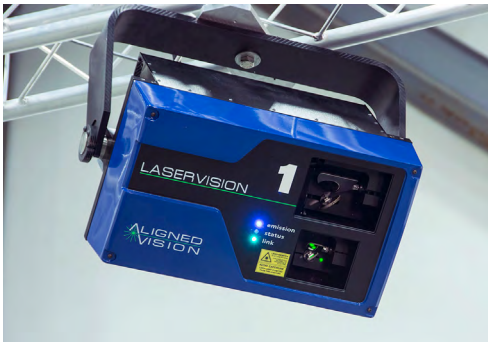
INTRODUCING LASERVISION



Real-time in-process automatic inspection

Locates and inspects detailed features anywhere in giant field of view

AI-enabled image analysis

Real-time laser feedback guides operators to anomalies

Automatically populates as-built digital twin

LASERVISION inspects wing spar during production yet independent of production equipment.

LASERVISION

STANDOFF DISTANCE: 4m

FIELD OF VIEW: 4m x 4m

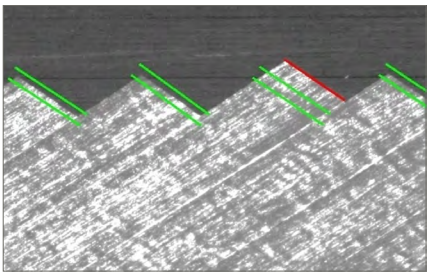
CAPTURED IMAGES: 10cm x 10cm

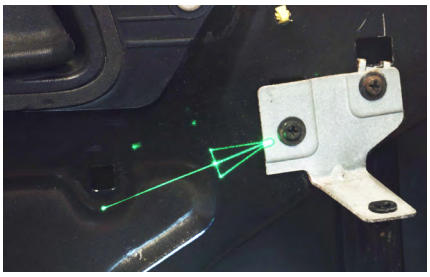
LASERVISION is an AI-based automatic inspection technology that fills a strategic gap between the manufacturing industry's currently available inspection technologies and its quality objectives.

LASERVISION is Aligned Vision's open-platform in-process automatic inspection system. It is the only such system to offer detailed inspection throughout a large (16m^2) field of view. LASERVISION performs automatic, CAD-directed calibrated image capture. Image analysis is performed using algorithms created through machine learning, and inspection results are available in real time to enable immediate corrective actions of any nonconformances.

INTRODUCING LASERVISION

ALIGNED VISION





Key to LASERVISION's suitability for a broad spectrum of manufacturing applications is its versatile image analysis capabilities. The in-process data and images generated by LASERVISION may be analyzed using Aligned Vision's own AI-based algorithm development software or any third-party image processing. Integrators may package LASERVISION with their own image processing capabilities to create an exclusive inspection application for their customers. LASERVISION also generates a wealth of smart data for deep learning manufacturing intelligence systems to use in closed-loop continuous improvement efforts.

The system is able to inspect virtually any visible product attribute: the absence of surface scratches and foreign objects and debris (FOD), orientation of stitching or reinforcing fibers, location of holes and clips, etched or printed component ID numbers (read through OCR), and much more.

KEY LASERVISION FEATURES

STREAMLINING MANUFACTURING QUALITY EFFORTS

- LASERVISION's standoff distance of 4m or more means it performs inspections without disrupting manufacturing operations.
- Unlike fixed smart cameras, LASERVISION's high-mag, high-res camera with instant pan-tilt aiming capabilities captures detailed images anywhere in its field of view.
- The system's laser projector works like a presenter's laser pointer, automatically highlighting correct feature position or the specific location of nonconformances.
- LASERVISION operates as a standalone system that imports CAD/CAM data and exports inspection data; or as an integrated system (via our SDK) within your quality management solution (QMS).
- Standalone LASERVISION features electronic work instructions displayed on tablets and phone-size graphic remote controls, eliminating paper and the step-away time required to consult the control computer.
- LASERVISION helps populate the as-built digital twin, enabling deep learning and continuous process improvement.

LASERVISION offers new ways to stay competitive, lower costs and increase throughput – without sacrificing quality.

aligned-vision.com/laservision

ABOUT ALIGNED VISION

Aligned Vision (Chelmsford, MA) pioneered industrial 3D laser guidance and is advancing technologies and applications to numerous complex manufacturing operations. Aligned Vision has engineered technologies that extend automation throughout the production cycle, from kitting to inspection and documentation. Our portfolio features the only large-field automatic inspection system currently available to makers of large structural components.