PRESS RELEASE

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Robot Based vision inspection combined AI

The **Kitov Core+** is a robotic-based automated visual inspection system combining traditional machine vision with **artificial intelligence** (AI) and **deep learning**.

Providing comprehensive inspection including **assembly verification, corrosion detection, dents** and **damage, surface imperfections** and **micro-cracks** it offers machine builders, system integrators, and planners automated CAD-based visual inspection planning. As an open platform, machine builders, system integrators, and planners can integrate the software with their new and existing production processes, including best-in-breed detectors and hardware components. 3D metrology is supported as well.

Parts up to 800mm in diameter, 500mm in height and 40kg in weight can be inspected , the **Core+** is used in all industries such as **general manufacturing, aerospace, automotive, electronics, defence** and **medical**, including **safety critical** applications and removes human subjectivity errors.

The system can find defects down to 50 µm (with a 50mm lens) and there are algorithms designed for specific, common inspection tasks, such as comprehensive screw/fastener inspection or label verification.

Direct program complex inspection routines from **CAD** (Computer-Aided Design) files capability reduces setup and programming time, and, if a CAD file is not available, the system can automatically create a **3D digital twin** from a 360-degree image scan.

The **Kitov Core+** provides a non-contact precision inspection solution that eliminates manual inspection and can be integrated into production using Industry 4.0, ERP, MES, and PLC or used as a stand-alone solution. It improves quality control, reduces inspection costs providing an industrial automated measurement solution.

Available from Optimax www.optimaxonline.com