

Press Release

New inspection simulator offers inspection expertise already in the planning phase

Hanover, October 2017 – **Viscom AG** today announced plans to introduce the new 3D Planner at the productronica electronics trade fair. With this newly developed software tool, a wide range of inspection scenarios can be tested and evaluated off-line. Thus, the optimum inspection coverage can be determined early in the development phase of new printed circuit boards (PCBs) or when planning the production process.

What form the best combination of inspection technologies for a PCB takes and its effect on throughput are decisive questions for product quality and process efficiency. In order to provide companies in the electronics industry with a timely planning aid, Viscom will present the 3D Planner at productronica, from November 14-17, 2017 in Munich, Germany. This virtual inspection simulator uses CAD and 3D data from the printed circuit board to test inspection options and determine the optimum inspection concept.

For example, the 3D Planner shows the user how long inspection of an electronic assembly would take with the currently planned inspection program and where weak areas in inspection coverage are apparent in the layout. This makes the off-line tool extremely helpful right at the beginning of the process chain, such as when a PCB designer or production planner wants to know the effort involved in inspecting a new product in the production line. "The new 3D Planner virtually simulates the inspection process," explains Detlef Beer, Senior Manager in Product Engineering at Viscom. "With it, whether the entire inspection coverage is good, sufficient or incomplete, is quickly recognized without having to create an inspection program for the optical and X-ray inspections in advance."

The proportion of orthogonal, angled and 3D inspections can be optimally tuned to each other with the 3D Planner. Through inclusion of the optical

inspection methods, the X-ray inspection can be optimized overall and reduced to the reasonable minimum. This significantly reduces radiation load on individual components. At the same time, the entire inspection process is optimized. Inspection coverage, inspection quality, throughput speed and costs can be individually weighted in the simulations to suit the application. The 3D Planner allocates the ideal proportion of tasks to the inspection gates for automatic optical inspections (AOI) and X-ray inspections. Detlef Beer adds: "The benefits show their full strengths when used on the X7056 combination systems from Viscom for especially efficient 3D AXI and 3D AOI inspections."

In the future, the software also will use 3D CAD models including components and leads, so that a complete, virtual reproduction of the PCB is available already in the planning stage. This type of data is currently under development at the suppliers' and, as soon as it is ready, will be applied in the 3D Planner. Until that point, along with footprint and Gerber data, overview images and 3D information from the PCB as otherwise used during 3D off-line program creation for AOI will serve as input. The new inspection simulator is based on the modern vVision operating software.

Image caption: The new 3D Planner simulates differently combined inspection methods in association with their effects on inspection duration, costs, quality and coverage

About Viscom

Viscom AG develops, manufactures and sells high-quality inspection systems. The portfolio encompasses the complete bandwidth of optical and X-ray inspections. In the area of assembly inspection for electronics manufacturing, the company is among the leading suppliers worldwide. Viscom systems can be configured specifically to the customer and can be interlinked. The company headquarters and manufacturing location is in Hanover, Germany. With a wide network of branches, applications centers, service support points and representatives, Viscom is represented internationally. Founded in 1984, Viscom has been listed on the Frankfurt Stock Exchange (ISIN: DE0007846867) since 2006. For additional information, visit www.viscom.com.