

LT6620 Substage

Our range of stages are suited for orthogonal positioning solutions in atmosphere, SEM/FIB, UHV and at low temperatures.

The LT6620 is primarily used in SEM/FIB to enhance the accuracy and functionality of the standard microscope stage. It is designed for large-range high-precision applications in extreme environments.

It is not fitted with positional encoders and is thus the economical alternative to the LT6820 substage for applications where repeatability or automation is not required.

APPLICATIONS

Substage for SEM & FIB

Cell counting

Particle counting

CUSTOMIZATION

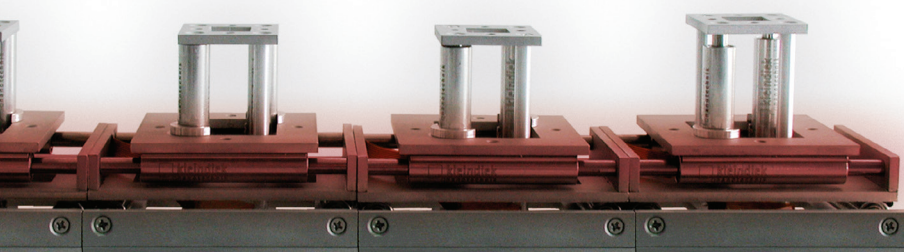
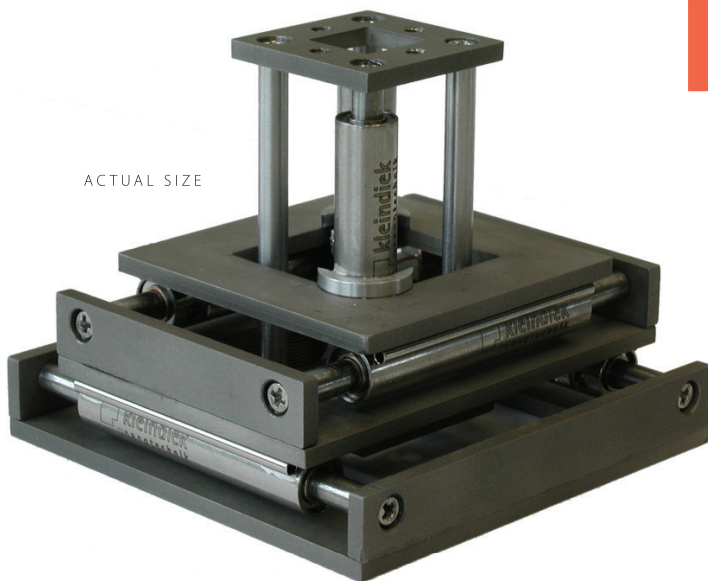
Two or three linear axes

Ultra high vacuum compatible

Low temperature compatible

Non-magnetic material

ACTUAL SIZE



LT6620 Substage

More compact and more flexible

- Small and practical
- Plug-and-play system with modular design
- Interfacing solutions for most SEM/FIB instruments (including load lock)
- Fast setup and removal

Clearer and simpler

- Result-oriented operation which leads to increased throughput
- Intuitive control interfaces, user-friendly software and API support
- User-friendly and easy to learn
- Compact, stand-alone electronics
- Pioneering cabling technology with compact vacuum feedthrough

More robust and more stable

- Compact construction delivers higher resonance frequencies
- Excellent stability
- Virtually insusceptible to vibrations
- Reliable operation (one year endurance test)
- Fast pre-positioning by hand
- Functions in extreme working environments

Faster and more precise

- No backlash or reversal play
- Sub-nanometer resolution ($< 0.5 \text{ nm}$)
- Coarse and fine displacement in one drive
- High operating velocity (up to 2 mm/sec)
- Low drift (1 nm/min)
- Smooth motion

Technical specifications

- Length 66 mm
- Width 66 mm
- Height XY 26 mm
Height XYZ $50 \text{ mm} + 15 \text{ mm travel}$
- Weight XY 200 g
Weight XYZ 270 g
- Travel XY 20 mm
Travel Z 15 mm
- Speed up to 2 mm/s
- Resolution $< 0.02 \text{ nm}$
- Angular deviation (unidirectional) $< 10 \mu\text{rad}$
- Load 500 g
- Lift 200 g
- Temperature range 273 K to 353 K
UHV version 273 K to 393 K
- Lowest pressure 10^{-7} mbar
UHV version $2 \times 10^{-10} \text{ mbar}$
- Substage mounting $4 \times 3.2 \text{ mm holes}$
- Sample mounting $4 \times \text{M3 holes}$
- Material Stainless steel

X,Y = HORIZONTAL
Z = VERTICAL

Contact us at
info@kleindiek.com
 or find your local agent at
www.kleindiek.com