INDUSTRIAL MICROFOCUS X-RAY 3D/CT MACHINE

Seamark ZM

XCT8500 UNIVERSAL INDUSTRIAL X-RAY INSPECTION SYSTEM

X-ray Computed Tomography is the most advanced technology for 3D measurement、quality control and non-destructive —— taking multiple images from various angles and converting the grey scale images into 3 dimensional point clouds.

Industrial CT scanning is widely used in semiconductor packaging inspection and internal connection, various materials such as electronic components, casting inspection.

Through the X-ray computed tomography technology, we can quickly and accurately check the detail of components and samples; It providrs the best solution for controlling production quality.

The XCT8500 universal industrial X-ray inspection system consists of a X-ray source, detector, scanning system, image reconstruction and analysis system. It can achieve inspection methods such as 2D/3D/CT, and is suitable for quality inspection, 3D measurement, and non-destructive analysis. Characterizing the micro-scale features of the internal structure of the sample, combined with qualitative and quantitative analysis software to achieve multi-angle measurement and analysis of the sample, as well as automatic determination of OK/NG conditions, and to provide effective data for product quality inspection.

It can be used for electronic component soldering quality inspection, BGA component, integrated circuit (IC) and its binding line inspection, semiconductor packaging inspection and internal connection, electronic power (IGBT) module inspection, and Wafer defect inspection (WLCSP).Including missing parts, deviation, tin connection,contamination, faulty soldering, component foot warping, voids, pillow effect, and other soldering abnormalities.

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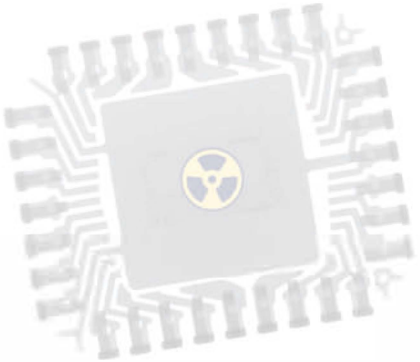
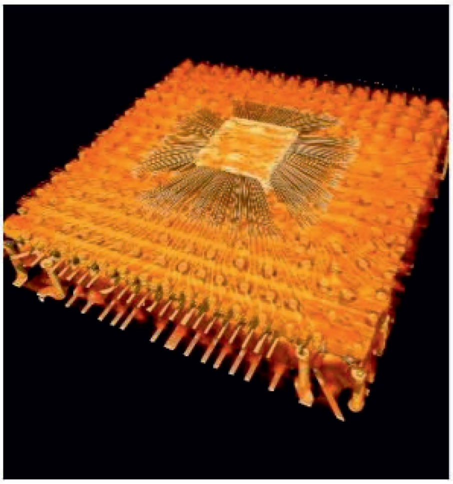


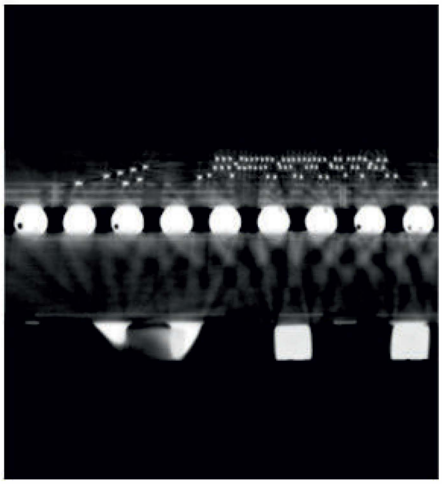
ADVANTAGES OF XCT8500 UNIVERSAL INDUSTRIAL X-RAY INSPECTION SYSTEM

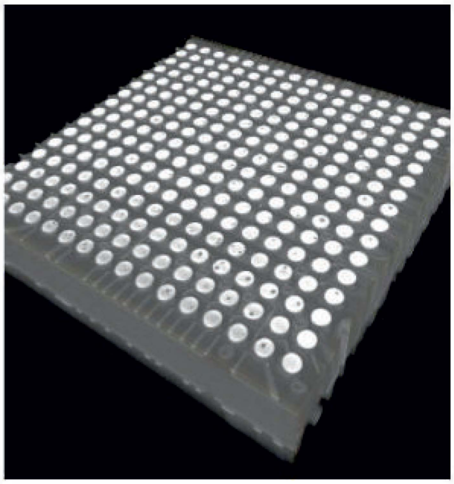
- With Planar CT Function (PCT), It Can Be Applied To 3D/CT Inspection Of Printed Circuit Boards, SMT, IGBT, Wafers, Etc.
- With cone beam CT function, it can be applied to the inspection of sensors, relays, micro motors, materials, and aluminum castings.
- Convenient 360° fixed-point observation mode.
- 2D void inspection software module (optional)
- 3D measurement and analysis software module (optional)

APPLICATION CASES

XCT8500 adopts open micro-focus transmission X-ray source, the inspection ability can reach 0.5μm. It can realize 2D/3D/CT and other inspection methods, and is suitable for quality inspection, three-dimensional measurement and non- destructive analysis.







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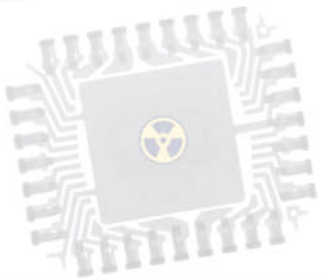

SPECIFICATION OF XCT8500 UNIVERSAL INDUSTRIAL X-RAY INSPECTION SYSTEM

X-RAY Tube Parameters

Tube Type	Open micro-focus transmission X-ray source
Tube Voltage Range	20 ~160KV
Tube Current Range	0.01mA ~ 1.0mA
Maximum Tube Power	64W
Maximum Target Power	15W
Minimum Object Distance (FOD)	< 300 μm
Micro Focus Size	< 1 μm
Minimum Defect inspection Capability	<500 nm

Flat Panel Detector Parameters

Flat Panel Type	Amorphous silicon flat panel detector (optional)
Pixel Matrix	1536×1536
Field of View	154mm×154mm
Resolution	5.0Lp/mm
Image Frame Rate(1×1)	30fps
AD Conversion Digits	16bits

3D/CT Parameters (Optional Function)

CT Scan Cycle	20s
CT Reconstruction Time	30s

Equipment Performance Parameters

Maximum Sample Size	645mm×635mm
Maximum inspection Area	500mm×500mm
Image Geometric Magnification	2500X
Input Power Supply	220V 10A 50 - 60HZ
Control System	DELL OptiPlex 7000MT v12.0 i9 graphics workstation
Dimensions	L1500mm×W1650mm×H2250mm
Net Weight	About 2950KG