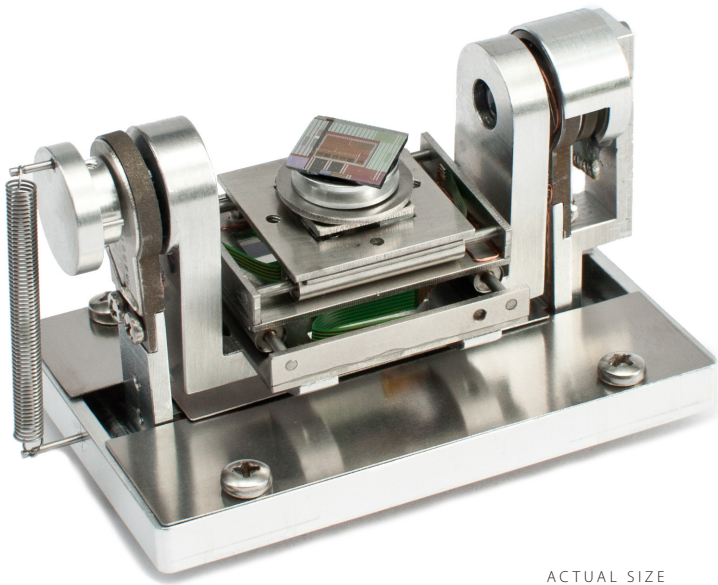


Eucentric Five-Axis Table

The E5AT stage is a five-axis positioning tool especially designed to allow tilting samples to ± 90 deg while allowing unlimited rotation of the sample and keeping the area of interest at the eucentric position.



ACTUAL SIZE

The system consists of a small four-axis substage mounted on a tilting platform. The substage offers a range of 10 mm by 10 mm in the X and Y directions and 3 mm in the Z direction. Additionally, the rotational axis allows unlimited rotation of the sample through 360 deg.

The tilting platform is fitted with a positional encoder with a resolution of 0.1 deg.

Applications

- Electron Channel Contrast Imaging (ECCI)
- Electron Backscatter Diffraction (EBSD)
- Tomography
- ... any application that requires eucentric repositioning of samples

Technical specifications

- Dimensions
 - Length 72 mm
 - Width 50 mm
 - Height 44 mm
- Travel X and Y 10 mm
- Travel Z 3 mm
- Travel R 360 deg (unlimited), with optional Encoder
- Travel T ± 90 deg, with Encoder
- Encoder specifications:
 - Absolute accuracy < 0.4 deg (7×10^{-3} rad)
 - Repeatability < 0.03 deg (4×10^{-4} rad)
- Resolution
 - Linear axes < 0.02 nm
 - Rotational axes $< 7 \times 10^{-9}$ rad
- Speed up to 1 mm/s
- Drift 1.5 nm/min
- Cartesian movement
- Optional: Integrated Microgripper
- No backlash or reversal play
- Coarse and fine displacement in one drive
- Virtually unsusceptible to vibrations

Further information

- Contact us at info@kleindiek.com
- Find your local agent at www.kleindiek.com