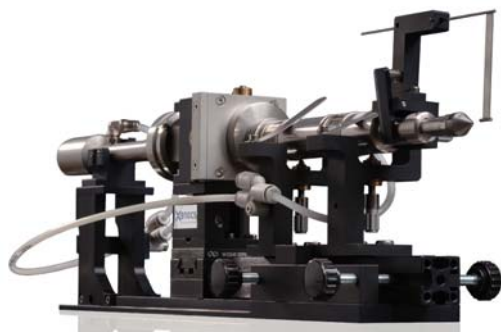


FOX2D MO 25_25P delivers a very intense and monochromatic Mo K α beam on a small focal spot. The unique combination of the single reflection design with a precision graded multilayer coating outperforms traditional graphite monochromator configuration for small sample analysis.



Benefits

- enhanced useful flux due to the **SINGLE REFLECTION ADVANTAGE** compared to standard two-reflection designs
- reduced collection time
- enhanced resolution (q_{\min} reduction)
- enhanced lifetime and lower cost of ownership (under vacuum)
- compact mechanical design
- easy to align (10 minutes procedure)
- fits all X-ray generators rotating anode generators, sealed tubes or micro-focus sources)
- no direct beam

Applications

- small molecule
- protein crystallography
- High pressure

Optional Accessories

- alignment camera
- collimator
- pin diode detector
- vacuum pump
- stand

Technical Data

Subject to technical changes without notice

Beam features

■ wavelength	0.71Å / 17.4keV (Mo K α)
■ spot size at focus	100x100 μm^2 FWHM (for a 60x60 μm^2 source)
■ typical flux	6x10 ⁶ phs/s (for a 60x60 μm^2 source run at 50W) 5x10 ⁷ phs/s (for a 100x100 μm^2 source run at 1.2KW)
■ collected angle	3.6 mrad (0.2°), for the 2 dimensions
■ K α spectral purity	typically >97%
■ K β contamination	typically <0.3%

Optical features

■ divergence	5 mrad FWHM (for the 2 planes with a 60x60 μm^2 source)
■ distance from source to optic centre	25 cm
■ distance from optic centre to focus	25 cm
■ substrate with optimized shape	ellipsoidal

Mechanical features

■ overall FOX 2D system length	From 280 to 440 mm
■ mirror length	80 mm
■ reversible mechanical housing	6° take off angle $\pm 2 \times$ Bragg angle
■ tilt and incidence micrometric screws for a simple and sensitive adjustment	10° total range (both axes) movement in vertical (tilt) and horizontal (Bragg) directions
■ XYZ adjustment table	14x14x5 mm ³ stroke

Vacuum features

■ primary vacuum housing	longer lifetime and lower cost of ownership
■ beryllium or Kapton® windows	loss per window : <0.1% (Kapton®)
■ dry vacuum pump	working pressure : 3 mbar pumping speed : 0.6 m ³ /h voltage : 220V or 110V

