

AXI9000

High-speed CT-type X-ray Fully Automatic Inspection Equipment

AXI9000 is a high-speed CT-based X-ray fully automatic inspection system, equipped with innovative self-developed intelligent inspection software, enabling high-speed 3D inspection. It can inspect a wide range of components, including BGA, POP, LGA, QFP, CSP, CHIP, QFN, DIP inserted components, IGBT, and more. It is capable of detecting defects such as missing components, misalignment, solder bridging, open solder joints, insufficient solder, voids, pillow effect, and other issues.

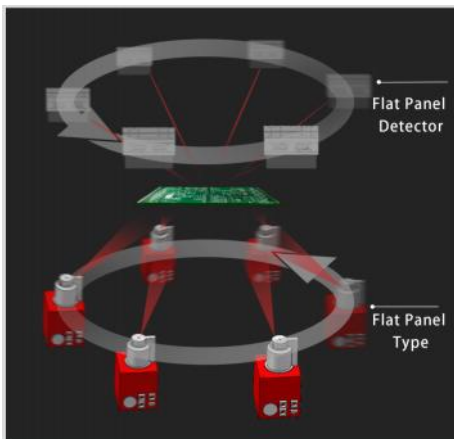
Product Features

- ◆ Unique 3D/CT reconstruction technology, the inspection speed is as fast as less than 2 seconds per FOV.
- ◆ Adopts a three-layer gantry structure with linear motors, equipped with a grating scale: This enables high-speed CT scanning.
- ◆ The number of projections and resolution can be flexibly adjusted: This meets the inspection needs of various scenarios.
- ◆ Innovative self-developed intelligent inspection algorithms: These algorithms enable high-precision inspection of defects such as cold solder joints, voids, and DIP fill rates.

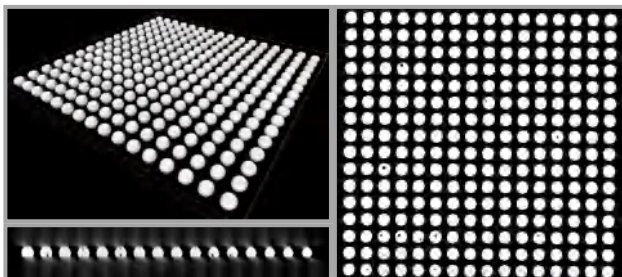


Product Parameters

Unique Patented Scanning Technology

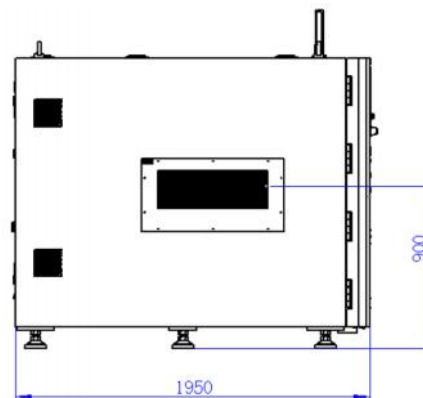
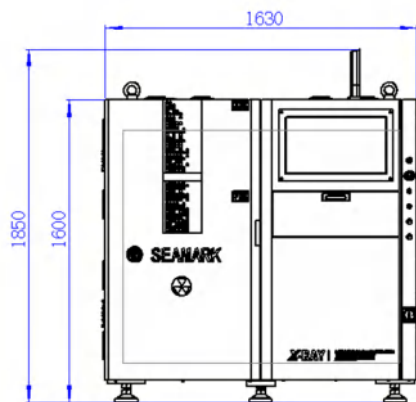


