

Press Release

Optimal optical 3D solder joint measurement from Viscom

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With a combination of intelligent software and the high-performance camera module XMplus, Viscom AG is perfecting automatic optical inspection (AOI), which also includes optimal 3D solder joint measurement. As a result, users receive definite and easy-to-interpret information and, with it, the best possible quality assurance for electronic components.

Solder joint measurement using 3D AOI is a central component of this spring's release of vVision and SI. Viscom presents both new software versions at the SMT show in Nuremberg, Germany. The access to exact measuring results helps users to create 3D AOI inspection programs and thus ensures a high efficiency. The three-dimensional measurement with the high-speed Viscom XMplus camera module produces easy-to-classify height and position values. Users can easily interpret these intuitive values in practice.

Quality of the data is extremely important for accurate, reliable measurement. To evaluate a solder joint with 3D AOI from Viscom, several height profiles are measured at the solder meniscus with a high resolution of 10 µm. The XMplus camera module is optimally suited for this sophisticated task. Its angled cameras ensure the best panorama view of components and their solder joints from all eight directions. The high-performance software used also guarantees maximum speeds throughout the measurement and inspection process.

The measured profiles of a solder joint are evaluated using a mathematical procedure and presented in an easily interpreted overall result. An additional advantage: This improved evaluation results in fewer false calls and thus increases production efficiency. This combination of intelligent

software and very powerful hardware offers customers options for efficient use.

Besides evaluating solder joints, exact detection of component orientation is also an increasingly important application. For example, in the ever-smaller LEDs that are increasingly being installed in vehicle lamps and headlights, even minimal tilting is a defect. Exact measurement values are needed for a final quality evaluation, and these are ensured with a Viscom 3D AOI.

Caption: The better the 3D signal quality, the more exact the 3D measurement will be

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, since 2006 Viscom has been listed on the Frankfurt Stock Exchange (ISIN: DE0007846867). For additional information: www.viscom.com