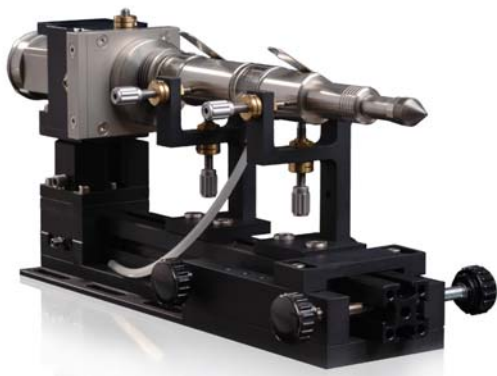


Based on Xenocs' innovative single reflection concept, the *FOX2D CU 15_100P* geometry is designed for application in which low divergence and high flux are required.

The long focal distance of this optic typically enables to focus onto the detector or to insert a two (or three) pinholes system to tune the flux-divergence compromise.



Benefits

- enhanced useful flux due to the **SINGLE REFLECTION ADVANTAGE** compared to standard two-reflection designs
- enhanced lifetime and lower cost of ownership (under vacuum)
- compact mechanical design
- easy to align (10 minutes procedure)
- adaptable to all X-ray generators (rotating anode generators, sealed tubes or micro-focus sources)
- no direct beam (X-ray safety procedure)

Applications

- Long Unit Cell
- Small Angle Xray Scattering (SAXS)
- GI SAXS
- x-ray reflectometry

Optional Accessories

- alignment camera
- collimator
- pindiode detector
- vacuum pump
- stand

Technical Data

Subject to technical changes without notice

Beam features

■ wavelength	1.54Å / 8keV (Cu Kα)
■ typical flux	1,2x10 ⁸ photon/s for a 50x50 μm ² source at 50W 3x10 ⁹ photon/s for a 300x300 μm ² source at 5KW -50 KV
■ collected angle	8.4 mrad (0.48°) for the 2 planes
■ spectral purity at Kα	> 97%
■ Kβ contamination	typically <0.3%

Optical features

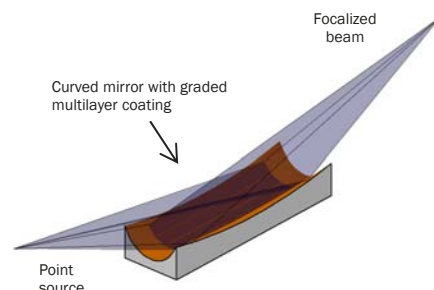
■ spot size at the focal point	H: 680 μm FWHM with a 50 μm microfocus source V: 390 μmFWHM with a 50 μm microfocus source
■ divergence	H: 2 mrad (0.11°) V: 2 mrad (0.11°)
■ distance from source to optic centre	15 cm
■ distance from optic centre to focus	100 cm
■ substrate with optimized shape	ellipsoidal

Mechanical features

■ overall FOX2D system length	190 mm
■ mirror length	60 mm
■ reversible mechanical housing	6° take off angle ± 2 x 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
■ Kapton® windows	loss per window : 0.75% (Kapton® foil)
■ dry vacuum pump	working pressure : 3mbar pumping speed : 0.6 m ³ /h voltage : 220V or 110V



DMC-060110-FOX2D CU 15_100P-TDS-01