

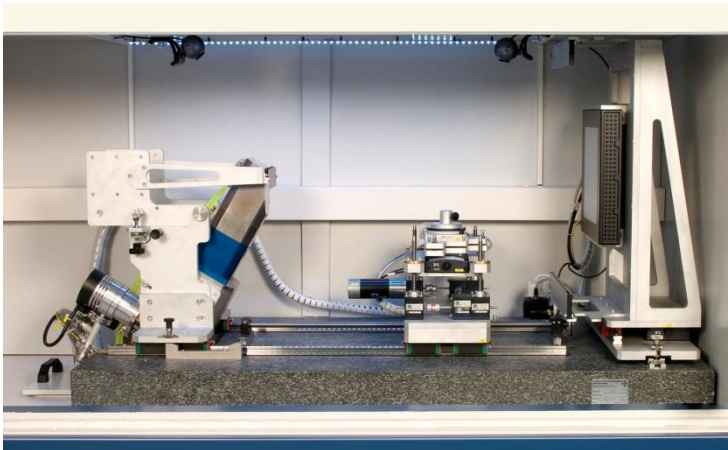
System Description

SHAKE SHR CT 225
SHAKE SHR CT 240



General Information

- Dimensions (L x W x H): 1,3m x 2,5m x 1,9m
- Weight approx.: 3500kg-4500 kg
- Vibration protected granite base
- Manual Loading- Unloading
- Motorized Door with safety Switches (you need two hands to move the door)
- Easy access to tube, sample stage, especially for service purposes
- Distance tube - detector: ~720mm for XEye (~830mm for Perkin Elmer) detector
- Webcam inside the system for easy process control
- X-ray leakage: < 0.5 μ Sv/h
- CE declaration and full documentation included



Picture shows the inside of the machine with a reflexion tube and a flat panel detector

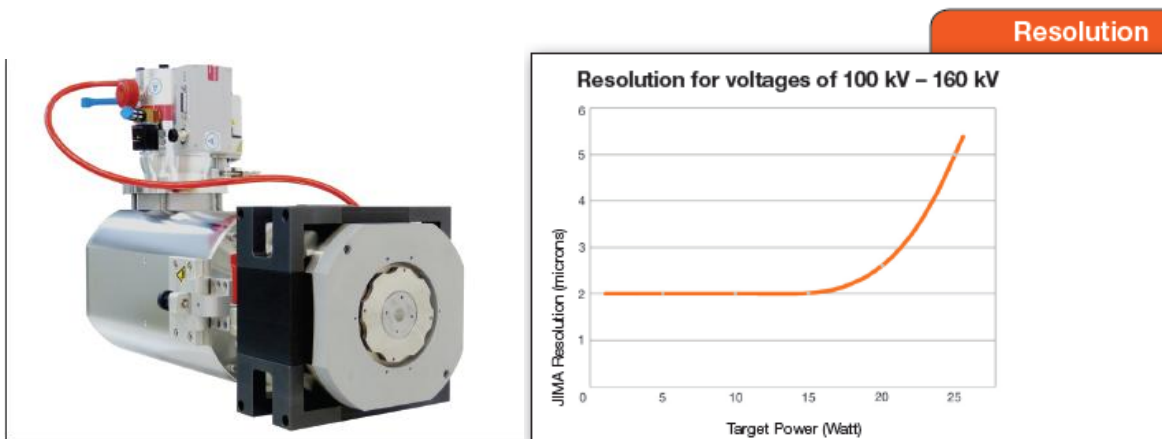
Technical data

X-Ray tube

- 225 kV microfocus tube incl. cooling system (10-225kV; 0,01 – 3,0 mA)
- Feature recognition < 2.5 μm
- TXI (True X-Ray Intensity) technology for stable X-Ray intensity during measurement (direct control of target current and direct adjustment of cathode current)
- Collimator
- Several pre filters included: 0,5 mm, 1 mm and 2 mm (Al and Cu)
- Adjustable tube holder for easy change to transmission tube

Optional:

- 240 kV transmission tube
- 225 kV transmission tube with High Power Diamond Target
- 160 kV transmission tube with High Power Diamond Target
- 160 kV microfocus reflection tube



Detector

- XEye Wearless long life detector
- No pixel or line defects
- Maintenance free
- Homogeneous DQE (detection quantum efficiency) over the whole active area
- Ring artefact free measurements
- 1 year warranty
- Active area: 200mm x 200mm
- Smallest pitch: 100 μm (2k x 2k)
- 16 bit; Dynamic: approx.: 10.000:1
- Image lag < 0,1 %
- External triggering possible
- Scintillator: GdOS:Tb

Optional:

