



What's up with the BTR Stretch Test Results?

Qualification Task Report

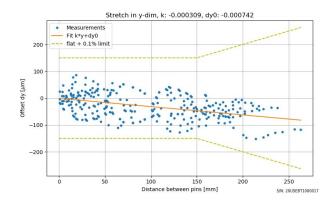


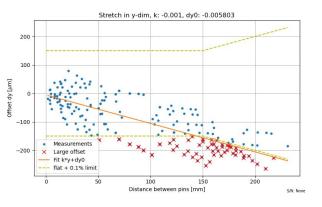
The Stretch Test

- Positions of fiducials on the BT are measured by the BTR cameras
- In each dimension, we compare the expected with the measured distance
- To pass, a tape cannot be stretched beyond a certain limit

The Problem

- Stretch tests have been performed both at DESY and Ljubljana
- Results for the same tape do not agree between the two robots





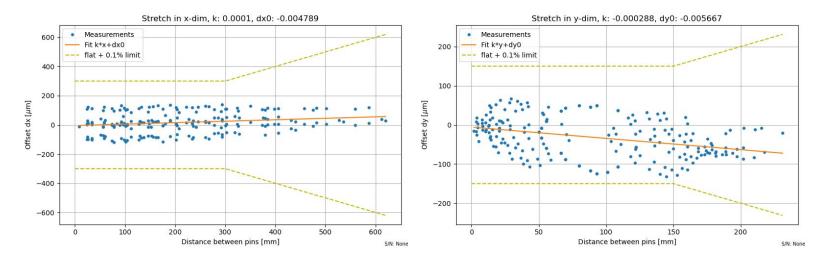
DESY result (20USEBT1000017, Bare)

Ljubljana result (20USEBT1000017, Bare)

Testing Our Robot

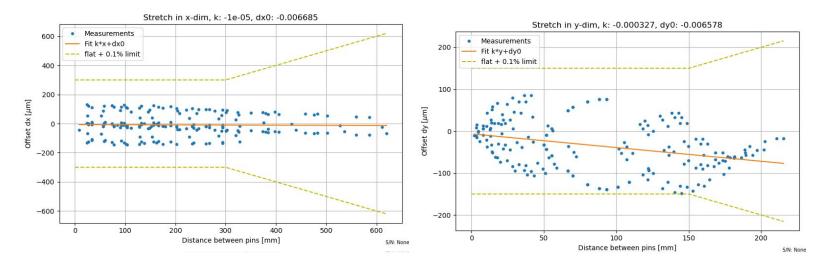
- The Smartscope in 26 can accurately measure the position of the fiducials
- This allows an accurate "gold standard" for our robot
- We measured a cocured tape to make sure we didn't stretch it in between tests

Testing Our Robot



DESY BTR Result (USEBT1000010, CoCured)

Testing Our Robot



DESY Smartscope Result (USEBT1000010, CoCured)

Result

- BTR and Smartscope results agree nicely
- Why do results from Ljubljana and DESY disagree then?

Result

- BTR and Smartscope results agree nicely
- Why do results from Ljubljana and DESY disagree then?
 - \circ We don't know yet :(