



Smart and Precise  
THT Quality Control  
from Below



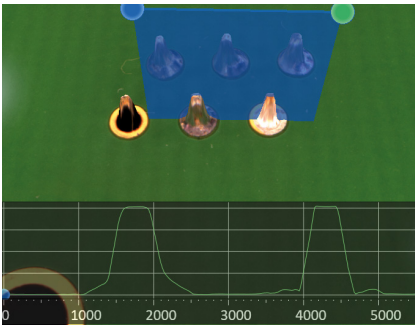
Suitable for press-fit  
technology



## iS6059 THT Inspection

3D solder joint inspection on PCB bottom sides

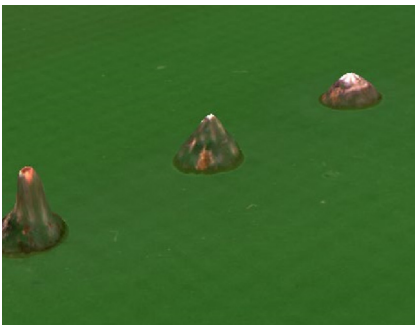
# Unmatched 3D AOI for Underside Inspection



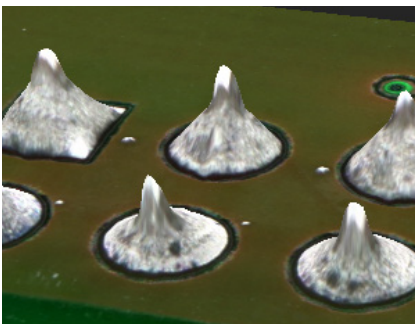
Height profiles of THTs



Insufficient wetting (front) and missing pin (back)



Reliable 3D pin length inspection



3D quality control of THT solder joints

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**Powerful 3D sensor technology for quality control from below**

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**Shadow-free results by using eight angled cameras**

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**Large tilted views for the most accurate analyses**

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**Versatile handling of many different inspection object types**

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**Optional return transport of the manufactured products**

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**Competent service worldwide – online, by phone, and on-site**

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Viscom has developed the iS6059 THT Inspection for the rapid, high-precision inspection of selective solder joints as well as SMD, press-fit and THT components. This advanced 3D inspection solution performs bottom-side inspection of circuit boards with supreme flexibility. The unique, generously proportioned transport height is based on an upper clearance of up to 100 mm and more. Viscom's intelligent, high throughput inspection technology guarantees precise 3D inspection of components, including THT solder joints.

The iS6059 THT Inspection is easily and efficiently combinable with a Viscom verification station. Results can be conveniently evaluated with data and images from other Viscom inspection stages. Additionally, efficient statistical process control from Viscom can be implemented.

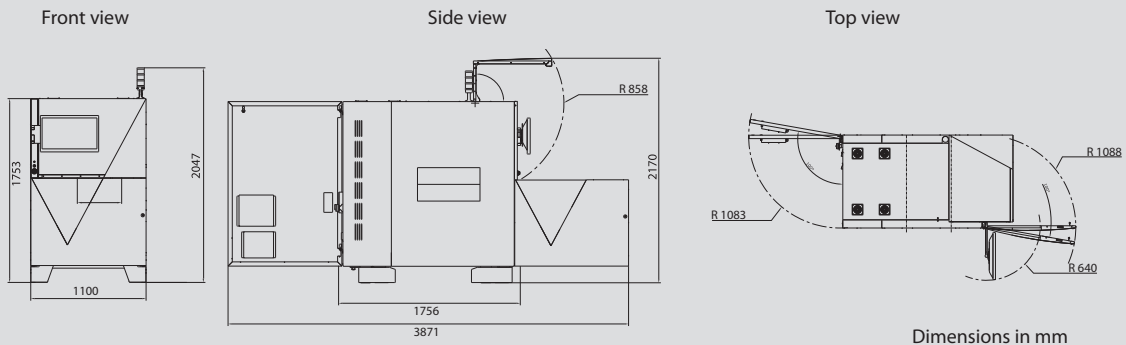
Even when facing extreme cycle time requirements, the system's high-performance camera technology guarantees the greatest inspection depth. Versatile illuminations can be tuned to the specific task. Previously captured images are evaluated, at the same time an x/y unit moves the camera module beneath the printed circuit board to the next position – providing a significant time advantage.

In addition to measuring pins, Viscom's inspection algorithms also allow fast detection of open solder joints, solder bridges, missing pins and other defects.



