

# XCT8000

## Desktop Cone Beam CT/3D Inspection Equipment

XCT8000 is a desktop small industrial CT/3D X-ray inspection equipment designed specifically for small-sized samples. It is easy to install and move, suitable for laboratory analysis and on-site use. The machine is equipped with self-developed professional software, supporting 360 degree inspection from any angle, with a spatial resolution of 5 $\mu$ m and an optimal defect resolution of 3 $\mu$ m. It can be used for quality inspection, 3D measurement, and non-destructive analysis. With qualitative and quantitative analysis software, it can accurately capture the microscopic characteristics inside the sample, achieve multi angle measurement and analysis, and empower product quality inspection.



### Product Features

**Convenient:** The device is easy to install and move, and can be analyzed and used in the laboratory

**Inspection Capability:** The maximum geometric magnification can reach 20X, and the defect inspection capability is less than 5 $\mu$ m

**360 ° Observation:** Observe product defects from any perspective

**CT Function:** cone beam CT function and spiral CT function

**Intelligent Inspection Software:** equipped with innovative self-developed intelligent visualization Inspection software and CT analysis software

**Image Enhancement:** New Image enhancement processing and preset filter algorithm

**Hyperfusion Algorithm:** image fusion and super-resolution technology, highlighting defect features

**Barcode Data Traceability:** barcode information correlation detection results, supporting integration with MES system

**Customization of Inspection Algorithm:** AI intelligent inspection algorithm can be customized according to the actual needs of users

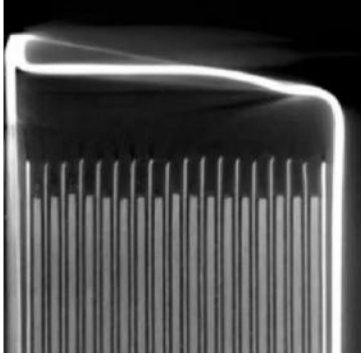
**Multiple Security Measures:** real-time monitoring of radiation levels, safety interlock, automatic shutdown of radiation sources in idle state

### Product Parameters

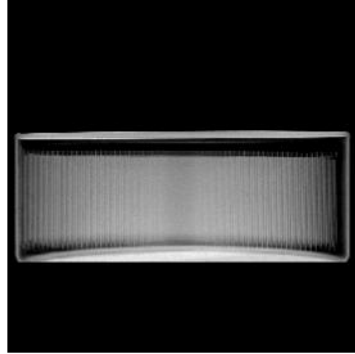
Model No.	XCT8000	
X-Ray Tube	X-Ray Tube Type	Reflection sealed microfocus X-ray source / Transmission sealed microfocus X-ray source
	Tube Voltage Range	0-130KV / 60-110KV
	Tube Current Range	10-300uA
	Maximum Output Power	39W / 30W
Flat Panel Detector	Flat Panel Type	Amorphous Silicon Flat Panel Detector (Optional)
	Pixel Matrix	1536*1536
	Field of View	130mm*130mm
	Resolution	5.5Lp/mm
	Image Frame Rate (1x1)	20fps
Equipment Performance Parameters	Ad Conversion Digits	16bits
	Load Area	200mm × 200mm
	Spatial Resolution	5 $\mu$ m
	Optimal Defect Resolution	3 $\mu$ m
	Maximum Geometric Magnification	20X
	Input Power	220V 7A 50-60HZ
	Dimensions	L1000mm×W638mm×H880mm
Net Weight	975kg	

Application Cases

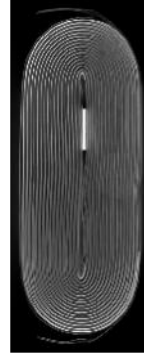
New Energy Application Cases



BGA (Void)



