

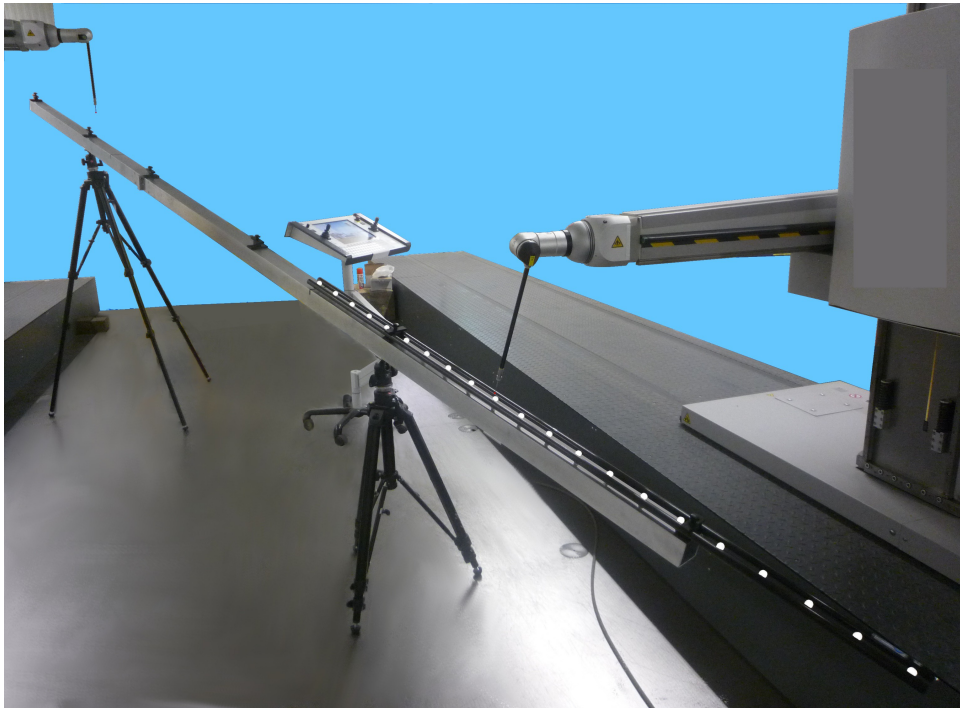


**NEWLY** manufactured by  
Qopas GmbH, Germany

**FORMERLY** manufactured by  
Trapet Precision Engineering

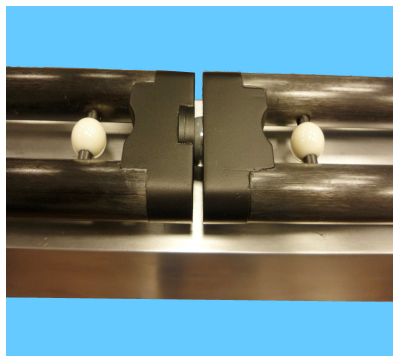
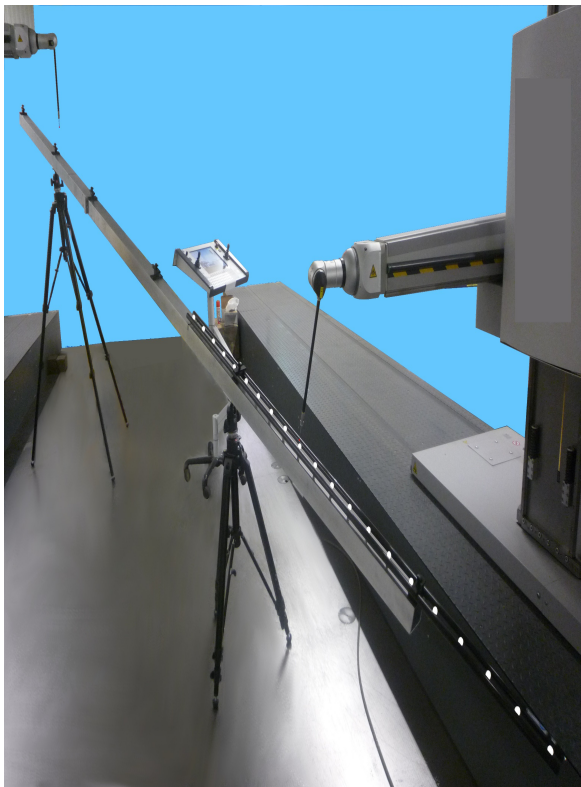
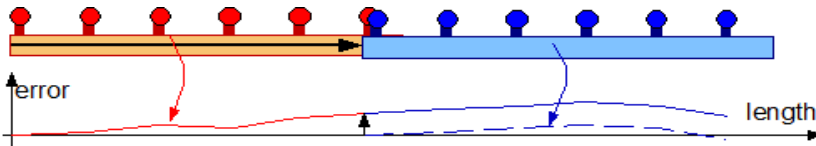
*...wenn die  $\mu$ 's Mühe machen...*

## Joined ESCALON Ball Bars Made in Germany

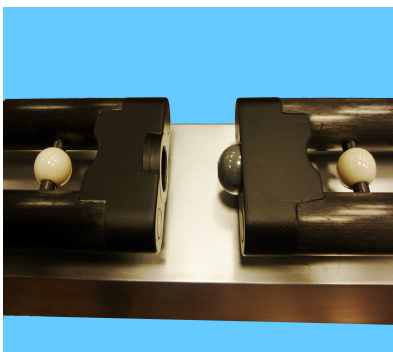


According to the International Standard on CMM verification ISO 10360-2 (2010) it is possible to "stitch" the results of measurements of a length standard together, having measured this reference in a multiple of overlapping positions along a line in the volume to be checked. In that way, you get almost the same Information about the length measurement deviation of the CMM as you would get by using a longer reference which has been completely measured.

In order to make this kind of measuring technique easy and fast, fixtures in form of aluminium or carbon fibre beams for ESCALON ball bars on which the ball bars can be easily placed in consecutive positions along a line are available. No high precision of the positioning is required.



ESCALON ball bars can be optionally equipped with integrated high precision joints to assemble two or more ball bars so that they form together one entirely calibrated ball bar. No stitching is needed as we work with one big ball bar.



The big advantages of precision joint ball beams is that

- => different ball bar lengths are available for different lengths of CMM axes,
- => several technicians may "dynamically" share Resources,
- => no need to invest in one long Ball bar, which probably won't be used frequently.