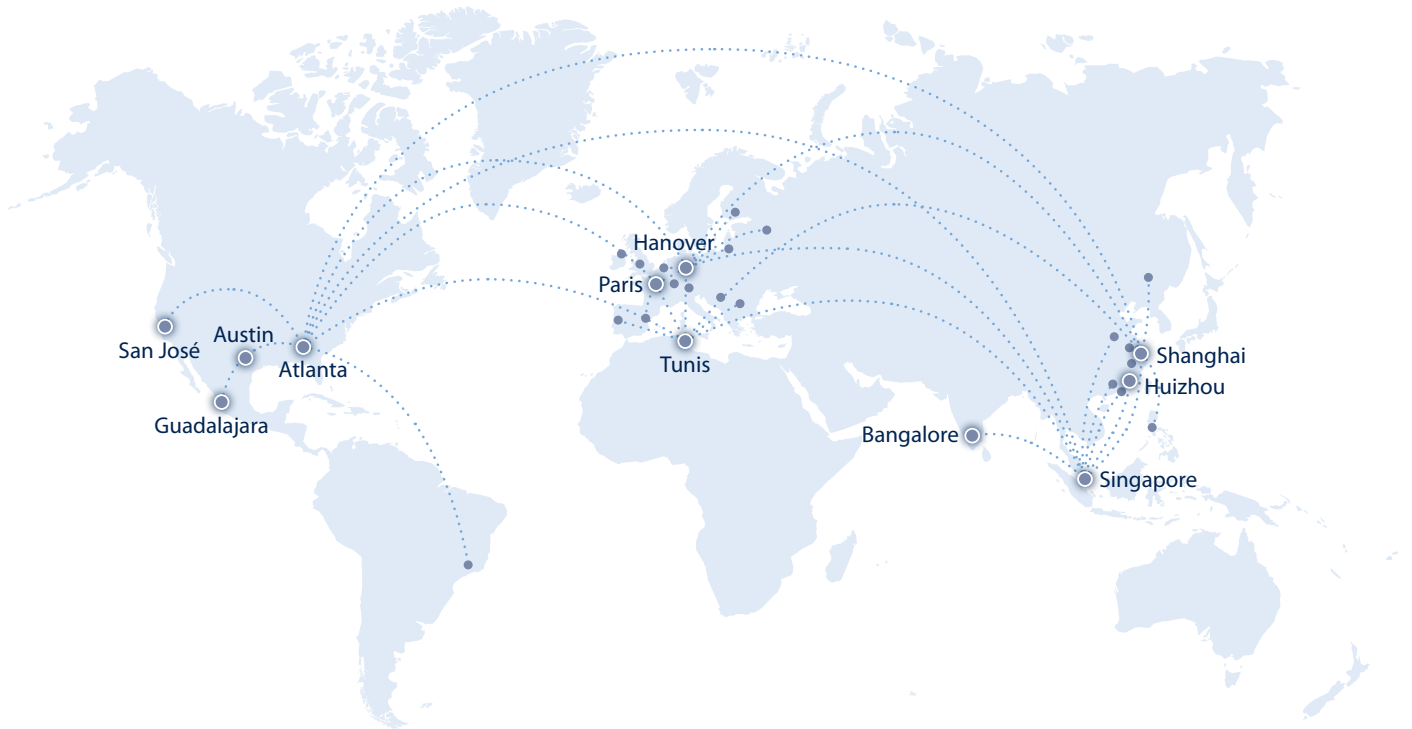
# Technical Specifications

## iS6059 THT Inspection



### iS6059 THT Inspection

<b>Inspection scope</b>		Selective and wave soldering, standard solder joints according to IPC, press fit
<b>Camera technology</b>		XMu-II
	3D sensor technology	
	Z-resolution	0.5 µm
	Z-range	Up to 30 mm (1.2")
	Angled view cameras	
	Number of megapixel cameras	8
	Orthogonal camera	
<b>Inspection speed</b>	Resolution	13 µm
	Field of view	50 mm x 50 mm (2" x 2")
<b>Inspection speed</b>		Up to 65 cm <sup>2</sup> /s
<b>Software</b>	User interface	Viscom vVision/SI EasyPro
	Statistical process control	Viscom vSPC/SPC, open interface (optional)
	Verification station	Viscom vVerify/HARAN
	Remote diagnosis	Viscom SRC (optional)
	Programming station	Viscom PST34 (optional)
<b>System computer</b>	Operating system	Windows®
	Processor	Intel® Core™ i7
<b>PCB handling</b>	PCB dimensions	508 mm x 560 mm (20" x 22"); long-board option available
	Transport height	850 - 950 mm ± 20 mm (33.5" - 37.4" ± 0.8"); other heights on request
	Width adjustment	Automatic
	Transport concept	Single-track transport system; ; dual-lane option available
	PCB clamping	Pneumatic
	Upper transport clearance	Up to 100 mm (4"); other heights on request
	Lower transport clearance	50 mm (2")
<b>Other system data</b>	Positioning unit	Synchronous linear motor
	Interfaces	SMEMA, Hermes, third-party providers
	Power requirements	400 V, 50 Hz, 3P/N/PE +/- 10%; 4 - 6 bar working pressure
	System dimensions	1100 mm x 1756 mm x 1753 mm (W x D x H)
	Weight	Approx. 935 kg (2061 lbs)



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