Internal Solder Ball Defects



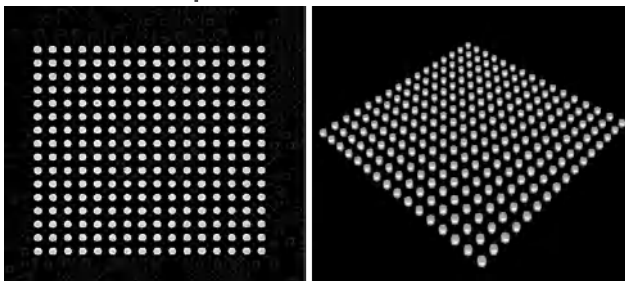
Model No.		AXI9000
X-Ray Tube	Tube Type	Reflective Sealed Micro-focus Ray Source (Optional)
	Tube Voltage Range	50-130kv
	Tube Current Range	0-500μA
	Maximum Output Power	65W
Flat Panel Detector	Flat Panel Type	Amorphous Silicon Flat Panel Detector (Optional)
	Pixel Matrix	1536*1536
	Field of View	154mm*154mm
	Resolution	5.0lp/mm
	Image Frame Rate (1x1)	30fps
	AD Conversion Digits	16 Bits
Equipment Specifications	X-ray Leakage	<0.5μSv/hr
	Air Pressure	0.45~0.65MPa
	Input Power	220V 10A 50-60Hz
	Control System	Professional GPU Image Workstation
	Dimensions	L1630mm*W1950mm*H1600mm
	Net Weight	4000kg
Substrate Inspection	Substrate Size	50*50 ~ 610*510mm
	CT Resolution	6-50μm/pixel (3μm optional)
	Substrate Thickness	0.5mm ~ 10mm
	Substrate Height	Upper Part ≤ 50mm Lower Part ≤ 40mm

Dimensions

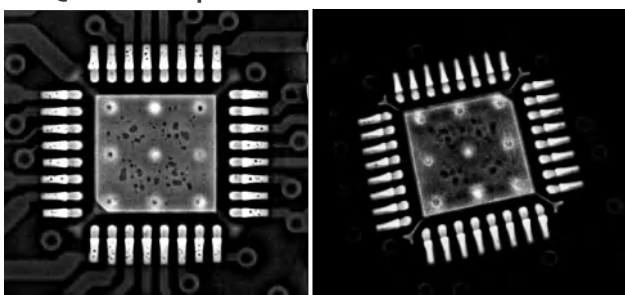


Application Effects

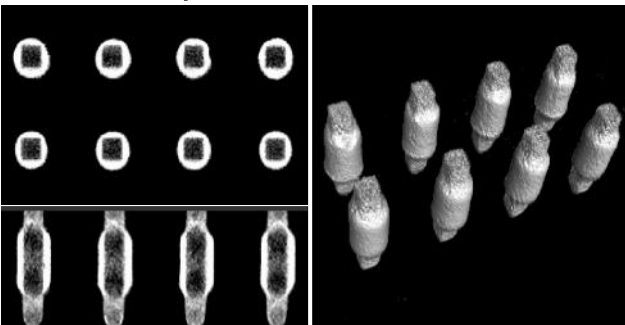
◆ BGA Components



◆ QFN Components



◆ DIP Components



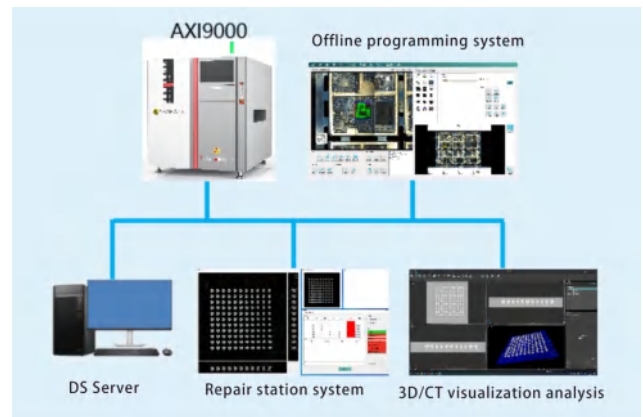
System Architecture

◆ Offline Programming System

Allows programming and false-positive debugging without shutting down the system.

◆ Maintenance Station System

Uses a three-view display method, providing a simple and intuitive way to view inspection results.



◆ Four-Point Correlation Analysis System

Can monitor the production status of the production line in real-time according to customer requirements, analyze product defects, assist in improving the production process, and enhance product quality.

