STOE

SINCE 1887



IPDS II/2T

STATE OF THE ART DIFFRACTOMETER WITH EXTREMELY SENSITIVE AND RELIABLE IMAGING PLATE TECHNOLOGY

We offer for all STOE parts in this product, the new and unprecedented:

10 YEAR | STOE PARTS & LABOR GUARANTEE

For terms and conditions, please send an email to: terms@stoe.com

SINGLE CRYSTAL DIFFRACTOMETRY

IPDS II

- Very high dynamic range (16 bits)
- Extremely low background (no dark current)

IPDS 2T

- Movable goniometer for higher 2θ angles
- Enlarged detection of reciprocal space
- Dual beam capabilities for highest flexibility

YOUR PARTNER IN X-RAY DIFFRACTION

STOE & Cie GmbH | WWW.STOE.COM

IPDS II/2T

UNPARALLELED RELIABILITY, BUILT TO SERVE ALL SCIENTIFIC NEEDS: E.G. SMALL MOLECULES, PROTEINS, ELECTRON DENSITY MEASUREMENTS

IMAGING PLATE TECHNOLOGY

Combines high sensitivity, large dynamic range and ability for long-time exposures with extreme stability and lowest maintenance.

FLEXIBLE SAMPLE ENVIRONMENT

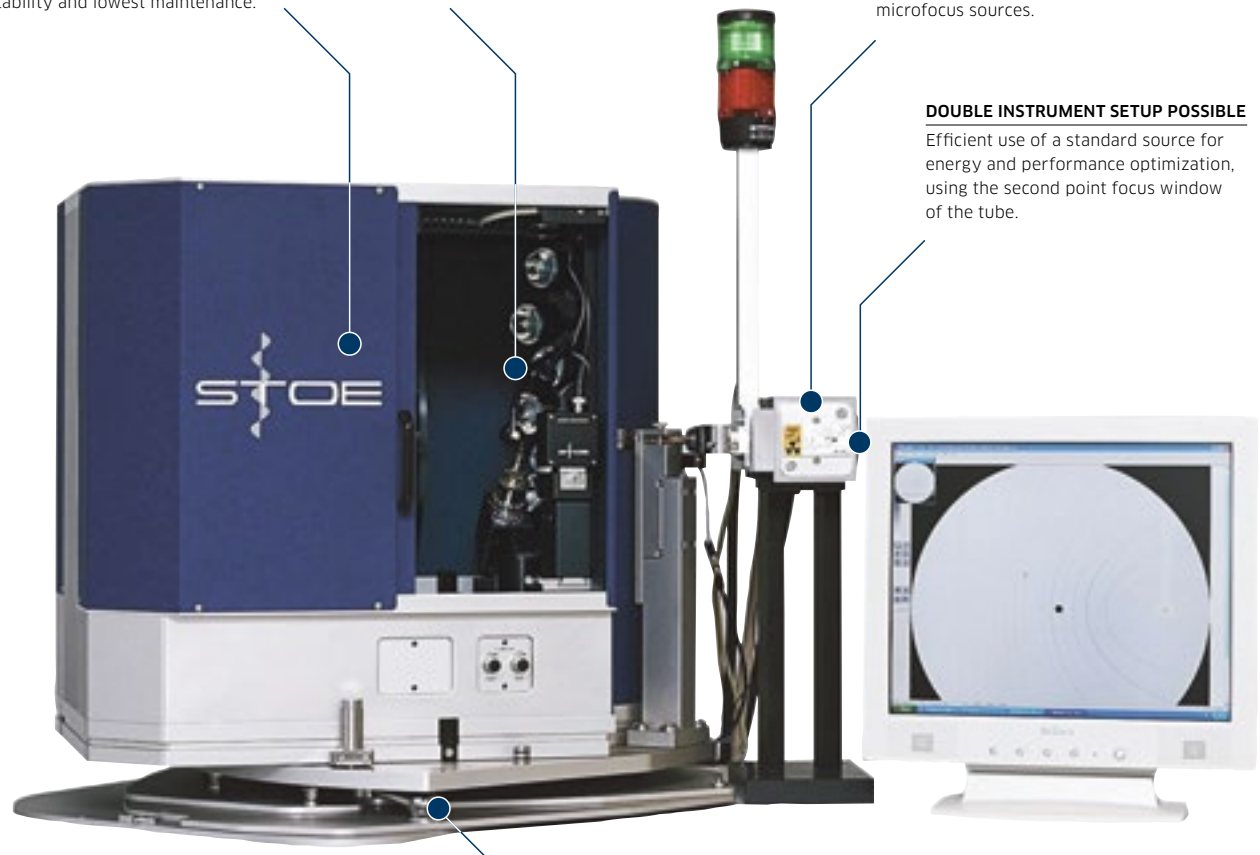
High- and low-temperature attachments as well as high pressure cells available.