- 20 cm x 20 cm; 1k x 1k; 16 Bit Flat Panel Detector in CT quality (e.g. PerkinElmer XRD 0820 AN15)
- 40 cm x 40 cm; 1k x 1k; 16 Bit Flat Panel Detector in CT quality (e.g. PerkinElmer XRD 1640 AN15)
- 40 cm x 40 cm; 2k x 2k; 16 Bit Flat Panel Detector in CT quality (e.g. PerkinElmer XRD 1620 AN15)
- all detectors can be delivered with additional precision axis for CT ring artefact reduction
- Collision protection by light grid

Software and computer system

- Fraunhofer EZRT computed tomography measurement- and reconstruction software Volex 6
- Reconstruction online to measurement possible
- Automatic rotation centre determination with an included calibration tool for best measurement results
- Measurement (4GB RAM) and reconstruction/visualization (12GB RAM) computer as Multiprocessor PC's 1 TByte Storage; DVD Writer; several USB connections
- 24'', 16:9 high contrast flat screen display

Optional:

- Helix CT for highest accuracy
- Limited angle CT
- Integrated beam hardening correction by characteristic curves based on IAR (Iterative Artefact Correction)
- Volume Player (Fraunhofer) for visualisation
- License of Volume Graphics Studio Max for 3D rendering, visualisation and analyses of reconstructed volumes

Axes

- Highly accurate 4-axis system on granite base
- Accuracy of granite surface < 10 µm/m
- Device for easy alignment of tube and detector
- X-axis sample stage (PI Drive M-410.PD):
100 mm traverse path
Unidirectional repeat accuracy: 0,2 µm
Bidirectional repeat accuracy: 2 µm
- Rotationaxis sample stage (PI Drive M-038.PD1):
Diameter 100 mm, 360° Rotation
Unidirectional repeat accuracy: 20 µrad
Wobble: < 75 µrad
- Y-Axis sample stage – magnification axis (PI Drive C-150.PD):
Bidirectional repeat accuracy: 100 µm

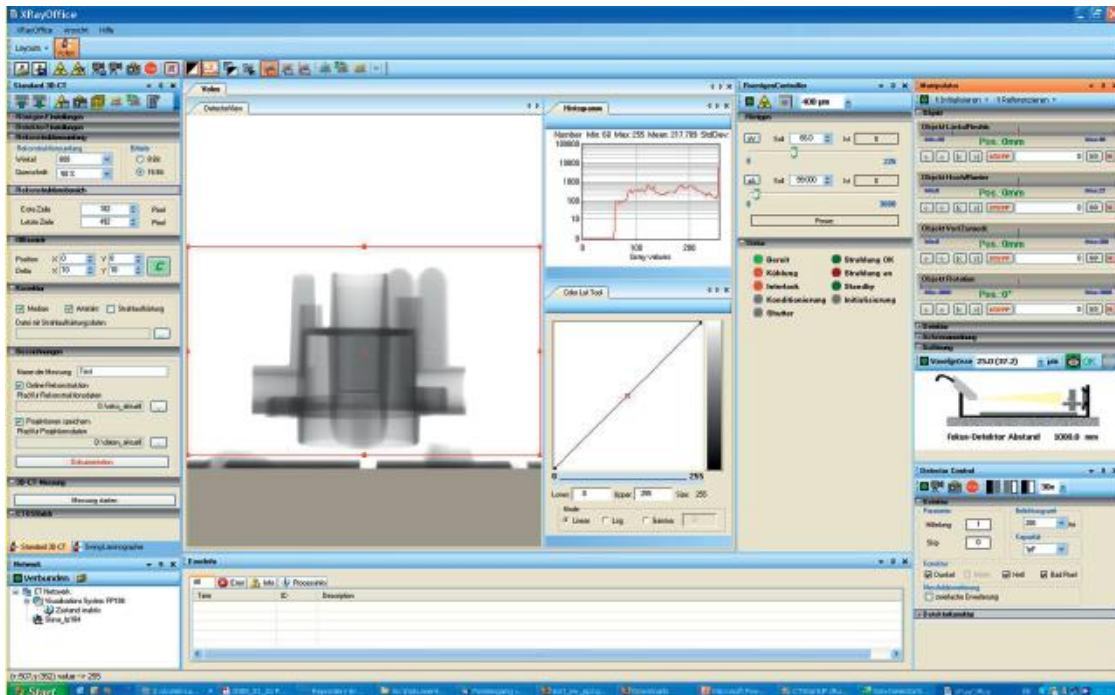
- Z-Axis Sample – manual operation by pushbottoms
~200 mm traverse path

Optional:

- Automated lifting table (Z-axis) with a traverse path of approx. 250 mm
enables Helical-CT for samples up to 10 kg
- Highest precision Aerotech Lifting Table (Z-axis) with a traverse path of approx.
250 mm
enables Helical-CT with highest precision

Sample holder

- Several sample holders included
- Easy mounting of sample holder inside the system on the sample stage
- Integrated sample holder rack



Preis für diese Konfiguration : € 475.000,00