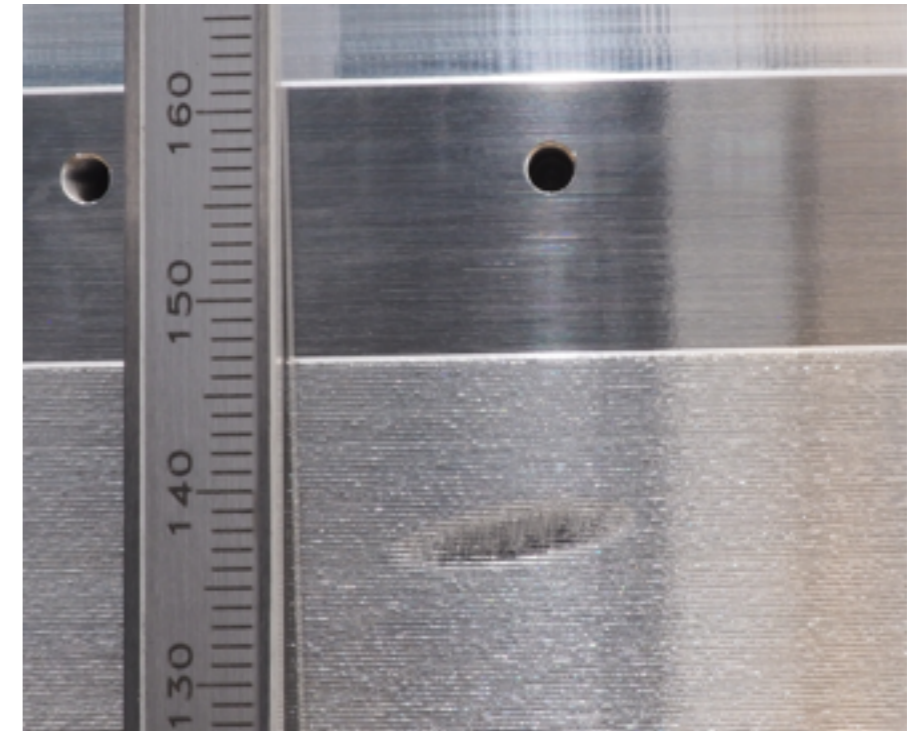
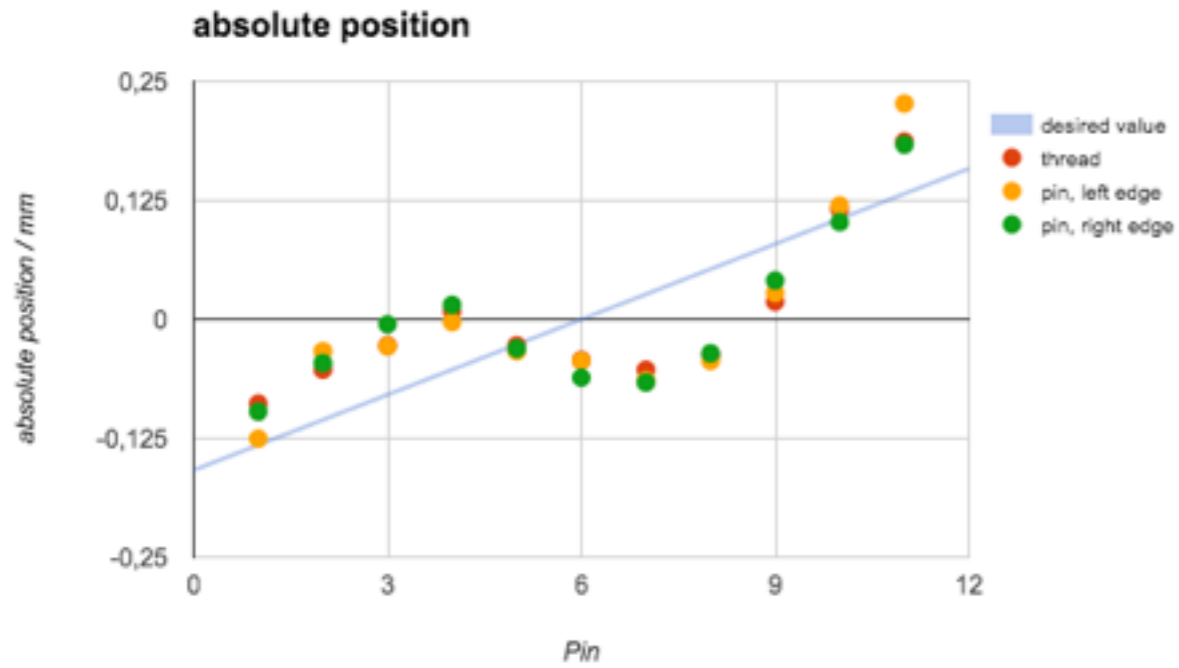
wheel 1 / TUDO2



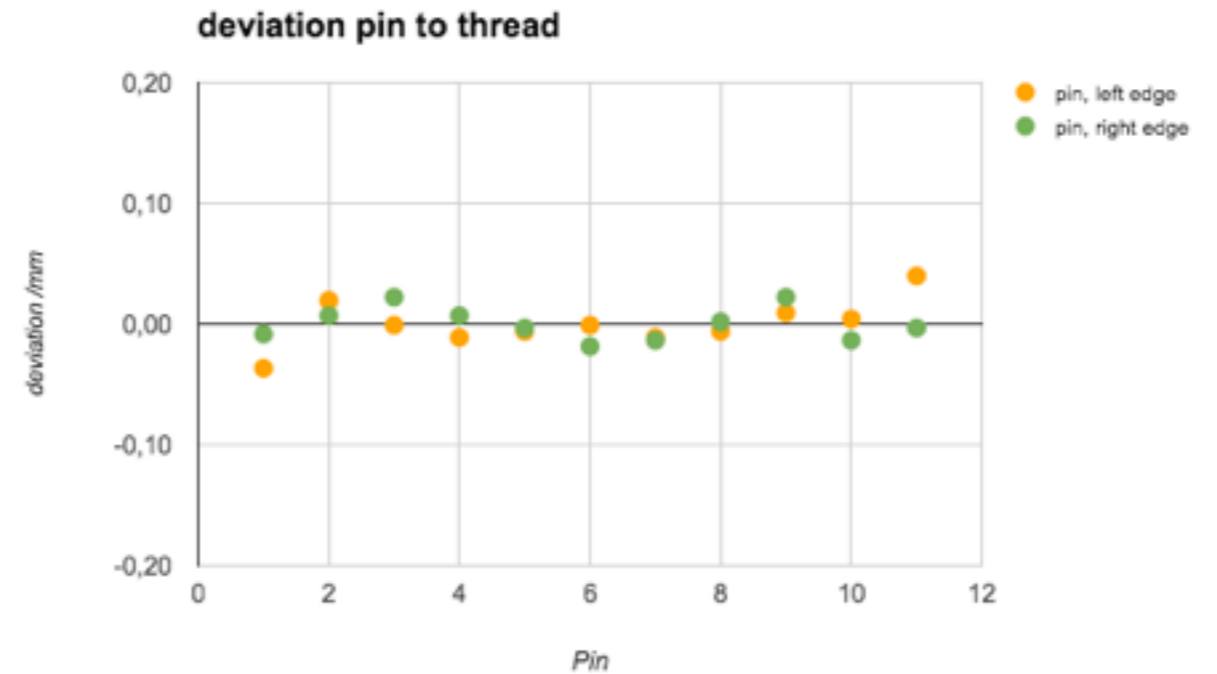