SINGLE & DUAL BEAM CAPABILITY

Cu, Mo, Ag sealed Tube and microfocus sources.

DOUBLE INSTRUMENT SETUP POSSIBLE

Efficient use of a standard source for energy and performance optimization, using the second point focus window of the tube.



VERSION IPDS 2T

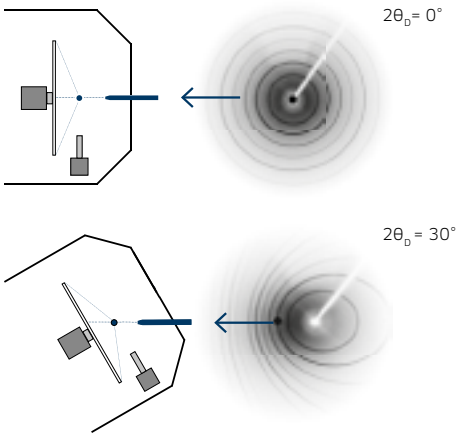
Yielding maximum 2θ-angles of up to 137° by turning the goniometer around the θ-axis.

IPDS II

- One instrument designed for both, small molecules and proteins
- Perfect for weak scatterers
- Reliable intensities of very weak and very strong reflexions within the same frame
- Long lifetime, low maintenance, low costs of ownership

IPDS 2T

- Extend the features of IPDS II by collecting data up to 137° in 2θ
- Useful for Cu radiation and electron density measurements



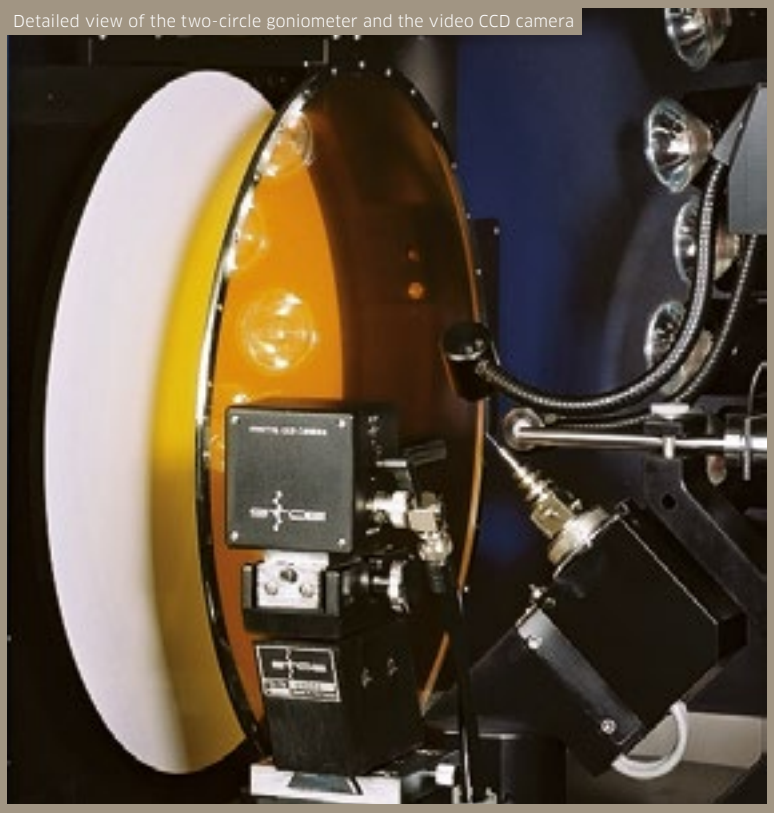
The shown Scherrer rings are presenting the turn from 0° 2θ to 30° 2θ using LaB_6 powder as the sample material.

