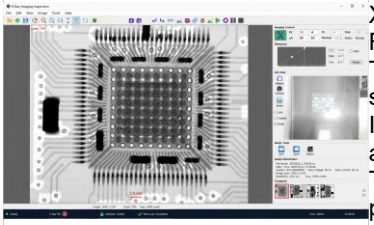
MTC-8400XPRO

Universal X-Ray Equipment

High-end Configuration

Software interface	Numerical control programming
	Simple mouse-click operation to write the inspection program The carrier can be positioned in X, Y direction; X Ray tube and detector in Z direction. The current and the voltage can be set by the software. Image Settings: brightness, contrast ratio, automatic gain, and exposure The user can set the pause time for the program switching The collision protection system can satisfy the maximum tilt and observation of objects.

Application:

Product Highlight

The MTC-8400XPRO X-ray Inspection System is designed for high-precision inspection of electronic components, PCB assemblies, semiconductor devices, and other industrial products. It enables operators to examine internal structures and identify defects that are difficult or impossible to detect through conventional visual inspection, equipped with intelligent AI software.

The system is suitable for detecting voids and bubbles, short circuits, open circuits, soldering defects, insufficient solder, missing solder joints, internal foreign materials, cracks, and other hidden defects.

With its user-friendly operation, high inspection accuracy, easy maintenance, and long service life, the MTC-8400XPRO helps reduce operator training requirements while improving inspection efficiency and consistency. The system also supports multi-angle inspection with a viewing angle of up to 60°, allowing operators to analyze complex internal structures from different perspectives for more reliable quality control.

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Specifications

Tube	
Tube type	Enclosed type
Spatial resolution	5μm
Tube voltage	90kv
Tube current	200μA
Detector	
Image taking type	Flat-panel Digital
Imaging precision	85μm
A/D convert quantified density value	16bit (65536)
Dpi	1536*1536px
Frame frequency	20 (FPS)
System	
Optical magnification	250X
System magnification	1000X
Operating system	WINDOWS 10
Power supply	AC110-220V 50-60HZ
Power	1200W
Radiation safety test	<1 uSV/H
Structure	
Detector rotation angle	60°
Stage size	540*540mm
Sensing range	510*510mm
Load-bearing	≤10kg
Machine size	1100*1360*1750mm(L*W*H)
Machine size (Including monitor)	1600*1800*2100mm(L*W*H)
Machine weight	950kg
Safety	
CE Certificate	Yes: STE23112101S
State immunity	Yes
Radiation Safety Permit	Yes: Guangdong Environmental Radiation Safety Permit [B0640]

Functional Advantage

Function	Advantage
CNC program: Automatically detect batch of different samples' locations	Automatically ON / OFF X-Ray tubes detect batch of samples
Array function: Automatically detect batch of samples with fixed position and same spacing	With high-stability and high-precision X-Ray tube
Bubble measurement: measure the bubble size, cavity rate, tin climbing height with one button	High definition digital X-Ray detector
Length and width measurement: the length and width of the measured inspection area	The stage can place a large number of samples of various sizes
Visual navigation interface: accurate positioning, accurate displacement from x - y with joystick	The stage can do 360° rotation to detect sample
Simulated color: to better observe and detect the image	Can do 60° tilt observations

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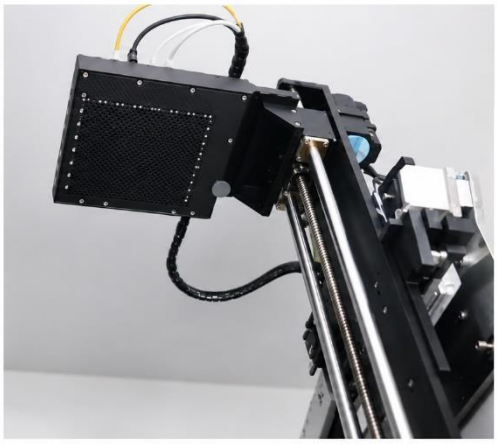
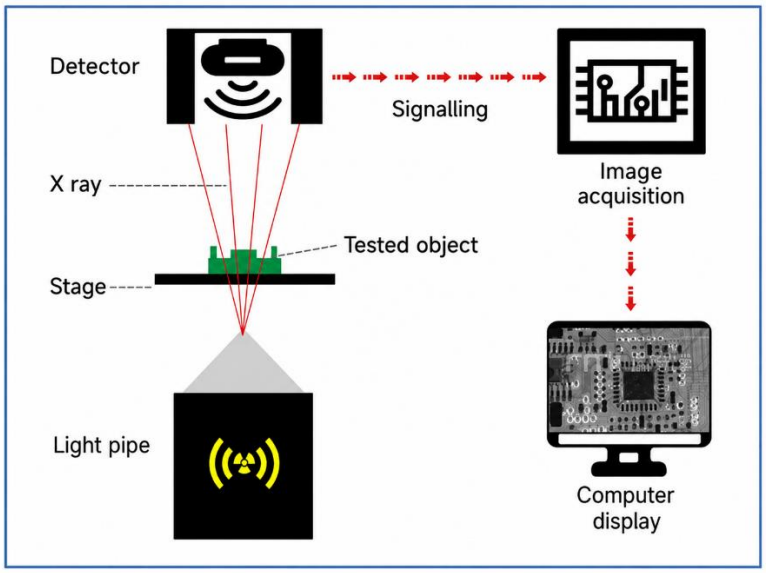
High Quality Accessories



