



Founded in 1976 as a one-man operation, Feinmechanik Ulrich Klein GmbH rapidly developed into a highly capable precision engineering company that employs more than 50 technicians and specialists in Velbert today.

While in earlier years individual parts were produced in small production runs, and also technical drives and small gearboxes, today one of the main fields of activity is the development and manufacture of manipulators for scanning electron microscopy.

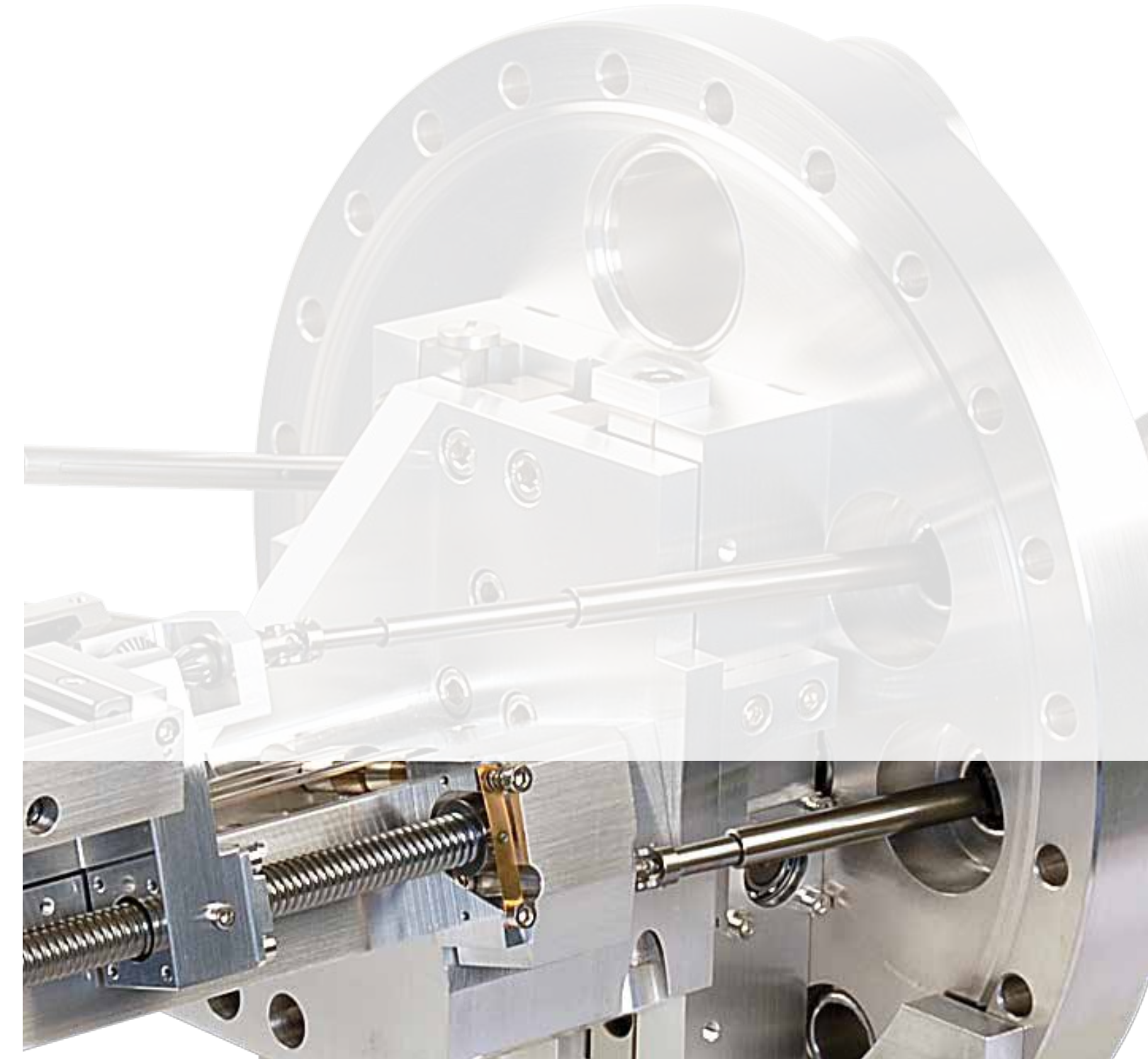
All the devices are developed and designed on CAD systems in our own design office to the specifications of the customer. Quality, innovation and precision have been part of our corporate philosophy for more than 35 years now and form the basis for the success of our products. What you will find here is an inventive spirit combined with perfect know-how and the very latest high-precision CNC technology.

Our customers include leading makers in scanning electron microscopy, materials testing institutes, universities, mechanical engineering and processing industries.

- Manipulators  
Development, design and production on CAD systems for scanning electron microscopy, for example, which find application worldwide through our partner companies.
- Linear and cross tables  
for all kinds of areas of application, either standard items or made to order, for example as a measuring table and/or handling system.
- CNC parts production  
on machining centres and CNC turning, milling and gear-cutting machines.
- Technical drives
- Linear drives up to 10 kN

We solve [your] problems – without any problem!

