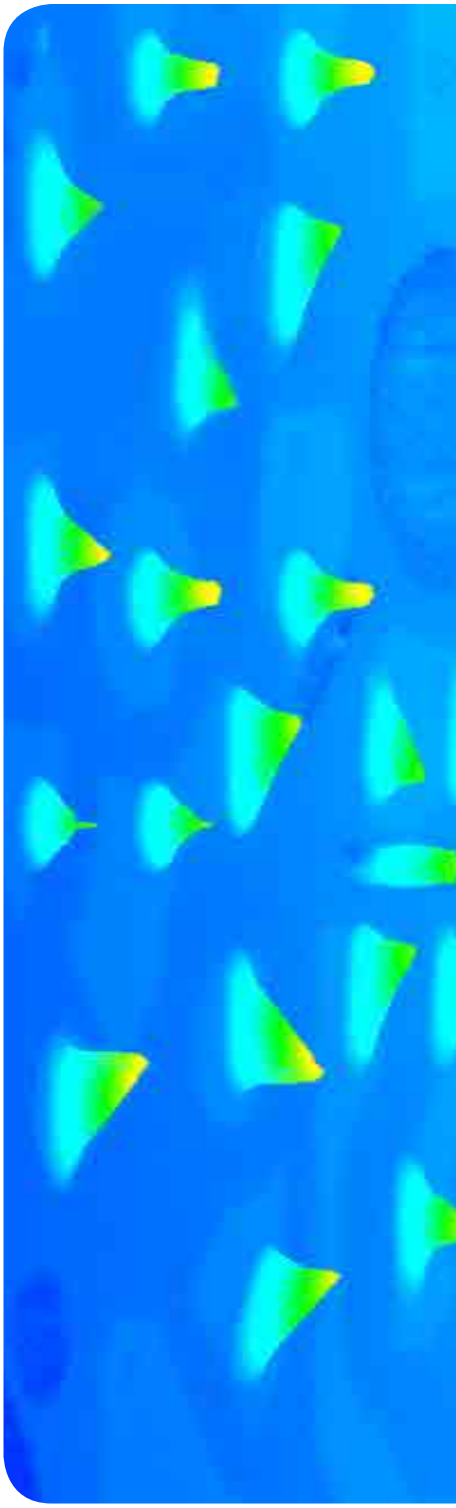
SQ3000™ for Through Hole Technology

Benefit Summary

Implementing an automated 3D inspection solution helped our customer reduce false calls, which caused significant delays and costs, and increase yields for mass production.



Challenge

Our customer struggled with false calls and high operational costs during inspection of their Through Hole Technology (THT). Their 2D system could not effectively keep up with production speed resulting in high operational costs and inefficiencies throughout the production cycle. Defects were discovered late in the process, and the system was not equipped to accurately inspect variations in shape and color on the THT boards.

Our customer needed a way to automate their inspection process, find defects sooner and increase speed for mass production. Their specific product called for a better sensor that could deliver reliable data, while inspecting variations among soldering machines and materials with increased shine.

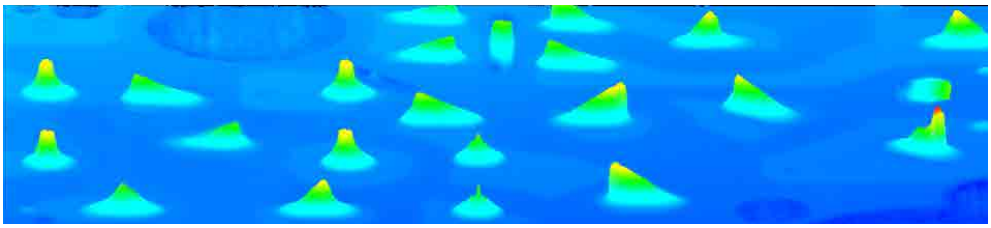
Solution

Implementing the SQ3000™ 3D Automated Optical Inspection (AOI) system allowed for a versatile solution that is easy to use and provides consistent, accurate results at high speeds. The sensor, software and system all work together to completely automate the full-line inspection process, with higher mean time between failures of the products they produce.

With Multi-Reflection Suppression (MRS) technology, our customers are able to find defects sooner and mitigate any measurement inaccuracies due to shiny THT surfaces for high yield inspection at fast speeds.

This solution greatly reduced the number of false calls and drastically decreased the escape rate with a first pass yield of more than 98%. The system is easy to use and requires very little maintenance allowing the customer to decrease operational costs.

This proprietary system was evaluated as the best-in-class solution that reduces costs, improves yields and continues to create operational efficiencies for our customer.



For more information on CyberOptics products, services, or solutions, visit our website at www.cyberoptics.com.

Contact CyberOptics today for more information
+1 800.366.9131 or +1 763.542.5000 | CSsales@cyberoptics.com | www.cyberoptics.com