

## Smart Sample Manipulator for in-house MX experiments



Courtesy of Dr Uwe Mueller – MX beamlines at BESSY II

Robotic system developed through the experience of CATS, leading sample manipulator on European synchrotron crystallography beamlines.

Transfers automatically frozen samples (SPINE standard or similar) from the storage Dewar to a diffractometer.

Performs in-situ analysis with crystallization plates.

Faster experiment results, flawless reliability and new functionalities make this system a profitable upgrade for any existing MX in-house installation.

## Save time, get more results and benefit

- Boosts the performance of your existing equipment
- Fast and reliable sample transfer
- Custom and smooth integration
- Low maintenance
- Compatible with all existing standards and ready for future standards and functions
- Advanced technology for plates screening



## Technical information

- High performance Stäubli robot (30µm repeatability, 50µm sphere of confusion for a 20° screening range)
- Choice of different storage Dewars with automatic liquid nitrogen filling (capacity from 3 to 27 pucks)
- Automatic gripper changer for the different robot functions (frozen samples / plates manipulation)
- Numerous hardware inputs/outputs + simple software communication via socket commands
- Shock sensor on robot arm end for safe process
- Robot laser calibration for absolute precision and reliability over time
- CE marking and compliance with international safety standards
- Built-in traceability and diagnostic tools (barcode reader, laser sensor)

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