



Precise In-Line Inspection of Wire Bonds

The S6053BO-V system from Viscom features the highest precision in automated optical wire bond inspection. With individually configurable transport options, ceramic substrates of different characteristics and sizes are reliably inspected.

Wire bonds and SMD assembly are inspected together. High-resolution cameras capture all bond sites and wires. The Viscom inspection software is designed for maximum inspection depth and accuracy. Wire path, dies and component position are only a part of the inspection. It makes no difference whether the bonds are of copper, aluminum or gold, or whether ribbon or thick or thin wires are involved. Even wire dimensions of 17 μm are reliably inspected. The system also detects damaged and misplaced components.

Inspection programs can be created and optimized off-line on a Viscom programming station. This is supported by image material from a previously captured video base. The standard library contains inspection patterns for die, ball-wedge, wedge-wedge and security bonds. The inspection scope can be individually extended. In conjunction with a high-power Viscom SPC evaluation, numerous conclusions regarding the process can be made.

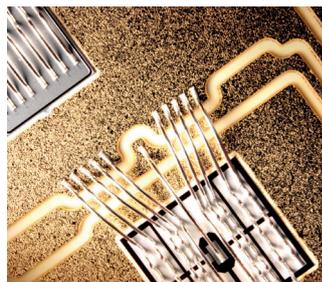
High-end solution for in-line inspection

Individually configurable transport

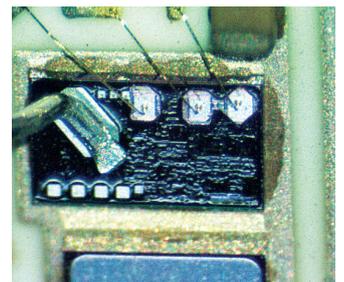
Compatible with all Viscom bond camera modules

Extremely high accuracy and inspection depth

Remote diagnosis, hotline and on-site service



Defect detection on multiwire connections



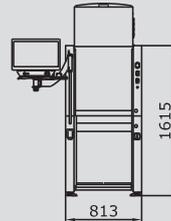
Inspection of different wire diameters

Bond

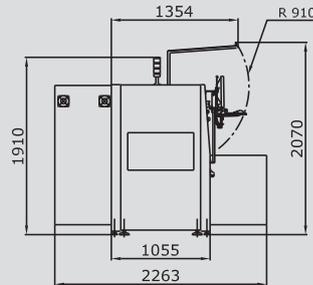
Technical Specifications



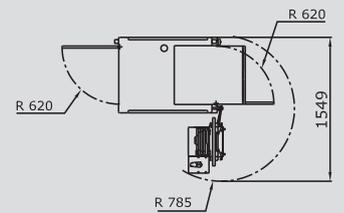
Front view



Side view



Top view



Dimensions in mm*

		S6053BO-V		
	Transport system	Single track	Double track	Dual shuttle
	Inspection concept	Single inspection		
Inspection scope	Bond	Ball bond, wedge bond, wire, die/SMD, ribbon		
Camera technology	Standard configuration XM-Bond-HR-II*			
	Number of modules per machine	1		
	Number of cameras	1		
	Pixel size	5 µm/pixel		
Software	User interface	Viscom EasyPro		
	SPC	Viscom SPC (statistical process control), open interface (optional)		
	Verification station	Viscom HARAN		
	Remote diagnosis	Viscom SRC (software remote control) (optional)		
	Programming station	Viscom PST34 (optional)		
System computer	Operating system	Windows®		
	Processor	Intel® Core™ i7		
Substrate handling	Max. substrate size	280 mm x 300 mm (11" x 11.8") (L x W)	280 mm x 130 mm (11" x 5.1") (L x W)	210 mm x 130 mm (8.2" x 5.1") (L x W)
	Transport clearance	860 – 1180 mm ± 20 mm (33.8" - 46.4" ± 0.7")		
	Substrate clamping	Vacuum or mechanical clamping		
	Upper transport clearance	Up to 35 mm (1.3")		
Inspection speed		> 1000 wire bond connections/min., depending on inspection object characteristics		
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 - 6 bar working pressure		
	System dimensions	813 – 1000 mm x 1615 mm x 1055 mm (32" – 39.3" x 63.5" x 41.5") (W x H x D)		
	Weight	800 kg (1763.7 lbs)		

Specifications and other system information are subject to change without notice and may differ from the information displayed at the time of ordering.

* Other camera technologies and substrate sizes on request