

Press Release

New iX7059 3D Inline X-ray System for Large Assemblies up to 1,600 mm from Viscom

Hanover, March 18 2021 – The core function of the new compact 3D AXI system from Viscom is 3D inline inspection of large flat assemblies with high precision and speed. The particular sharpness of the layer images proves the extremely high inspection accuracy required to detect hidden solder joints and critical voids in surface soldering, especially for highly dense and complex boards. The state-of-the-art 3D X-ray technology of the Evolution 5 with integrated planar CT in combination with a new handling concept ensures best inspection results at highest cycle time requirements.

The new **iX7059 PCB Inspection XL** system from Viscom is perfectly suited for use in production lines that produce printed circuit boards, LEDs and also power semiconductors for e-mobility or high-voltage/direct-voltage transmission technology, where 100% quality assurance is essential. The new iX7059 generation 3D inline X-ray inspection ensures seamless, high-precision defect detection at the highest throughput for a targeted zero-defect strategy.

The iX7059 PCB Inspection XL has a powerful microfocus X-ray tube at its core that provides **non-destructive, with high radiography** and comprehensive inline inspection of thick, very densely and double-sided PCBs able to cope with hidden solder joints and massive shadowing effects. The sealed 130 kV X-ray tube, or a 160 kV X-ray tube which can be used as an option, is maintenance-free. Its capability range includes **intelligent void measurement** in terms of number, size and proportional area as well as a complete solder joint inspection of wired components, also for multi-layer boards – something which is very relevant for hybrid power modules, chip layers and substrate layers.

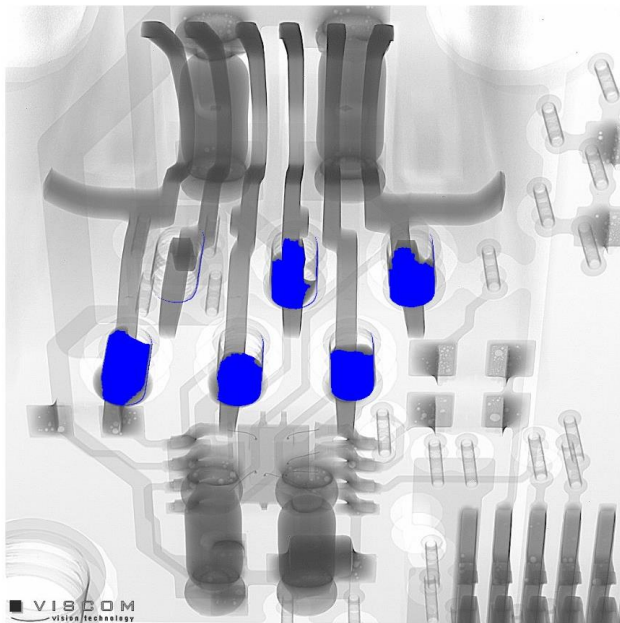
The flexible X-ray system makes it possible to achieve precisely customized inspection strategies in 2D, 2.5D and 3D with a resolution of 8.5 µm up to 25 µm. The **new Evolution 5 image acquisition concept** with its new T3 flat panel detector generation is used for high-precision and ultrafast 3D X-ray inspection. The 3D images – up to 120 images in approx. 5 seconds for one Field of View – are taken from a wide variety of views and with oblique beams during motion, optimizing inspection time even more. The combination with the extended planar computed tomography shows all significant features in slice images in great detail. This simplifies verification, reduces false alarms, saves costly rework and avoids product rejects.

The iX7059 PCB Inspection XL inline system **with new handling design** transports and detects PCBs – also on workpiece carriers – up to 15 kg and 660 x 1000 mm in size, optionally up to 1600 mm in length thanks to the Extended Longboard Option. The compact modern system design, 1493 mm x 1654 mm x 2207 mm (W x H x D) in size, allows inline or island installation with the smallest footprint.

Other highlights include automatic gray value calibration, barcode scanners (optional), M2M networking via Viscom Quality Uplink, and an MES interface tailored to customer requirements for complete traceability. The convenient system operation via the modern touch screen monitor and the simple, fast creation of inspection programs via the vVision or EasyPro operating software round off the system design.



01_iX7059 PCB Inspection XL: New 3D inline X-ray inspection with CT for the high-end electronic production



02_New Viscom 3D AXI system for high-precision void measurement of surface soldering as well as solder joint inspection of THTs

About Viscom

Founded in 1984, Viscom AG is one of the leading suppliers worldwide in the field of assembly inspection within electronics production. With its headquarters and production site in Hanover, Germany, the company develops, produces and sells high-quality inspection systems from the areas of AOI, SPI, AXI and MXI bond inspection as well as as well as conformal coating inspection. The systems from Hanover set high standards in terms of accuracy and speed. The product range covers the complete spectrum of optical inspection and X-ray inspection for small- and medium-sized companies as well as for large series production. Viscom systems are used for 100% automatic inspection of electronic assemblies such as those used in the production of automotive electronics, aerospace technology or in the manufacture of telecommunications electronics.

Product development also focuses on customer-specific system developments and networking with other production processes for smart factory applications. In order to achieve this, Viscom AG increasingly invests in its own software and hardware development which is constantly defining new standards in inspection technology.

International sales are handled by a broad network of its own subsidiaries, application centers, service centers and representatives. A service team of in-house technicians and application specialists commission Viscom systems worldwide, offering maintenance, conversion and modernization from a single source. In addition, system-specific training courses are offered for customers' operators, programmers and maintenance personnel. Experienced engineers and technicians from the application and service departments share their expert knowledge with participants.

Viscom AG has been listed on the Frankfurt Stock Exchange since 2006 (ISIN: DE0007846867).