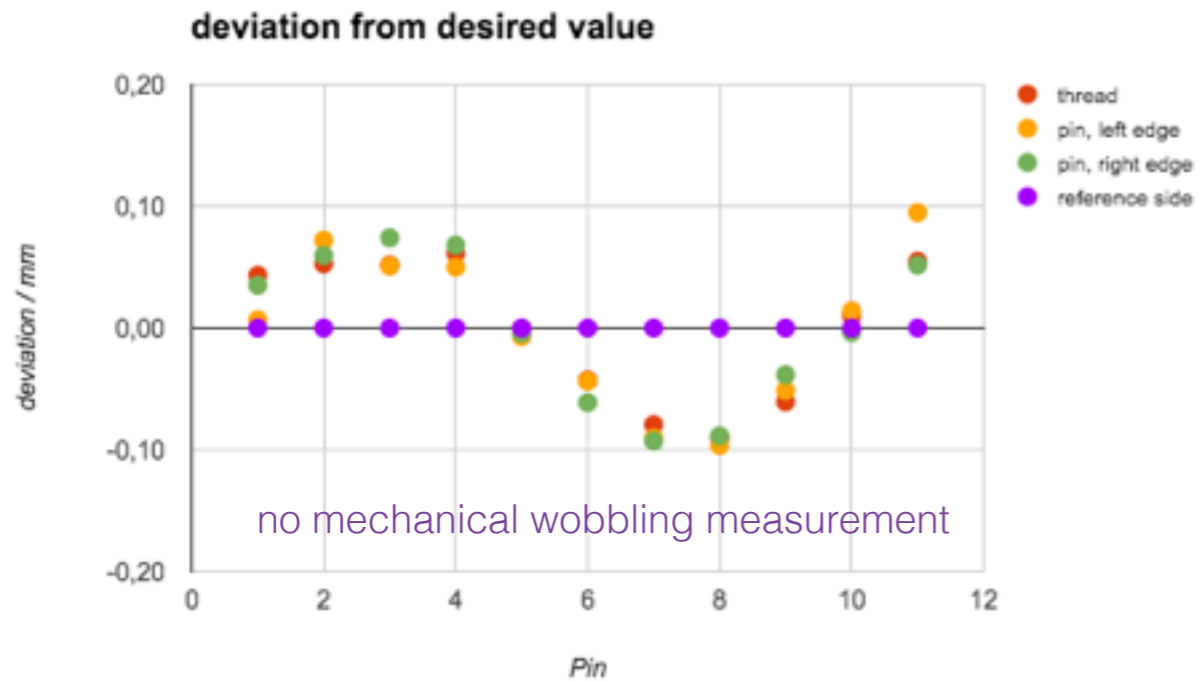
$2.95\text{mm} < \text{pin width} < 3.00\text{mm}$



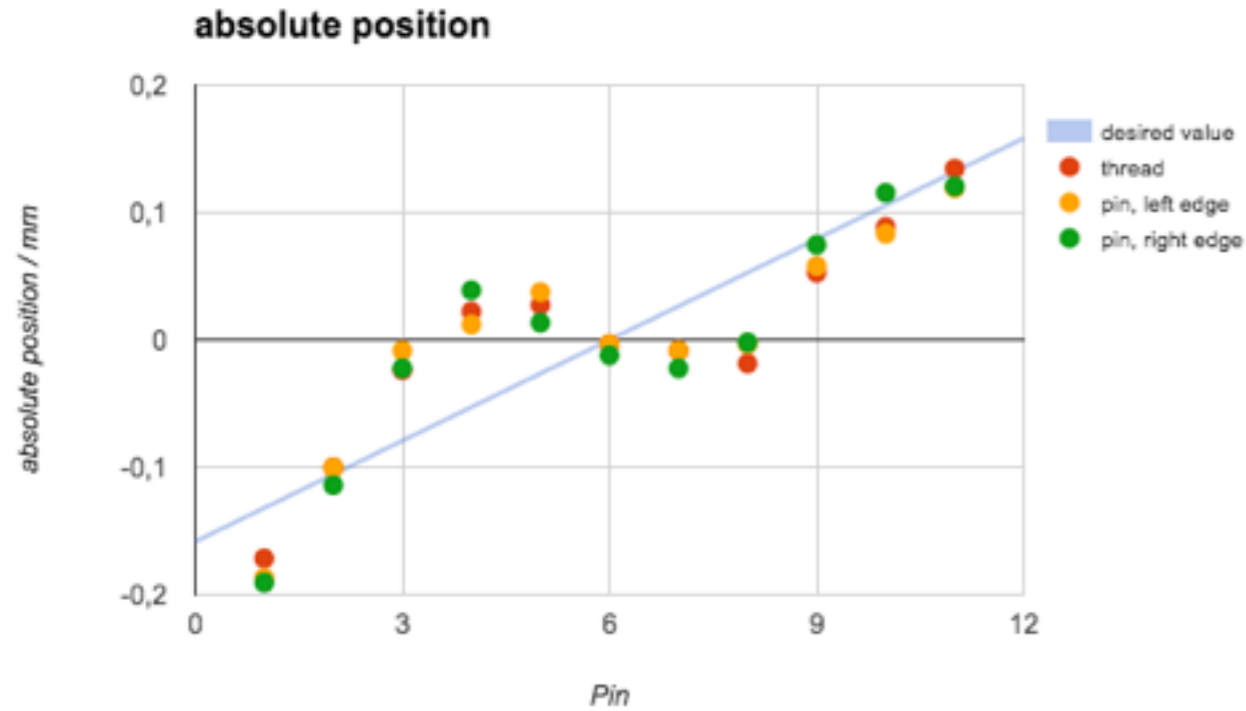
wheel 6 / TUDO3



