

microPREP™ PRO

MOTORIZED STAGE

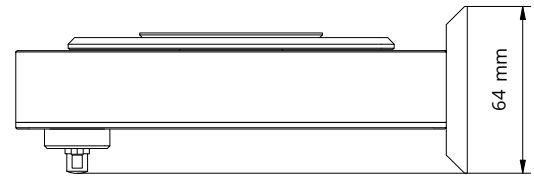
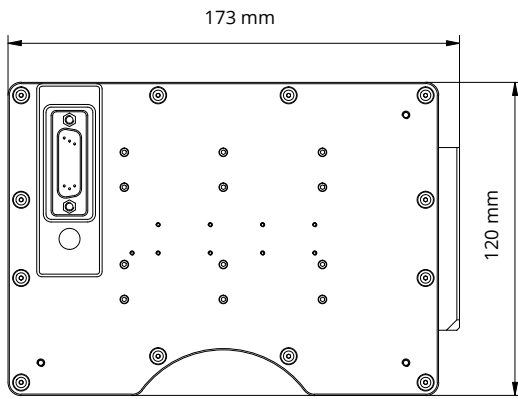
The motorized stage is designed for samples that are preferably placed either on a SEM stub/mount or directly on the platform. The stage is suitable for sample sizes up to a diameter of 70 mm and a height of 20 mm. The two integrated piezo axes for translation (x and y direction) and one integrated piezo rotation axis assist in finding the area of interest. The motorized stage enables the microPREP™ PRO to run multiple processes within one workflow. The motorized stage is suitable for milling, XL-Chunk processes, and 2D or 3D contours without being limited to that.

APPLICATION IDEAS

- XL-Chunks and related shapes
- Milling processes (box and cross-sections)
- Pillars/needles or even pillar arrays
- Multiple processes
- Laser polishing

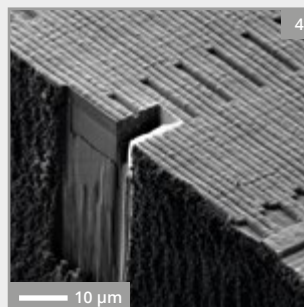
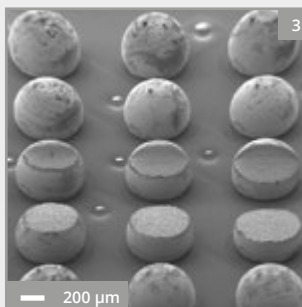
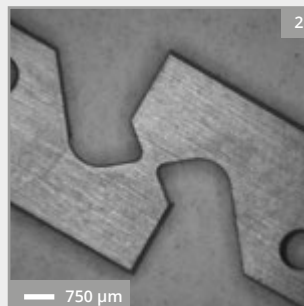
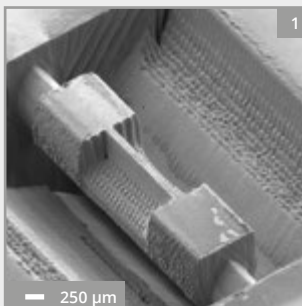


Technical Data



Actuator Type	Piezo electric
Travel Range	X-axis: 43 mm Y-axis: 26 mm Rotation (closed loop): infinite
Resolution (Piezo)	Linear axis: 4 nm Rotational axis: 2 μ rad (0.00012°)
Repeatability (Piezo)	Bidirectional: \pm 160 nm Rotational: \pm 15 μ rad (0.00085°)
Physical Dimensions	173 mm x 120 mm x 64 mm (6.81" x 5.72" x 2.52")
Possible Sample Sizes	3.2 mm (1/8") SEM/FIB short pin stubs/ mounts Diameter < 70 mm Height < 20 mm
Weight	1.2 kg
Max. Load Capacity	up to 5 N

Application Ideas



The motorized stage gets the most out of the microRPEP™ PRO. Almost all processes can be performed with this stage. Due to the pin fitting any 3.2 mm (1/8") pin stub or mount for SEM/FIB systems can be used. This opens up further possibilities in the field of sample preparation. The motorized stage was designed to prepare complex structures and can also manufacture geometries with undercuts. The XL-Chunk workflow can be named here as one of the main applications for this stage (*image 1* with additional lamella process). The stage is also best suited for cutting tensile test or cantilever specimen (*image 2*). Moreover, the motorized stage can be used to carry out cross-sections and box-millings. These tasks can also be easily performed on several positions on the same sample (*image 3 and 4*). In combination with the motorized rotation stage, completely new ways of sample generation can be realized in the field of tomography applications.

• and
• many
• more

Rev. 2020-09 Changes in accordance to technical progress are reserved.