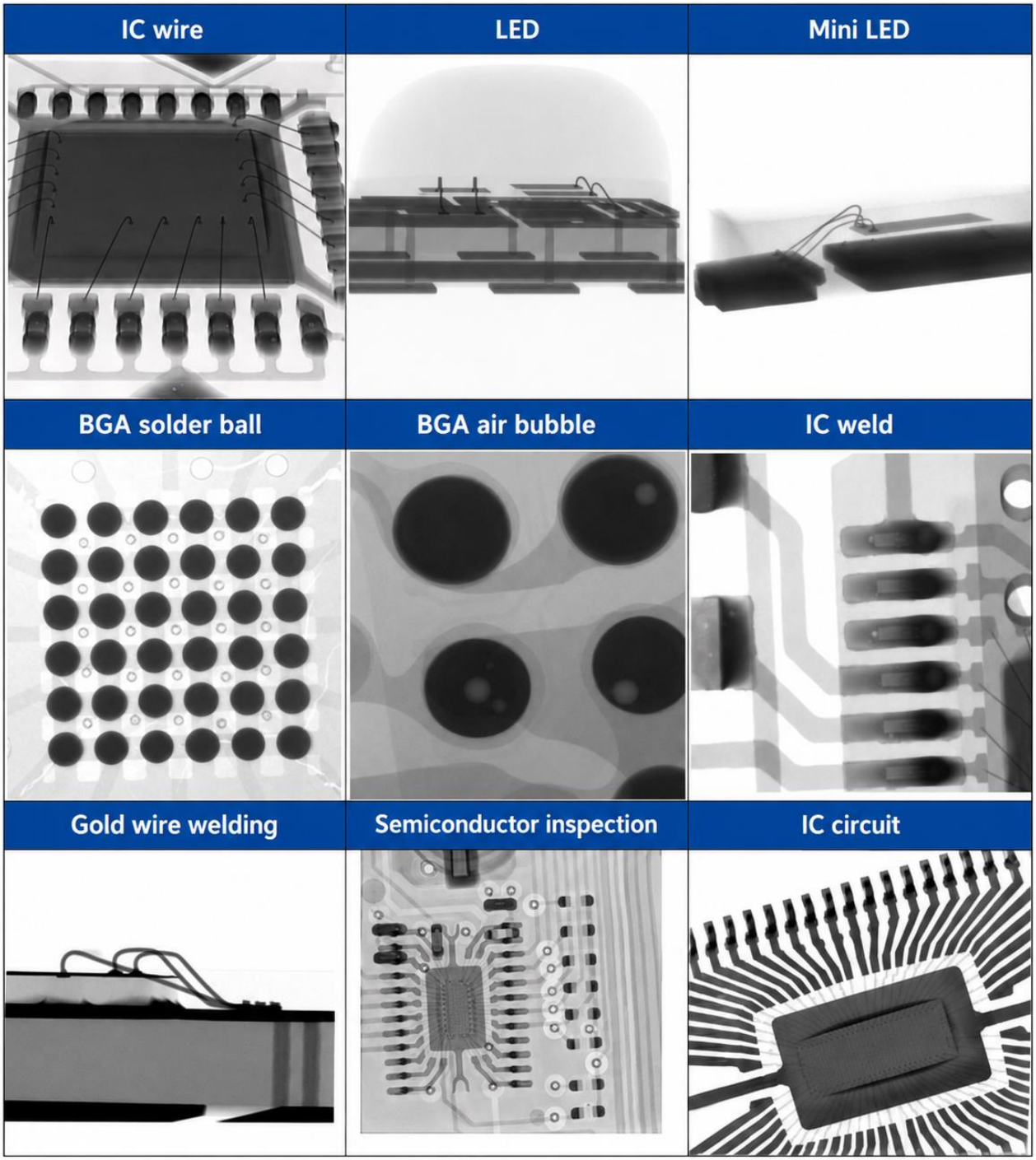
Digital HD X-Ray detector
The X-ray detector supports real-time image acquisition and image correction, delivering high-quality, stable imaging performance. It features a passive cooling system and a built-in temperature sensor that continuously monitors and displays the operating temperature in real time.
The detector also supports multiple gain settings and flexible PGA + Binning combination modes, allowing optimized imaging performance for different inspection requirements.

X-Ray Principle Description



A Schematic diagram of the X-Ray working principle

Inspection Case



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Actual Photo

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