

## MIRTEC to Exhibit the Revolutionary APLHA 3D AOI System in the 3D AOI Arena, productronica 2019

**November 2019** – MIRTEC, 'The Global Leader in Inspection Technology', announces that the company will premier its all-new ALPHA 3D Automated Optical Inspection System at productronica 2019. New to this event, Messe München and Konradin Verlag have organized a 3D AOI Arena in Hall A2. Leading 3D AOI



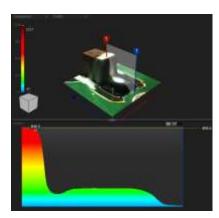
manufacturers such as MIRTEC will demonstrate their latest 3D Inspection Technology at this four-day event scheduled to take place Nov. 12-15, 2019, at the Munich Trade Fair Center in Munich, Germany.

## **Revolutionary Hybrid 3D Inspection Technology**

Moiré fringe pattern projection technology is widely used for 3D AOI as it is easy to implement, and is suitable for many applications. This technology, however, is not without limitations. Increased complexity and density of modern PCB designs have led to higher instances of "shadowing" in which lower lying devices are obstructed by taller adjacent components. This, combined with the prolific use of highly reflective devices and materials within the electronic

manufacturing process, can cause Moiré fringe pattern projection technology to fall short of fulfilling the needs of critically demanding applications. Attempts to overcome these limitations by adding more projectors, predictive algorithms and the heavy use of data filtering leads only to higher costs, slower processing speeds and distortion of the true data, leading to less accurate results.

MIRTEC's all-new ALPHA 3D AOI System was designed to specifically address the most demanding inspection requirements. The ALPHA 3D AOI machine is configured with MIRTEC's proprietary Hybrid 3D Inspection Technology which provides uniform precision measurement across the entire 3D measurable range regardless of external factors such as PCB density and material characteristics. This revolutionary technology yields superior edge definition and requires substantially less software filtering of raw inspection data than competitive systems. Less distortion of raw data simply translates to superior inspection performance which is especially crucial for accurate solder joint inspection.



Cold Solder Joint w/ Insufficient Wetting



## Smart Inspection Software based on Artificial intelligence based Deep Learning Methodology

MIRTEC's Automatic Programming Software uses Artificial intelligence based Deep Learning Methodology to minimize human error and standardize the programming process. This advanced software solution automatically analyzes the PCB architecture and assigns the appropriate part type and process parameters for each SMT device thereby maximizing programming efficiency. Only basic operator training is required to achieve optimal inspection results.

MIRTEC's 'Best-in-Class' Optical Character Recognition (OCR) Technology reduces false calls and improves production process efficiency by automatically restoring and inspecting damaged characters through AI and Deep Learning.

## Leading the Way to Industry 4.0

MIRTEC's Total Remote Management System (TRMS) is a fully integrated Industry 4.0 Solution which combines remote management with real-time data monitoring and analysis for each system within the SMT production line. MIRTEC's TRMS provides real-time remote monitoring of status information and statistical data such as; equipment operation status, production yield, PC resources, temperature, humidity, etc.

The combination of MIRTEC's 3D AOI and TRMS systems provide a vast improvement in production process management over common AOI technologies and management software. The TRMS Module is a key part of MIRTEC's Intelligent Factory Automation System. This powerful software suite was designed and developed by MIRTEC to provide manufacturers with a clear view into the manufacturing process, thereby helping them achieve higher operating efficiencies and improved quality.

"MIRTEC has earned a reputation as one of the most progressive and dynamic suppliers of inspection equipment to the Electronics Manufacturing Industry", stated Chanwha Pak, CEO of MIRTEC Co LTD. "Productronica is an event that brings together the latest 3D Automated Optical Inspection Technology from every major AOI manufacturer throughout the world. We are very excited to present our Technologically Advanced APLHA 3D AOI System at this year's event. We look forward to welcoming visitors to our booth #413 in Hall A2 and at the 3D AOI Arena as well."

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MIRTEC is a leading global supplier of automated inspection systems to the Electronics Manufacturing Industry. For further information, please visit <a href="https://www.mirtec.com">www.mirtec.com</a>