



CONTACT

Brian D'Amico

MIRTEC Corp

Phone: 203-881-5559

E-mail: b.damico@mirtecusa.com

Web: www.mirtecusa.com

MIRTEC to Showcase State-of-the-Art 3D AOI Solutions at APEX 2024

March 2024 – MIRTEC, 'The Global Leader in Inspection Technology,' will showcase its complete line of 3D AOI and SPI Inspection Systems at Booth #2100 during the 2024 IPC APEX EXPO scheduled to take place April 9-11, 2024, at the Anaheim Convention Center. "MIRTEC will feature a total of seven systems specifically designed to address the full spectrum of inspection requirements associated with the Electronics Manufacturing Industry including two new state-of-the-art 3D AOI Solutions," stated Brian D'Amico, President of MIRTEC's North American Sales and Service Division.

MIRTEC unveils its 'Groundbreaking' ART Hybrid 3D AOI System

At APEX 2024, MIRTEC will unveil the **All-New ART Hybrid 3D AOI System**. Heralded as the World's first 75MP Multi-Camera / Full HD Resolution 12 Projection 3D AOI System, ART introduces a paradigm shift in inspection technology. Leveraging MIRTEC's exclusive 12 Projection Digital Blue Moiré Technology and five 15MP CoaXPress Color Cameras, the ART system specializes in inspecting reflective objects, particularly solder joints in high-end electronics manufacturing industries like automotive electronics, aerospace, and defense. The ART system overcomes challenges faced by conventional 3D AOI systems, ensuring reliable 3D inspection results even on highly reflective surfaces.

The ART system's innovative approach involves complementary image acquisition of its five 15MP cameras. In scenarios where one camera faces light saturation due to reflective surfaces, the system seamlessly utilizes the data from the other cameras to restore precise 3D shape images. This revolutionary design allows the system to precisely measure 3D data at the very point where solder meets the component terminals. This has long been a challenge for conventional 3D AOI systems. Instead of providing REAL 3D Data, competitive systems with simply 'fill-in' absent data using software algorithms. This unique capability to accurately measure and characterize solder joints and reflective surfaces sets ART apart in the industry.



MIRTEC introduces TAL 3D SCAN for 30% Increased Productivity

MIRTEC will display two MV-6 OMNI 3D AOI machines at APEX 2024. The first system will feature a specialized 3D Laser Scanner attachment called TAL 3D SCAN. This revolutionary design integrates directly into the PCB transport system of the MV-6 OMNI for precision 3D inspection of tall components prior to transport into the MV-6 OMNI System. The attachment scans waiting PCBs on the first stage while the MV-6 OMNI processes PCBs on the second stage. This innovative approach provides a 30% increase in productivity for mixed THT-SMT PCB manufacturing.

The second MV-6 OMNI machine will showcase a CXP-12 data transfer interface (CoaXPress 2.0), providing double the data transfer rate for lightning-fast processing speeds.



GENESYS-CC AI Based Conformal Coating AOI Series

MIRTEC's Award-Winning GENESYS-CC AOI machines are configured with MIRTEC's Exclusive 15MP CoaxPress Camera Technology which is the highest camera resolution among conformal coating AOIs on the market. This system ensures accurate and rapid Conformal Coating Inspection capable of measuring coating thickness from 10µm to 1,000µm. The optional flip conveyor enables double-sided PCB inspection without an external flipper.

MV-3 OMNI Desktop 3D AOI Series

MIRTEC's Award-Winning MV-3 OMNI Desktop 3D AOI Series features our exclusive OMNI-VISION® 3D Inspection Technology which combines either a 15MP or 25MP CoaXPress Camera with MIRTEC's revolutionary 12 Projection Moiré 3D Technology in a cost-effective platform. MIRTEC's proprietary Ultra-High resolution CoaXPress Vision System is designed and manufactured by MIRTEC for use with our complete product range of 3D inspection systems. MIRTEC's 12 Projection Digital Moiré Technology provides true 3D inspection to yield precise height measurement data used to detect lifted component and lifted lead defects as well as solder volume post reflow. Fully configured MIRTEC's MV-3 OMNI machines feature four 10MP or 18MP Side-View Cameras in addition to the Top-Down Camera, a Multi-Focus Programmable Z-Axis System and Multi-Function AOI/SPI Fusion Technology. Without question, the MV-3 OMNI is the most Technologically Advanced Desktop 3D AOI machine **'On the Planet!'**

MS-11e 3D SPI Series

MIRTEC's Award-Winning MS-11e 3D SPI Series features our exclusive 15MP or 25MP CoaXPress Camera Technology, providing enhanced image quality, superior accuracy, and incredibly fast inspection rates. The MS-11e 3D SPI is also available with a cost-effective 4MP Camera Link option. These machines use Dual Projection Shadow Free Moiré Phase Shift Imaging Technology to inspect solder paste depositions on PCBs post screen print for insufficient/excessive solder, shape deformity, shift of deposition and bridging. All MIRTEC 3D SPI machines are CFX compliant and feature upstream and downstream Closed Loop Feedback.

INTELLI-PRO AI-Powered Process Management Software Suite

MIRTEC's INTELLI-PRO AI-Powered Process Management Software Suite, including the Total Remote Management System (TRMS), provides real-time remote monitoring and analysis for each system within the SMT production line. TRMS enhances production process management, and the Remote Debugging System (RDS) serves as the base application for the Optimum Inspection Tool (OIT), an AI assistant for the debugging process.

"IPC APEX has earned a reputation as North America's largest and most comprehensive Electronics Manufacturing Exhibitions," continued D'Amico. "We look forward to welcoming visitors to Booth #2100 to learn more about MIRTEC's innovative inspection solutions and to discover why MIRTEC is regarded as one of the most progressive and dynamic suppliers of inspection technology to the electronics manufacturing industry."

###

MIRTEC is a Leading Global Supplier of Automated Inspection Systems to the Electronics Manufacturing Industry. For further information, please visit www.mirtecusa.com