VISCOM
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X7056-II BO

AOI and AXI for Wire Bonds and Other Inspection Areas

The inspection system X7056-II BO effectively combines optical in-line wire bond control with automatic X-ray inspections. This comprehensive inspection concept enables higher efficiency, optimizes cycle times and thus improves throughput. Where the bottom line is concerned, procurement costs are significantly lower than purchasing two separate inspection systems.

The Viscom inspection software is designed for maximum inspection depth and accuracy. The standard library contains inspection patterns for die, ball-wedge, wedge-wedge and security bonds. The inspection scope can be individually extended. During the inspection, high-resolution optical camera technology capture all bond sites and wires. The automatic X-ray inspection then follows seamlessly. Thus, for example, hidden connection sites can also be reliably inspected in one run.

The quality of wire paths, dies, component positions and other features are inspected. It makes no difference whether the connections are of copper, aluminum or gold, or whether ribbon or thick or thin wires are involved. Damaged and misplaced components are also reliably detected. Viscom also offers the full scope of high-powered verification, offline programming and SPC evaluation for this system.

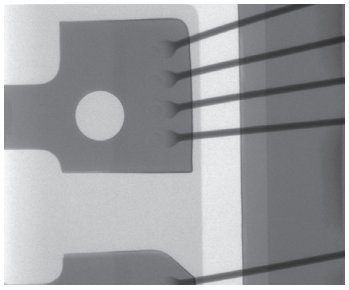
Bond AOI and bond AXI combined in one system

High-performance inspection software from Viscom

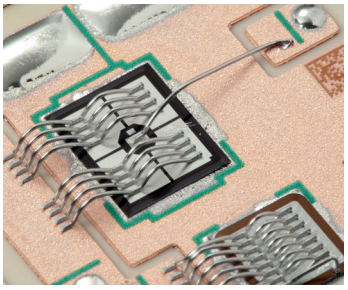
Extremely high accuracy and inspection depth

Versatile camera module selection for thick and thin wires

Maintenance-free closed microfocus X-ray tubes



Wire bond inspection on the X-ray image



Defect detection on multiwire connections and multiple loops

Bond

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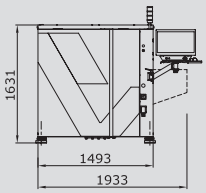
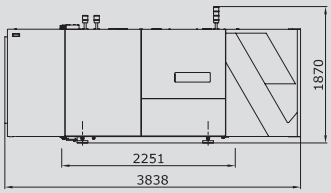
Technical Specifications

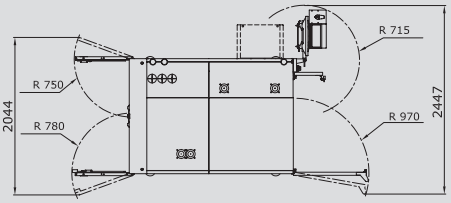
Front view



Side view



Top view



Dimensions in mm

		X7056-II BO
X-ray technology	X-ray tube	Sealed X-ray tube
	High voltage	60 - 130 kV
	Tube current	50 - 300 µA
	Detector	Flat panel detector (FPD), 14-bit grayscale depth
	Resolution	6 - 30 µm/Pixel (depending on configuration)
	X-ray cabinet	Designed to meet requirements for fully protected devices in accordance with German Radiation Protection Act (StrlSchG) and German Radiation Protection Ordinance (StrlSchV). Radiation leakage rate < 1 µSv/h
Camera technology*	**XM Bond HR module – orthogonal camera**	
	Field of view	23 mm x 23 mm (0.9" x 0.9")
	Resolution	4.5 µm
	Number of megapixel cameras	1
Software	User interface	Viscom EasyPro/vVision-ready
	Verification station	Viscom HARAN
	SPC	Viscom SPC (statistical process control), open interface (optional)
	Remote diagnosis	Viscom SRC (software remote control) (optional)
	Off-line programming	Viscom PST34 (external programming station) (optional)
	Systematic defect analysis and continuous system monitoring	Viscom PDC (process data control), TCM (technical chain management)
System computer	Operating system	Windows®
	Processor	Intel® Core™ i7
Substrate handling	Substrate size	Up to 450 mm x 350 mm (17.7" x 13.8") (L x W)
	Transport clearance	850 - 980 mm ± 20 mm (33.5" - 38.6" ± 0.8")
	Substrate clamping	Pneumatic
	Substrate support width	3 mm (0.1")
	Upper transport clearance	Up to 25 mm (1"); FPD with 8 µm resolution: 20 mm (0.8")
	Lower transport clearance	50 mm (2")
	Handling time	≥ 4 s (with xFastFlow)
Other system data	Positioning/handling unit	Synchronous linear motors
	Interfaces	SMEMA, SV70, customer-specific
	Power requirements	400 V (other voltages on request), 3P/N/PE, 8 A, 4 - 8 bar working pressure
	System dimensions	1493 mm x 1631 mm x 2251 mm (58.8" x 64.2" x 88.6") (W x H x D)
	Line integration dimension	+25 mm (1")
	Weight	2245 kg (4949 lbs)

*Other camera technologies on request

#Viscom_X7056-II BO_EN20050001

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