FULL ACCESSIBILITY OF THE SAMPLE ENVIRONMENT FOR EASY ADAPTATION OF HIGH AND LOW TEMPERATURE ATTACHEMENTS AS WELL AS HIGH PRESSURE CELLS

Double Instrument Setup



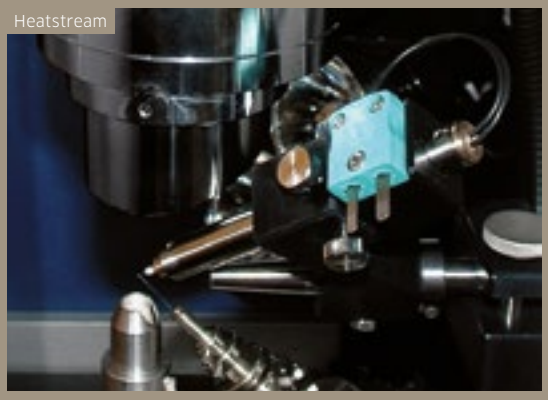
Detailed view of the two-circle goniometer and the video CCD camera



Dual Beam Setup



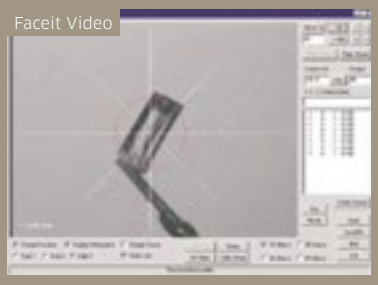
Heatstream



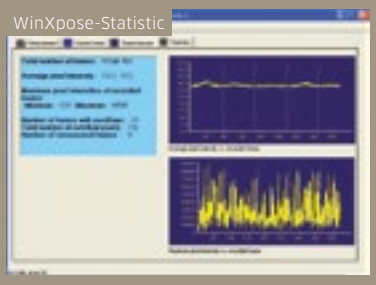
X-Area

- Software for easy data collection and evaluation
- Powerful solution for complicated situations (multi-domain and modulated crystals)
- Support for DACs

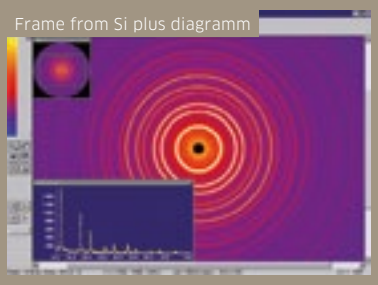
Faceit Video



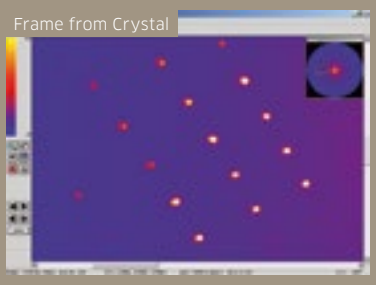
WinXpose-Statistic



Frame from Si plus diagramm



Frame from Crystal





SYSTEM SPECIFICATIONS	IPDS II	IPDS 2T
Dimensions (including system cabinet, max.)	1680 x 880 x 2110 mm	1680 x 880 x 2110 mm Double Setup: 2050 x 1260 x 2110 mm
Weight (complete system)	390 kg	420 kg Double Setup: 600 kg
Max 2θ:	77°	137°
Goniometer	ω: 180°, Φ: 360°	ω: 180°, Φ: 360° 2θ: 0°, 5°, 30°, 45°, 60°
Detector distance	40 – 200 mm (automatically set)	40 – 200 mm (automatically set)
Minimum d/Å	0.45 Ag K_α, 0.57 Mo K_α	0.30 Ag K_α, 0.38 Mo K_α, 0.83 Cu K_α
X-ray sources	Sealed Tubes: Ag, Mo, Cu Microfocus sources: Ag, Mo, Cu	Sealed Tubes: Ag, Mo, Cu Microfocus sources: Ag, Mo, Cu

DETECTOR SPECIFICATIONS	IPDS II	IPDS 2T
Diameter Image Plate (active area)	340 mm	340 mm
Intrinsic noise	low noise due to absence of dark current	low noise due to absence of dark current
Linear dynamic range	> $1:10^5$	> $1:10^5$

Specifications without obligation and subject to change without notice.

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