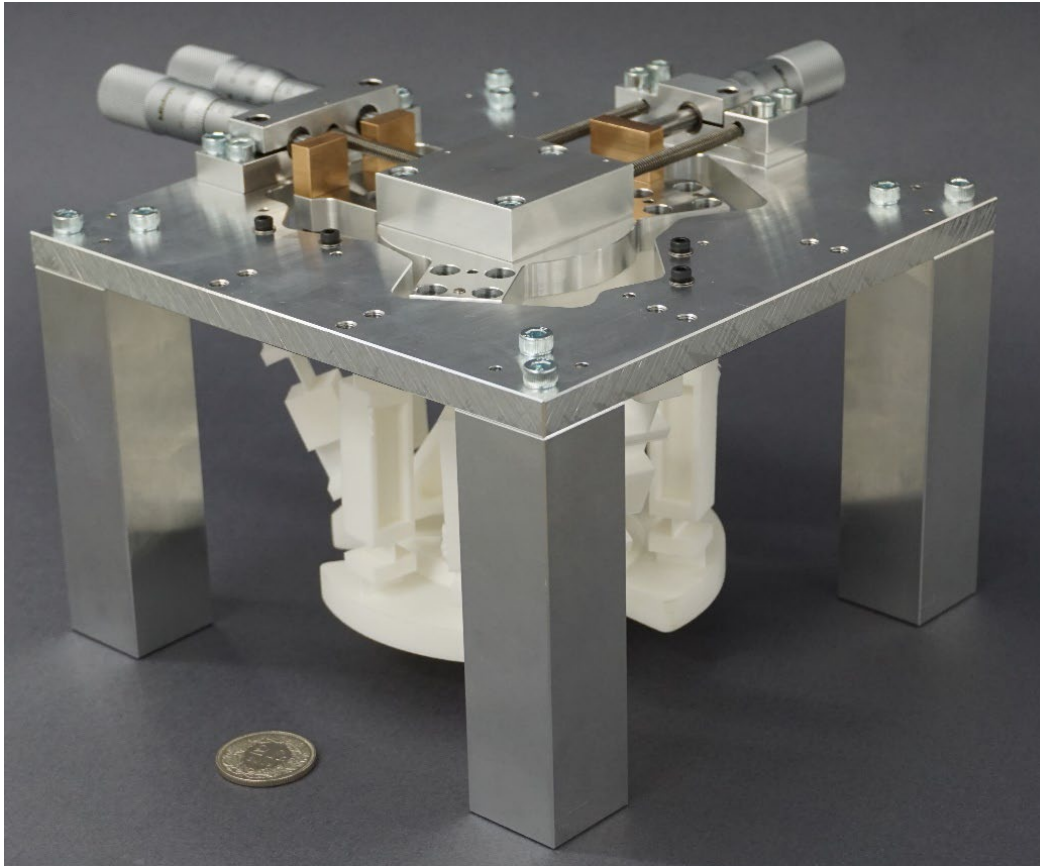


ATLAS: Accurate xy-Table with Large Stiffness

Ref. Nr

6.2165

Keywords

Flexure-based XY translation table, high-accuracy displacement.

Intellectual Property

EP21179030.8

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Description

This innovative flexure-based xy-stage is a compound design with high straightness of motion allowing large strokes with high accuracy under high loads.

This patented design uses flexure-based vertical columns which cancel each other's parasitic motion. This configuration is optimal to sustain high payloads, as the structure is loaded either in traction or compression.

Advantages

The XY-stage features a high load capacity, while also delivering high repeatability. Its flexures have no backlash, eliminate the need for lubrication and minimize wear,

resulting in an infinite lifetime and maintenance-free operation. These flexures create a monolithic structure, allowing for scalability in various applications. Additionally, the flexures are compatible with extreme environmental conditions. The stage can be operated both manually and in an automated manner.

Applications

- Automation and assembly
- Clean room and controlled environments
- Space industry
- Optical positioning systems
- Precision 3D-printing