Button Battery

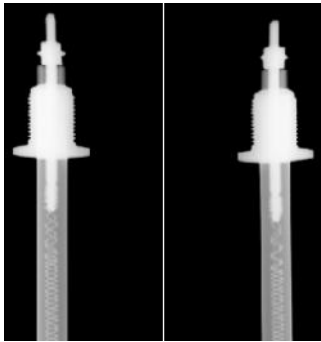


Soft Pack Battery

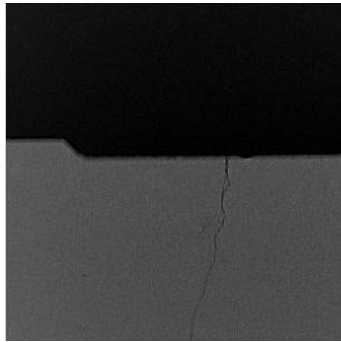


Cylindrical Battery

Application Case of Casting/Welding Parts



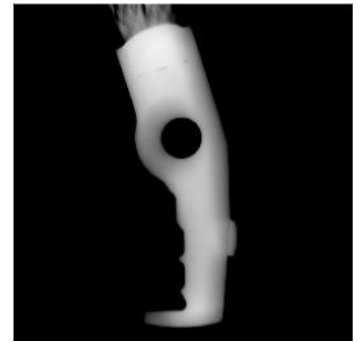
Heating Tube



Graphene Carbon



Fiber Skeleton



Copper Hard Casting

Other Case Studies



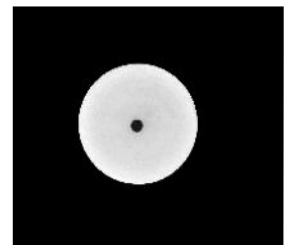
USB



Fuse



Real Pearl

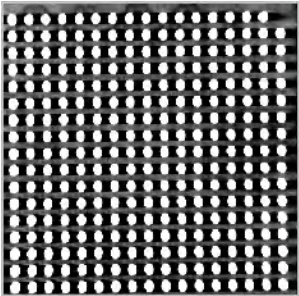


Fake Pearl

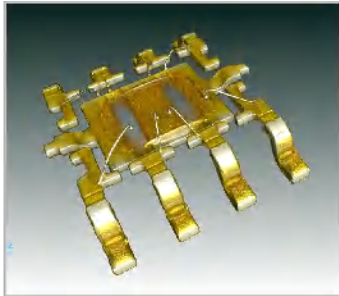


Probe

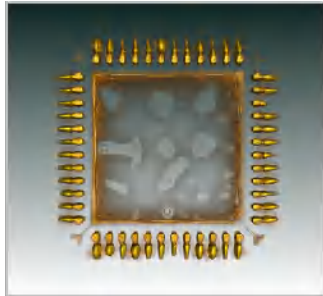
### SMT Inspection Case Diagram



BGA (3D)



IC

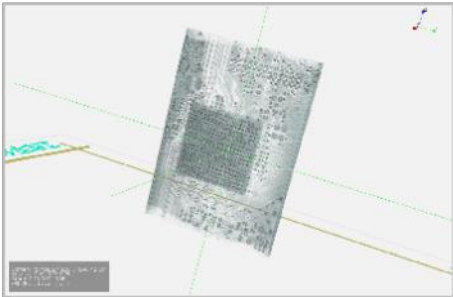


QFP

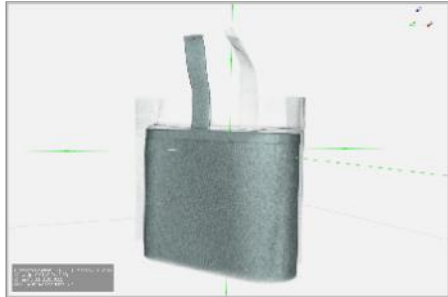


DIP

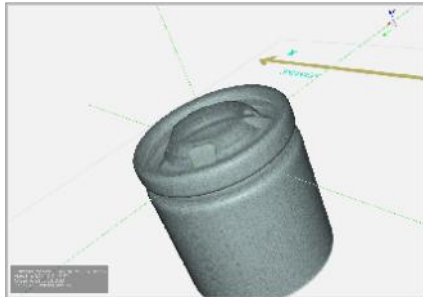
### Example of 3D Inspection Effects



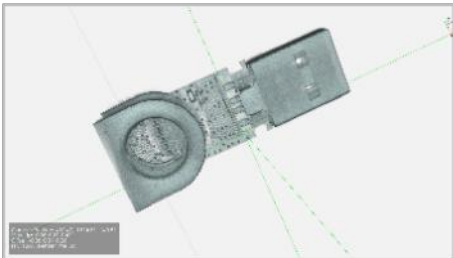
BGA



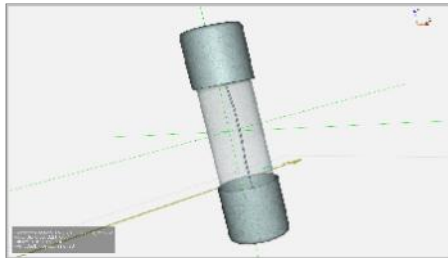
Soft Pack Battery



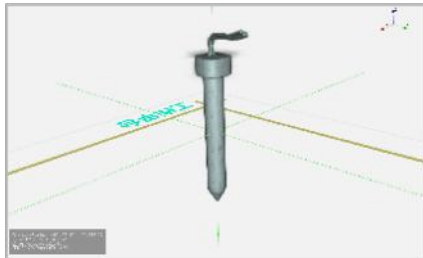
Cylindrical Battery



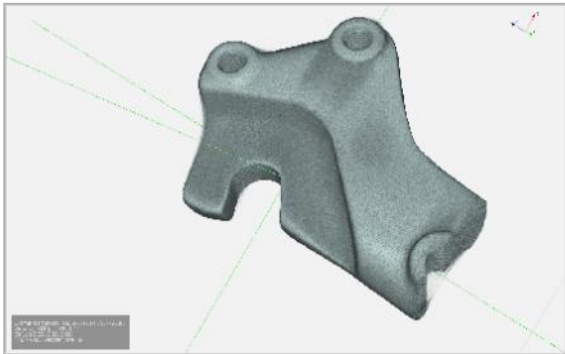
USB



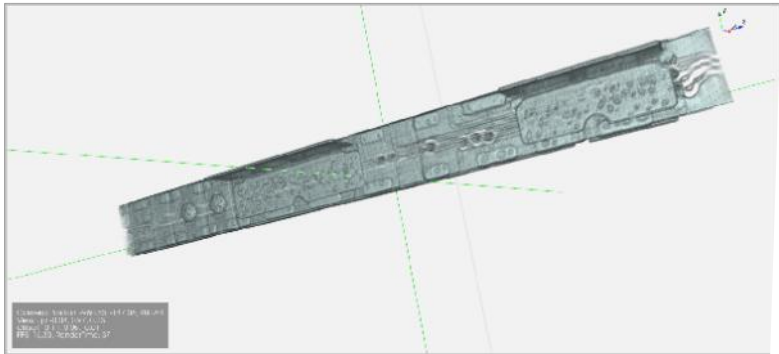
Fuse



Temperature Sensor



Aluminum Alloy



Copper Aluminum Alloy