JABIL



ViTrox^{\oplus}

VITROX

Company: Vishay Intertechnology

• Industry: Machine Vision Technologies

• Country: Worldwide

• Employees: 800+

• Websites: www.vitrox.com



ADVANCING QUALITY AND EFFICIENCY WITH INNOVATIVE INSPECTION SOLUTIONS

ViTrox is a leading solutions provider of innovative, advanced and cost-effective automated inspection systems for the semiconductor and electronics packaging industries. The Penang, Malaysia-based company's core Machine Vision System (MVS), Automated Board Inspection (ABI) and Electronics Communication System (ECS) are deployed at Jabil's facilities around the globe to bolster manufacturing quality and operational efficiencies.

For more than a decade, ViTrox has provided Jabil with advanced inspection solutions to assure the company's surface mount technology (SMT) processes deliver the highest levels of quality, integrity, and performance. "ViTrox plays a critical role in Jabil's manufacturing process," says Kurt Shafer, Director of Supply Chain Management at Jabil. "We must be able to deliver products to our customers on time and on quality while maintaining performance to the rigorous industry standards for precision manufacturing."

Through advanced technologies and automation, ViTrox empowers Jabil to expedite thorough inspections of highly detailed integrated printed circuit boards (PCBs) for any defects or imperfections. "Inspection speed and throughput go hand in hand and are essential to the performance of Jabil's operations," Shafer adds. "Our goal is to give our customers confidence that their products will be manufactured at the highest quality, and to do so we must invest in industry-leading solutions and world-class partners."



ADVANCING TECHNOLOGY THROUGH PARTNERSHIP

ViTrox and Jabil have over a decade of history together taking on the relentless pressures required to deliver flawless, market-leading products that feature the latest technology advances. To meet this demand consistently, as technology evolves, so has the relationship.

"Jabil has evolved from the typical SMT manufacturing business environment to many other market segments, including mobility, infrastructure, medical, aerospace, transportation, automobile," says Wee Kah Khim, Vice President and General Manager at ViTrox. "So we see a need to change or evolve our organizational structure to strengthen our partnership with Jabil."

The challenge is akin to hitting the bull's eye repeatedly as the target continually moves. "Year over year, ViTrox has to keep up with Jabil's endless technology advancements," says Shafer. "As the technology changes and evolves, ViTrox's inspection equipment must keep pace."

ACHIEVING A HIGH LEVEL OF COMPETENCY

ViTrox's inspection solutions, which feature the latest optical and x-ray technologies, enable Jabil to reduce the number of personnel required on some lines, redirecting them to other critical manufacturing endeavors.

This shift has been accomplished with no degradation to the quality or speed of inspection and final production. Reaching this high level of competency reflects Jabil's confidence that ViTrox's solutions will consistently detect any inconsistencies or lapses in manufacturing processes.

"We rely on ViTrox's inspection equipment to provide visual confirmation that the line is running to our operational standards. This is imperative for Jabil to maintain its stature as the most technologically advanced and trusted manufacturing solutions provider in the world."

Today, with more and more components becoming miniaturized to the point they are barely visible to the naked eye, inspection has never been more important. Getting accurate information is critical as anything less could require scraping products, which wastes money and time, while also negatively impacting delivery schedules. "The engineering community at Jabil trusts ViTrox," says Shafer. "That speaks volumes as our engineers are a very discerning group."

FACTORY OF THE FUTURE

Jabil's vision of a digital manufacturing future demands consistent improvements in manufacturing speed and agility, which cannot be accomplished without the latest inspection automation solutions. "We've been working closely with Jabil on the equipment side, especially our Advanced Optical Inspection solutions," says Benjamin Lichtwardt, Global Account Manager at ViTrox. "Jabil has recently evaluated the software we have in place, and we will begin to see the fruits of that effort."

In fact, the bi-directional nature of ViTrox software delivers an extra measure of guidance to upstream equipment while gathering important dashboard data to optimize overall operations. A constant feedback loop between ViTrox and Jabil facilitates an environment of continuous improvement and open collaboration.

While ViTrox works with all the world's leading manufacturers, its relationship with Jabil stands out. "Jabil is the only one that has evolved from SMT to plastic molding, precision machining and also packaging," adds Khim. "That is really amazing. This means the inspection requirement is very wide and very unique now."

The partnership has become a win-win for the organizations. Characterized by positive output, a meshing of cultures and a constant stream of open dialogue, both companies are positioned well for continued growth and improved commercial viability.

Jabil (NYSE: JBL) is a manufacturing solutions provider that delivers comprehensive design, manufacturing, supply chain and product management services. Leveraging the power of over 200,000 people across 100 sites strategically located around the world, Jabil simplifies complexity and delivers value in a broad range of industries, enabling innovation, growth and customer success. For more information, visit jabil.com.

