

Find the inspection solutions you need at APEX – Visit ViTrox in Booth #2223

January 12 2017 – ViTrox Technologies, a solutions provider of innovative, advanced and cost-effective automated vision inspection systems and equipment for the semiconductor and electronics packaging industries, today announced plans to bring its new product line to the IPC APEX EXPO, scheduled to take place Feb. 14-16, 2017. During the show, ViTrox will have live demonstrations of its ONE-STOP solution in Booth #2823, from the V510i XXL to V810i S2EX In-Line Advanced 3D X-Ray Inspection System by connecting with the first ever software-based product, V-ONE!



ViTrox's V510i XXL system uses 2D + 3D inspection concurrently to achieve high productivity and high detectability. It boasts capabilities that are unmatched by other existing solutions in the market. V510i XXL is coupled with structured lighting for 2D illumination with multiple color LEDs. The revolu-tionary multi-angle multi-color illumination capability allows multiple images to be acquired for each view.

ViTrox has developed a new platform for the V510i XXL for single lane inspection to cater to larger board inspection. It is able to inspect boards up to $620 \, \text{mm} \times 690 \, \text{mm}$ and supports boards up to $7 \, \text{kg}$ or $15 \, \text{kg}$. Moreover, V510i XXL has the pneumatic cylinder conveyor that can be programmed to allow changing of the travel direction without changing any hardware. The Z-height features of V510i XXL provide a fully automatic projector calibration process and increase the board component inspection range up to $44 \, \text{mm}$.

The V810i S2EX is able to inspect boards up to 482 x 609mm (10 percent larger than the S2) and provides the best support on the market for boards up to 7mm thick and 4.5kg. The board top clear-ance of V810i S2EX is enhanced with 50 mm and bottom clearance of 70mm. The inspection area of the system is improved up to $18.7' \times 24'$.

V810i S2EX features Scan Path Merging (SPAM) state-of-art new technology that can reduce the in-spection time and hardware scanning path. Single Unified Management Office (SUMO) uses an 8-core processor with 128GB of RAM that accelerates the system to its optimum level of performance. Simultaneous Efficient Reconstruction Technique (SERT) and a new 64bit imaging processor architec-ture combine Predictive Slice Height (PSH) into a single scanning path. Phase Shift Profilometry 2 (PSP 2) boosts the projection and image acquisition speed up to 10 times faster using an in-house proprietary projector. PSP 2 improves accuracy and test coverage on 100 percent pressfit and PTH boards.

One of the highlighted key features of V810i S2EX is 3D CT, which was released for failure analysis and volume calculation, while the repair station is for the operator to view the failed joints in 3D CT to make better judgement. Furthermore, users can view the 3D image, Vertical Slicing and 3D CT View at a glance. The Auto Exposure of V810i S2EX is a new advanced technology, with auto learning of the optimal exposure settings by weaving together the data from various exposure settings into a pro-jection in order to improve the image quality for very heavily shaded components. Moreover, V810i S2EX's new 2 x 2 binning cameras are able to achieve higher resolutions up to 6um.

V-ONE is the new software-based product launched by ViTrox that combines all of the previous and future ViTrox software into one suite of solutions to connect the inspection machines in SMT produc-tion lines in order to monitor their performance

on a real-time basis. V-ONE allows users to manage factories smarter and optimize factory resources across geographical locations.

The initial stages of V-ONE are Collect, Visualize and ProAct. During the Collect stage, users are able to monitor, collect machine data, and track issues in real-time even they are not physically on the pro-duction floor. Any data that are recorded in V-ONE is traceable, whereby users can access and review machine data in a few clicks from anywhere by connecting PC or smart devices to Wifi or the network.

During the Visualize stage, users can collect machine data by using V-ONE and create different cus-tomizable charts as a dashboard for ongoing monitoring and analysis purposes. Inspection system data, such as false call rates, productivity rates, first-pass yield rates, machine utilization rate, operat-ing equipment efficiency rate and other data can be viewed and used for analysis charts on a real-time basis. Besides, the triggering system of V-ONE will send out alerts to user groups via SMS, email, etc. when abnormal performance occurs.

During the ProAct stage, all about the data collected from inspection machines will be recorded in the V-ONE and it will have auto fine tuning through the centralized Networked Offline Programing (NOLP) station which helps to reduce false call rates. The auto fine-tuning is based on the machine data his-tory that is saved in the V-ONE system and users can review the machine data history of the past. By utilizing the features of V-ONE, users are able to manage their inspection production lines in a smarter way; aligning with Smart Manufacturing of the future.

Do not miss this chance to experience a live demonstration of ViTrox's ONE-STOP solution during the show! ViTrox is looking forward to welcoming you for visitation and inquiries. For more information about ViTrox, visit www.vitrox.com.

http://globalsmt.net/trade_show_news/find-inspection-solutions-need-apex-visit-vitrox-booth-2223/