Feinmechanik Ulrich Klein GmbH



***Fine mechanics in precision***



Feinmechanik Ulrich Klein GmbH  
Konrad-Zuse-Straße 4  
42551 Velbert  
Germany  
Phone: + 49 2051 / 80512-0  
Fax: + 49 2051 / 80512-30  
klein@feinmechanik-klein.de  
www.feinmechanik-klein.de





Gear wheels / CNC turned and CNC milled parts



Toothed belt wheels - various pitches up to Ø 100 mm  
Gear wheels up to module 1.5 resp. Ø 100 mm



Worm gears and worm wheels up to module 1.5 resp. Ø 100 mm



Spur wheels, gear sets, etc. up to module 1.5 resp. Ø 100 mm

Accessories for manipulators



Airlock for samples up to 200 mm / 8 inches



UHV-rotary-feedthroughs with handwheel and 4-digit position meter, motor-flange available

Linear actuators

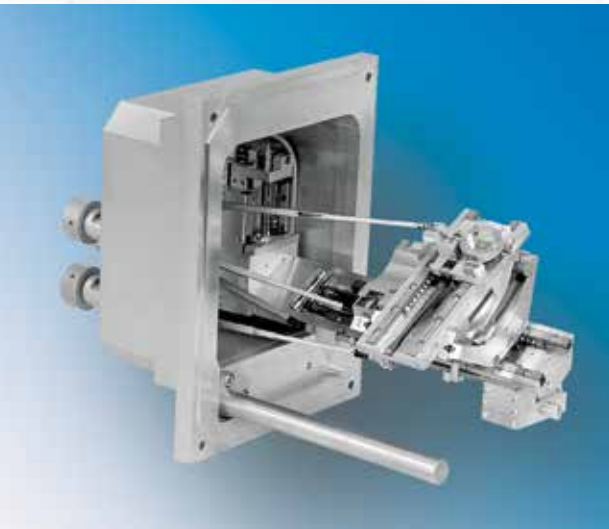


Linear actuators up to 10 kN

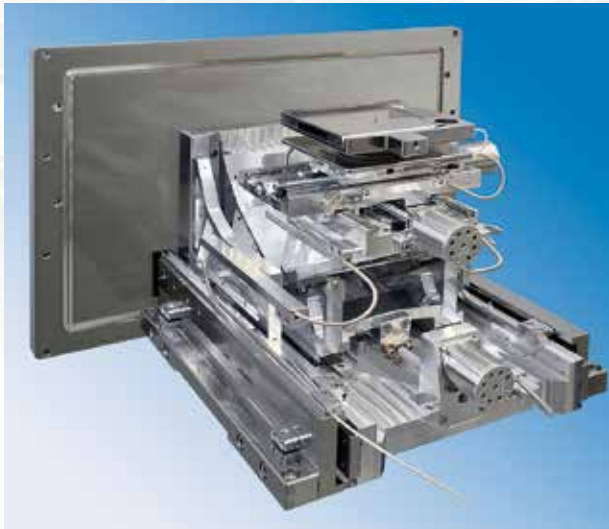
Manipulators



5-axes-manipulator for scanning electron microscopes SEM



Manipulator for scanning electron microscopes SEM



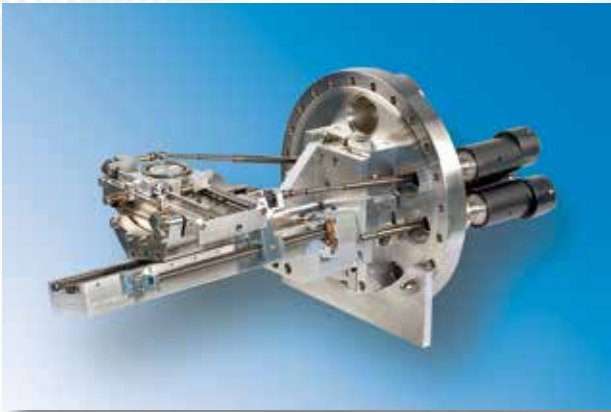
High-precision probe scanner / manipulator  
X- and Y-axes = 130 mm travel, Z-axis = 40 mm travel



Module for heating- and tensile tests assembled on top of a 5-axes-manipulator for SEM



5-axes-manipulator for scanning electron microscopes SEM (X-, Y- and R-axes driven by Piezo-motors)

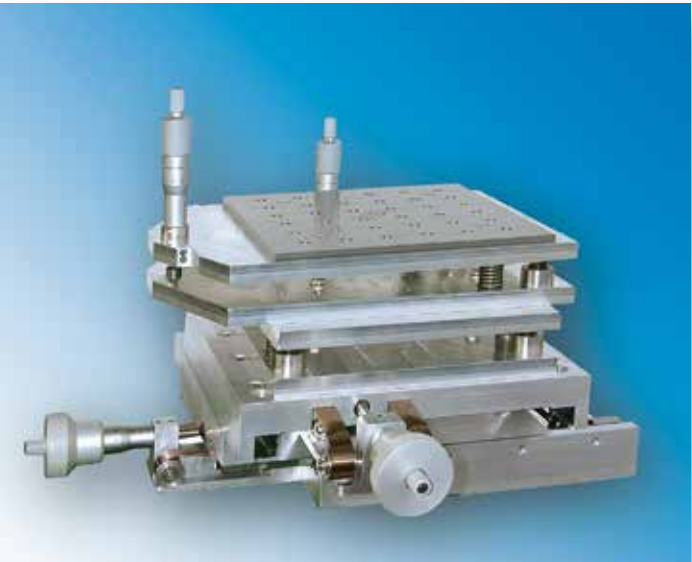


5-axes-manipulator for UHV-applications

Linear and cross tables



Cross table with locking screws, roller bearings



Cross table with height alignment, roller bearings

Our fabrication



Cross table with micrometer screws, roller bearings

