

Smart Sample Manipulator for Powder Diffraction Beamlines



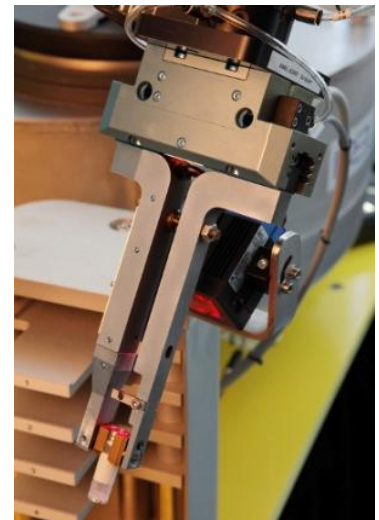
Robotic system intended for powder diffraction on Synchrotron beamlines.

Provides fast automated transfer of samples (capillaries, flat-plate holders, or custom samples holders) between the goniometer and their storage location.

Faster experiment results, flawless reliability and new possibilities can now be offered to beamline users.

Free your hands and mind for Science

- Fast and reliable sample transfer
- Compatible with all existing standards
- Ready for future standards and functions
- Low maintenance
- Custom and smooth integration



Technical information

- High performance Stäubli robot (30µm repeatability)
- Numerous hardware inputs/outputs + simple communication via socket commands
- Automatic gripper changer to manage different sample holders types (Spine capillary tubes, auto-centring flat-plate holders \varnothing 5 to 25 mm, 0.2 to 2 mm thick pellets)
- High capacity removable carousels (standard=50) for each sample holder type
- Collision detection sensor on robot arm, for safe process
- Robot laser calibration : absolute precision and reliability over time, and advanced diagnosis functions
- Standalone unit or custom integration
- CE marking and compliance with international safety standards
- Built-in traceability and diagnostic tools (barcode reader, laser sensor)

Engineering company located in a high-tech environment, IRELEC supplies highly reliable systems operating in extreme environmental conditions for Industry and Scientific Research.

