New white light interferometer for precision and speed directly on the line

Ultra-fast, robust and extremely precise: the next generation of white-light interferometry

The white light interferometer (WLI) for in-line measurements has been proven in a variety of applications and is now even faster thanks to NetGAGE3D. Together with high measurement speeds and a robust process, the sensor enables users to capture color images or conduct batch-by-batch quality inspections. This solution takes white-light interferometry to the next level when it comes to speed and the very highest precision.

Whether for inspecting circuit boards and wafers or metal components in a tray, the high precision of the new white light interferometer quickly and easily boosts quality when used in the production line. The 3D sensor is ideally suited to full-surface contactless measurement and guarantees pinpoint accuracy. With just a single scan, the NetGAGE3D white light interferometer dependably delivers highly accurate measurement results in the nm range to ensure a reliable inspection of different surface area properties such as roughness or flatness, but also of dimensional accuracy and completeness. Depending on the application, the new sensor can be equipped with various cameras, for example with a particularly high lateral resolution for detecting roughness or a very large measuring field for inspecting evenness.

Short scanning times for a variety of applications

The expanded sensor is equipped with new software and hardware components that enable even faster measurement. The new method enables a significantly higher degree of data efficiency, as fewer interference signals are needed to calculate the surface structure and fewer redundancies occur during the measurement. Thanks to this new
scanning method, the 3D sensor will enable even shorter scanning times of less than a second.

The new NetGAGE3D plus is perfectly tailored to automated series production. With short measurement times and a batch processing function, the systems are able to measure a large number of components in next to no time at all. Furthermore, its brief scan time also means that the NetGAGE3D plus is suitable as a cycle-controlled measurement technology for use in the electronics industry, where the systems are primarily used to check printed circuit boards or soldering paste. Thanks to a special feature for the batch processing of components in a magazine, NetGAGE3D plus can achieve significant time savings in operator self-inspection, as users can directly intervene in the manufacturing process in order to make corrections.

NetGAGE3D plus for networked manufacturing

Thanks to high-quality components, the self-preserving enclosure and low maintenance requirements, NetGAGE3D plus is very robust. The operating concept is optimized for both touch screens and conventional input using a keyboard and mouse, while the intuitive menu navigation makes operation easy, even for users without any prior knowledge. Equipped with an embedded PC and Wi-Fi capability, the sensor already meets all technical requirements for networked production as standard and is the ideal solution for a multitude of applications.
Image

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NetGAGE3D plus checks the quality of a great variety of components quickly and efficiently.

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The measurement parameters can be adapted to the present magazine with only a few settings due to the simple and intuitive user guidance of the NetGAGE3D.