

Koh Young Showing PCBA and Semiconductor Inspection Innovations at Productronica on November 14-17, 2023 at Messe München

Alzenau, Germany – Koh Young, the industry leader in True 3D measurement-based inspection solutions, will highlight live demonstrations of its award-winning inspection and measurement solutions for printed circuit board, advanced packaging, and semiconductor assembly at Productronica, the highly-anticipated trade fair in Messe München on November 14-17, 2023 in Munich, Germany. Koh Young will have two booths. The first is at A2.377 and is focused on traditional surface mount technology. Our sister booth at A2.359 is focused on advanced packaging and semiconductor inspection innovations. Join our booth at Productronica 2023 to find out more. The following is just a glimpse into what Koh Young will have in store for our visitors.



Solder Paste Inspection (SPI)

In 2002, we introduced the concept of 3D measurement-based solder paste inspection – and it revolutionized the inspection industry. Today, manufacturers recognize the value of the 3D measurement data and use the data to improve the print process, in turn, improving production yield and quality. Today, 3D SPI has become a standard requirement for SMT lines – it is no longer optional. The KY8030-3 is our SPI workhorse, and the most popular SPI solution in the electronics manufacturing market. With a patented dual-projection technology, we deliver trustworthy and repeatable measurement data, which manufacturers can use to reliably optimize the print process.

- KY8030-3 Industry's Fastest True3D SPI Solution with Integrated Auto-Repair Dispenser
- aSPIre3: Industry's Highest Performing True3D SPI Solution

Automated Optical Inspection (AOI)

The Koh Young 3D AOI Zenith delivers perfect inspection performance with True3D measurement technology. In the 2D inspection world, false calls and escapes are unavoidable. To solve this problem, we took a different approach. We based our solution on full 3D measurement technology, not 2D technology and its inherent shortcomings or 2D with some 3D capabilities bolted-on to help. At Koh Young, the Zenith measures all components in True3D. We find the component body based on true 3D profilometric information. Using this approach, we provide trustworthy inspection results, regardless of component or board color variations. When our 3D measurement data meets artificial intelligence, we can deliver even more advantages to manufacturers.

- Zenith Alpha Best Value True3D Automated Optical Inspection Solution
- Zenith UHS Industry's Fastest True3D AOI Solution
- Zenith 2 Revolutionary True3D AOI Delivering Incomparable Capabilities



Automated Pin Inspection (API)

Built on its world-class True3D[™] AOI technology, new enhancements help it break through barriers associated with inspecting products with a mix of both Pins and SMDs. The complete KY-P3 lineup provides an automated back-end solution combining advanced high-resolution optics and innovative AI-powered vision algorithms for single pin, press-fit, and Final Optical Inspection, as well as for pins inside a connector shroud, while also inspecting traditional SMDs on the same product. Because of its quantitative measurement-based approach, accuracy and repeatability is unsurpassed.

• KY-P3 Industry-awarded breakthrough in 3D Automated Pin Inspection

Dispense Process Inspection (DPI)

The award-winning Neptune is the industry's first 3D optical measurement solution for transparent material inspection. Using Koh Young LIFT technology (Laser Interferometry for Fluid Tomography), the Neptune delivers non-destructive 3D inspection to precisely measure and inspect fluids – wet or dry. With its Machine-Learning algorithm, the Neptune accurately measures materials for coverage, thickness, and consistency with a user-defined threshold setting. It also identifies bubbles, cracks, and other defects in coating. It also measures underfill, epoxy, bonding, glue, potting, flux, and more to deliver an exact measurement of transparent and translucent materials.

- **Neptune T** Industry's First 3D Optical Measurement Instrument for Transparent Materials
- Neptune C+ Award-winning True3D In-Line Dispensing Process Inspection (DPI) Solution

Process Control & Optimization Software

Al-powered KSMART solutions help automate process control, while focusing on data management, analysis, and optimization. It collects data from across the factory for defect detection, real-time optimization, enhanced decisions, and traceability to improve production, increase quality, and lower costs by eliminating variances, false calls, and escapes. Koh Young can help manufacturers solve significant business challenges by applying connectivity to modernize industry processes. By leveraging IPC-CFX with its Al-powered technologies, Koh Young successfully applies real-time data to improve the production process by converting data into process knowledge. Combined with IPC communication standards, Koh Young can open the gates to a smart factory for anyone.

- KSMART Seamless Smart Factory Software Suite Turning Data into Insights
- **KPO** Award-winning AI-powered Printer and mounter Process Optimization Software

Semiconductor and Advanced Packaging Inspection

Building on our award-winning, industry-leading inspection technologies, the Koh Young Meister Series delivers True 3D measurement-based inspection for ultra-thin solder, wafer bumps, balls, and components. Manufacturers can maximize yield without increasing costs by detecting defects at the wafer level with accurate inspection.

- Meister S Premium In-line 3D Inspection System for Micro Solder Paste Deposits
- Meister D+ Breakthrough in 3D Measurement for Highly Reflective and Mirror-surfaced Components
- Meister W+ True 3D Measurement for Wafer Bumps & Shiny Components

To learn more about how our solutions boost your quality, visit us at Productronica in Booths A2.377 and A2.359 at Messe München in Munich, Germany. If you cannot attend the show, you can still learn more about our best-in-class inspection solutions at our website <u>www.kohyoung.com</u>.



About Koh Young Technology, Inc.

Established in 2002, Koh Young revolutionized the inspection market by launching the industry's first 3D Solder Paste Inspection (SPI) system using a patented dual-projection Moiré technology. Since then, it has become the global leader in 3D measurement-based SPI and Automated Optical Inspection (AOI) equipment for the electronics industry. Based on its True 3D measurement-based inspection technology, Koh Young has developed innovative inspection solutions for challenges with machined parts, press-fit and through-hole pins, conformal coatings, dispensed materials, and semiconductor packages. Through its constant innovation, Koh Young has secured over 3,500 global customers, and commands the dominant global market share position in the SPI and AOI markets with well over 20,000 machine installations. By adopting a user-centric R&D focus, it continues to use its core competencies to develop innovative solutions for new and existing markets by listening to our customers and researching emerging trends and applications. From the headquarters in Korea, activities spread across the world through its global sales and support infrastructure spanning Europe, Asia, and the Americas. These regional offices ensure Koh Young stays close to the market, and more importantly, its growing user base. Learn why so many electronics manufacturers trust Koh Young for reliable inspection for a smart factory at our website kohyoung.com.