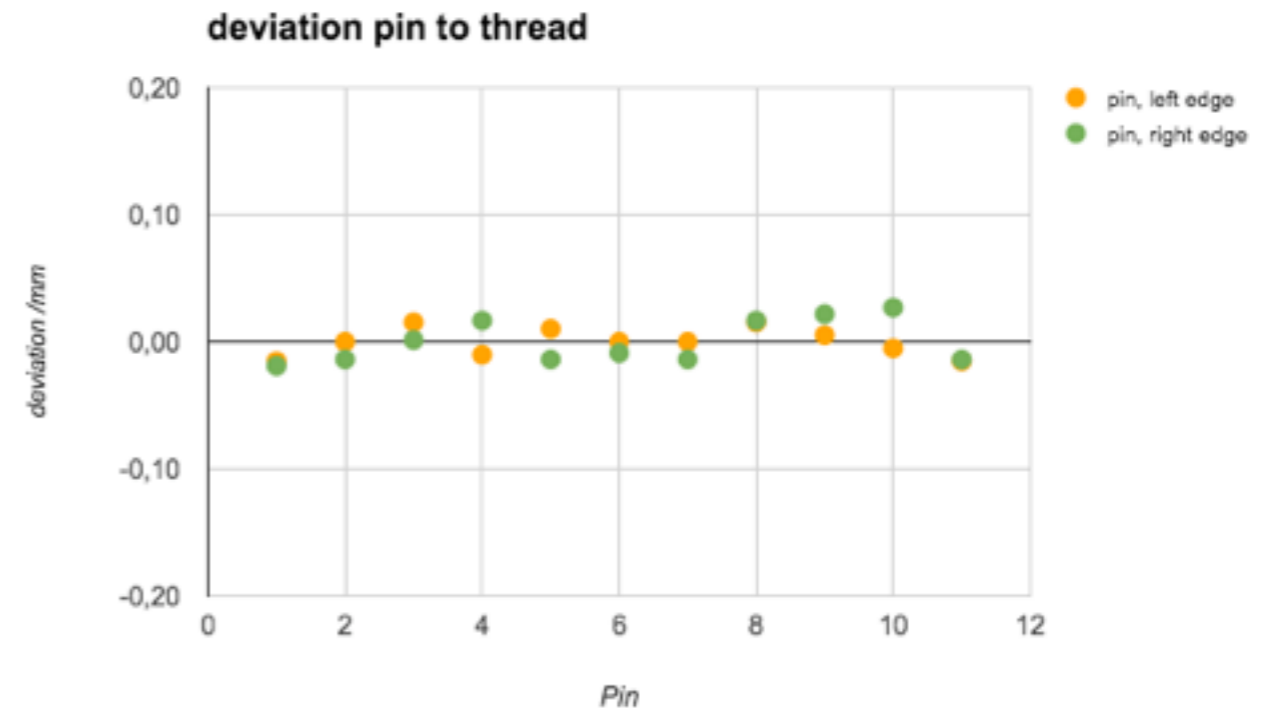
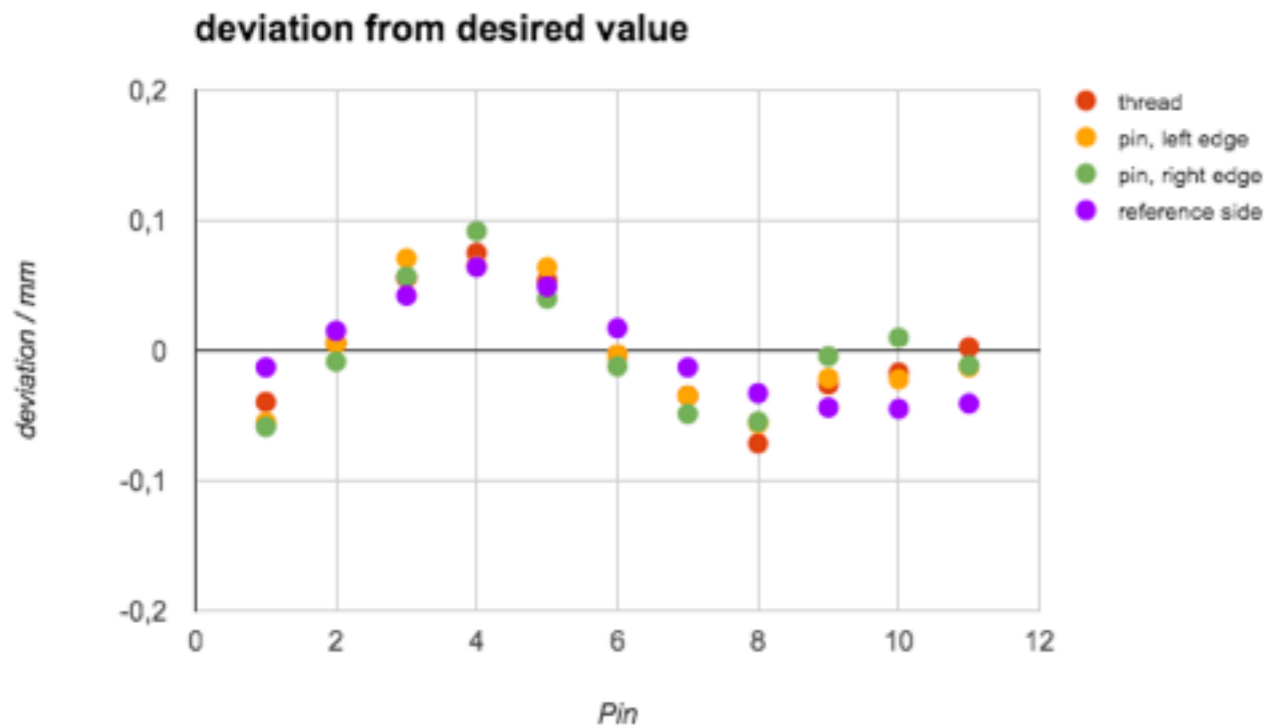
2.95mm < pin width < 3.00mm



wheel 8 / TUDO4



2.95mm < pin width < 3.00mm



Conclusion

- pin width fine for all pins
- wobbling mainly driven by our axis
 - to test this, we will do a 180° wheel rotate comparison
- pin to thread alignment zero within accuracy (<0.05mm)
- one wheel has a scratch
 - winding test still pending
- no other special observations