

X-9200 UPKTECH - X-RAY Inspection Machine

Description:

X-9200 electronic semiconductor testing equipment, with a minimum detection accuracy of 1um, can be used to detect integrated circuit chip semiconductors, such as BGA, IGBT, flip chip and PCBA component welding, LED bonding, IC packaging and other industries for high-precision testing.



Application:

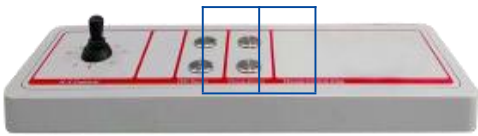
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|-----------------------|-----------------|
| 1.LCM Display Module | 2.Semiconductor |
| 3.Automobile industry | 4.Battery |
| 5. LED Bonding | 6. IGBT Bonding |

Features:

Function	Advantage
CNC program: Automatic batch detection of different positions of samples	Automatic ON/OFF X-RAY light tube batch detection of samples
Array function: Automatic batch detection of samples with fixed positions and the same spacing.	Equipped with Japanese X-RAY light tube, the detection accuracy reaches 1um.
Bubble measurement: One-click measurement of bubble size, void rate, and tin climbing height	High resolution digital X-RAY tablet
Length and width measurement:	The stage can accommodate a large

measure the length and width of the partial detection area.	number of samples of various sizes.
Visual navigation interface: precise positioning, x-y realizes precise joystick displacement	Optional 360° rotation of the stage to detect samples
Analog color: better observation of inspection images	Allows 60° tilt observation

High-end configuration:

Joystick control	NC programming
	<p>Simple mouse click operation to write detection program.</p> <p>The stage can be positioned in X and Y Directions; the X-ray tube and detector can be positioned in Z direction</p> <p>Software sets current and voltage Image settings: brightness, contrast, automatic gain and exposure.</p> <p>Users can set the pause time for program switching.</p> <p>Anti-collision system allows for maximum tilt and viewing of objects</p>

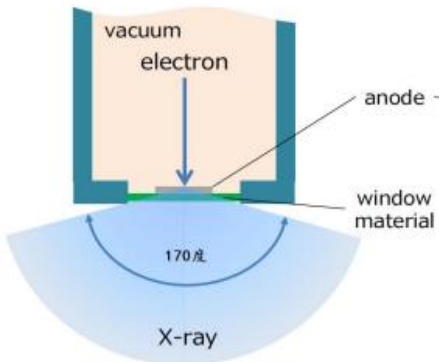
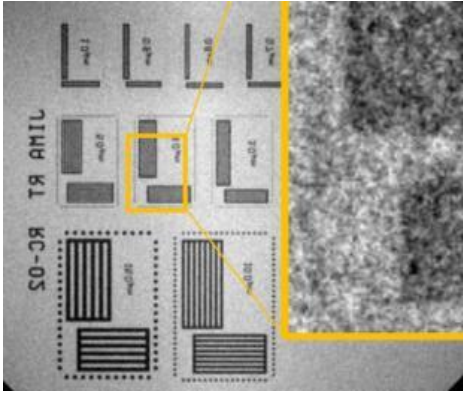
Specifications:

	Model	X-9200
Tube	Tube type	Transmissive Tube
	Spatial resolution	1μm
	Tube voltage	100kv/110kv
	Tube current	200μA/300μA
Tablet	Image acquisition method	flat panel digital imaging
	Imaging accuracy	76μm
	A/D density value	16bit (65536)
	Resolution	1648*1644px
	Capture frame rate	30 (FPS)
System	Magnification	2000X/≥7500X
	Operating system	WINDOWS 10
	Power	AC110-220V50-60HZ 1800W
	Radiation safety test	<1 uSV/H
Structure	Plate rotation angle	60°
	Stage size	690*685mm
	Detection range	670*665mm
	Stage load capacity	≤20kg
	Machine Dimension	1510*1770*1850mm(L*W*H)
	Machine size (including monitor)	1810*2420*2200mm(L*W*H)
	Machine weight	1800kg
	Platform movement method	Automatic/ Manual
Safety	CE certification	Yes : B-S191126500
	State exemptions	Yes
	Radiation Safety License	Yes

Tube specification parameters:

Item	Unit	G-320rm		
Tube voltage working range	kV	60-160		
Tube current working range (tube current)	uA	10-200		
Maximum output	W	20		
Minimum resolution (JIMA RT RC-02B)	um	1		
X-ray window material/thickness	-/mm	C(Diamond)/0.29		
Material of cake material		W(Tungsten)		
X-ray radiation angle	Deg.	168 (maximum), 80 (above 80%, equal spacing)		
Weight	Kg	21		
Control	—	Continuous, pulse		
Pulse	—	Software≥1sec	Software≥50ms	Software≥1sec
External control	—	RS-232C (G-311MH-DP has external input point)		
DC	V	24 (+1.2,-1.2)		
Maximum power consumption	W	40		65
Operating temperature	W	10-45		
Storage temperature	°C	0-50		
Humidity (working, storage)	°C	≤85(no condensation)		
High voltage power supply	—	built-in		

X-RAY principle description:

X-ray Working principle schematic diagram	X-ray JIMA test diagram
 <p>The diagram illustrates the X-ray generation process. An electron beam, labeled 'electron', is directed from a 'vacuum' chamber through a 'window material' onto an 'anode'. The resulting X-ray beam is shown as a blue arc with a '170度' (170 degrees) angle, labeled 'X-ray'.</p>	 <p>The diagram shows a printed circuit board (PCB) with various components. A yellow box highlights a specific area, and a yellow line indicates the X-ray beam path. The components are labeled with 'JIMA' and 'RC-05'.</p>