

Machine Tools

ACSIS™ AUTOMATED COMPOSITE STRUCTURE INSPECTION SYSTEM



ACSIS™

ACSIS[™] (Automated Composite Structure Inspection System) is **Ingersoll Machine Tools'** best-in-class solution for the automated inspection, repair, and quality monitoring of the composite manufacturing process.

First released in 2016, **ACSIS™** has become the industry-leader in automated inspection with unparalleled abilities to locate, identify, and measure layup defects such as overlaps, gaps, twists, missing tows, splices, and more, on a variety of materials.

Defects Detection

All identified defects are presented to the operator for review and input via an interactive tablet/smart-watch application paired with a laser projector or an **Augmented Reality** interface using the **Microsoft HoloLens**.

Operator feedback during this process is used to further refine **ACSIS™**'s **machine learning** models which are then requalified via Ingersoll's patented training software.

Beyond defect detection, all results are also electronically logged for further review offline in the Defect Cloud interface to identify trends in defect occurrences and improve the production of future parts or current parts by offering insight to machine health.

ACSIS™ has shown a defect detection rate of over 99% and has been qualified in production to existing NDI standards.



Configuration:

- "In-ply configuration to accomodate the in-situ inspection of large structures
- "Post-ply" automatically exchangeable module where complex geometry demands it

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Ingersoll Machine Tools, Inc. 707, Fulton Avenue Rockford, 61103 Illinois USA Tel. +1 815 987 6000 info@ingersoll.com



Machine Too**l**s