

XCT-1000 High Resolution setup

High resolution AXI system with CT technolog









The XCT-1000 platform features both volume analyzing and automatic processing of the slices. The XCT-1000 system is capable of processing the Siemens CERA-TXR technique with exact volume reconstruction by using the latest CMP-technology for automatic geometrical correction and calibration. It is especially suitable for the inspection of small to medium production volumes or for the use in laboratory environments, production sampling or failure analysis. The XCT-1000 HR applications range from Semi-Backend component level inspection for wire bonds, μ -bumps and die-attach voiding to super high resolution solder-joint inspection for PCB's, sensors and LED's.

SYSTEM CONCEPT

- Horizontal X-ray beam and vertical rotation axis to avoid gravitation influences
- Adjustable detector mounting for various types of flat panel detectors
- Configurable X-ray tube mounting

The **XCT-1000 platform** is available in the following configurations:

XCT-1000 Transmission (2D) + CT-Analyzer + CT-AXI

Features and Benefits

- Flexible AXI CT system for offline setups
- Microfocus X-ray tube: sealed tube / maintenance free
- Digital flat panel detector
- Adjustable sample rotation table with up to 5 axes motion system
- Transmission mode for high-speed manual and automated analyzing
- Real-time CT volume reconstruction
- CERA (Siemens) core reconstruction with high speed CT functionality
- CMP (Siemens) CT calibration software with automated correction/ compensation of geometrical motion parameters
- AXI algorithm library for transmission and volume (slice) analyzing (wire-bond, µbumps, die-attach-voiding,..)
- Optional: Customized sample holder



Inspection & Process Software

- PC-Station with multi-core processor setup
- Windows 10 platform

MIPS Inspection Platform

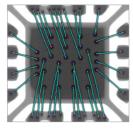
- MIPS_NDT control software and GUI for manual and automatic X-ray analyzing and automatic classification
- MIPS_CT volume reconstruction and volume (slice) analyzing including CERA and CMP software tools
- MyVGI Software License / Viewer for CT volume visualization



Applications

The XCT-1000 system is ideal for non-destructive testing, materials investigations and in particular for dimensional measurements for internal structures, undercuts and free form surfaces.







Specifications

Facilities	
Dimensions:	1735 mm (H) x 1620 mm (W) x 820 mm (D)
Weight:	1.500 kg
Safe Operating Temperature:	15° - 28 °C optimal 20° - 25° C
Power Consumption:	max. 6 kW
Line Voltage:	220 VAC, single phase, 16 A
Air:	5-7 Bar, < 2 l/min, filtered (30µ), dry, oil free

X-ray Image Chain	
X-ray Source (sealed tube)	
Energy:	High Resolution Setup 160 kV/20 W
Focal Spot:	= 1µm spot</th
Object resolution (Voxel size):	down to 1-3 µm
Grey resolution:	14 Bit
Detector Type:	
Flatpanel Detector	50/75 μm pixel size

CT multi axes motion system with rotating sample Programmable motion x1, x2, y, z, rotation system:	Motion System	
' ' ', '	CT multi axes motion system	n with rotating sample
	· ·	x1, x2, y, z, rotatio

Barcodereader	
Volume Graphics software licen	се
Custom fixtures	

For more information, speak with your Nordson MATRIX representative.

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Inspection features

Max. sample size:

Max. inspection area:

Max. sample weight:

FDD (focus detector distance)

FOD (focus object distance)

90 mm x 120 mm

90 mm x 120 mm

130 - 700 mm

50 - 650 mm

5 kg