Symétrie

METROLOGY AND POSITIONING

PRESS RELEASE
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New vacuum compatible high resolution hexapod

SYMETRIE delivered a vacuum compatible hexapod to Diamond Light Source (DLS) in the UK.

Synchrotrons around the world seek to offer the most varied experiments to their users.

To achieve GISAXS technique (Grazing-Incidence Small-Angle X-ray Scattering), the I22 beamline of DLS is now equipped with a hexapod that can position a load of 250 kg in six degrees of freedom (Tx, Ty, Tz, Rx, Ry, Rz).

The Diamond hexapod is installed in a 10^{-3} mbar vacuum chamber, isolated from the chamber containing the sample. Materials and motors have been carefully selected for this particular environment and the hexapod positioning performances were tested in SYMETRIE's vacuum chamber.

The resolution of this high precision positioning hexapod is 0.1 µm for translations and 0.0001° for rotations.

Ergonomic and efficient software

The hexapod comes with its controller and an EPICS compatible control interface. The ergonomic software allows to configure a virtual centre of rotation and to easily change user and object coordinates systems.

SYMETRIE is an innovative company specializing in the design and implementation of positioning and motion hexapods of all sizes for over 10 years.

In a few words:

- 4 M€ turnover, an R & D department, 70% of engineers
- Major customers: Airbus Defence and Space, AMOS, CEA, Rio Tinto, Sagem, Selex ES, Thales, University of Hawaii, University of Western Australia...
- Large scale technological projects: Megajoule Laser; ground-based or space telescopes: Aries, JWST, NOEMA, OAJ and Pan STARRS 2; satellites: Gaia and MPO, synchrotrons: APS, the Australian Synchrotron, DLS, ESRF, LBL, MAX-lab, SLAC, SOLEIL...

Contact us for more information!
Anne Duget - Tel: +33 (0)4 66 28 87 20 - Email: anne.duget@symetrie.fr