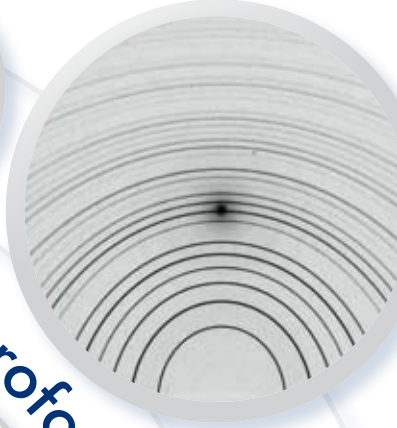
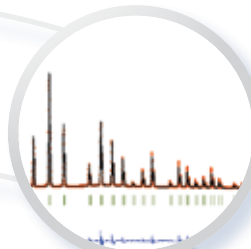


XRD



1 μ S Incoatec Microfocus Source

30 W

air-cooled

Quazar multilayer optics

unprecedented
flux density

for Cu and Mo
Ag and Cr

low maintenance



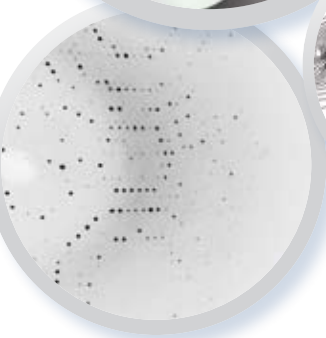
2D focusing or collimating

3 years warranty

High Brilliance Sealed Tube



SCD



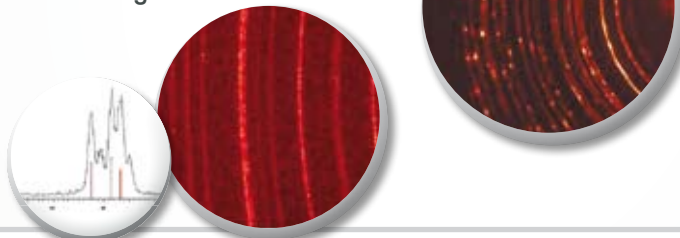
SAXS

Incoatec Microfocus Source $1\mu\text{S}$

high brilliance - small spot - air cooled - 3 years warranty

$1\mu\text{S}$ for XRD

- focusing, parallel or hybride (1D foc and 1D par) Quazar optics
- measurements in reflection or transmission geometry
- for powders achieve gains of up to 100 compared to sealed tube systems
- outstanding resolution ($< 0.1^\circ 2\theta$) in combination with 2D detectors e.g. VÅNTEC-2000



Applications:

- stress, texture, powder
- HR-microdiffraction
- heating chamber
- wafers
- well plate screening
- and many more ...

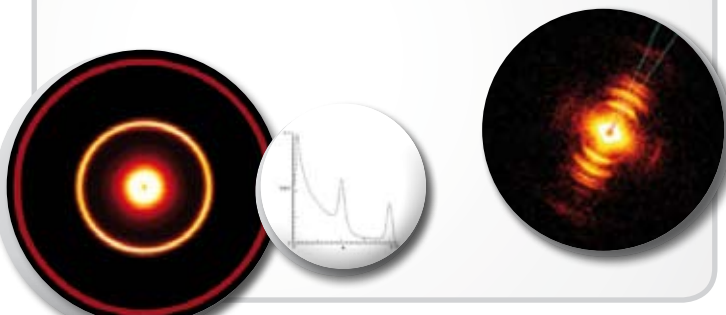


The Incoatec Microfocus Source $1\mu\text{S}$ contains a 30 W microfocus sealed tube with high brilliance and a high-performance 2D focussing or collimating Quazar multilayer optics, the newest type of Montel optics. It gives you a performance exceeding that of traditional 5.4 kW rotating anode sources, and is as easy to handle as sealed tube systems. It is available for Cu and Mo radiation. The $1\mu\text{S}$ offers numerous other benefits: it does not require water cooling, has no moving parts, has a very long lifetime without maintenance, is extremely stable, is easy to replace, and has low cost of ownership comparable to common sealed tubes. It comes with a generator unit which easily fits into a 19 inch rack, and can be delivered with a collimator system and accessories such as alignment motors or beam analyzer tools. The complete system is radiation safe and vacuum tested.

The compact design makes the $1\mu\text{S}$ an attractive component for many academic and industrial research organizations upgrading existing X-ray analytical instruments to cutting-edge performance.

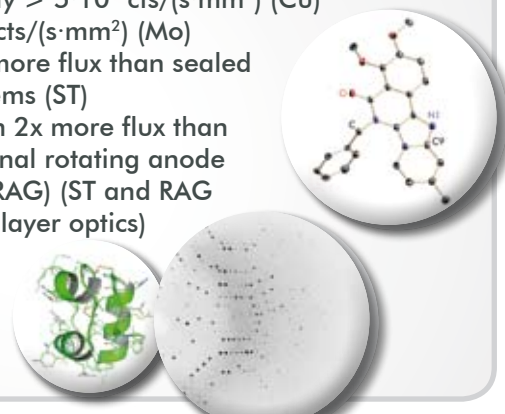
$1\mu\text{S}$ for SAXS

- Quazar optics for parallel beam
- divergence: 0.35 ... 1 mrad available
- 5x more flux than a sealed tube system with cross-coupled multilayer optics
- integrated into Bruker AXS NANOSTAR



$1\mu\text{S}$ for SCD

- Cu or Mo anode
- 250 μm (Cu) or 110 μm (Mo) spot in focus
- flux density $> 5 \cdot 10^9$ cts/(s $\cdot\text{mm}^2$) (Cu) or $> 10^9$ cts/(s $\cdot\text{mm}^2$) (Mo)
- up to 8x more flux than sealed tube systems (ST)
- more than 2x more flux than conventional rotating anode systems (RAG) (ST and RAG with multilayer optics)



Incoatec GmbH – Your Partner for X-ray Optics and Microfocus Sources: Incoatec was incorporated in 2002 by former members of the GKSS research center in Geesthacht near Hamburg and the Bruker AXS GmbH. We have more than 15 years of experience in X-ray optics based on thin film technology. Incoatec develops and makes all products on-site - Made in Germany. Our Optics are used in X-ray diffractometry, spectrometry and at synchrotron beamlines worldwide.

INCOATEC
innovative coating technologies gmbh