Wichita State University

MATCHMAKING PROGRAM

In-Process AFP Manufacturing Inspection System (IAMIS)









Potential Applications

Quality inspection for composites manufactured through additive manufacturing in industries including but not limited to:

- Wind Energy
- Automotive
- Aerospace

About

IAMIS technology applies machine-learning (ML) algorithms to detect manufacturing defects that violate product certification standards. IAMIS technology reduces time strain and operator dependency for product inspection. The technology employs augmented reality to locate and describe defects, which further allows for a quicker repair and decision-making to enhance the manufacturing process's productivity and efficiency.

Market Opportunity

As the use of Automated Fiber Placement continues to grow, the necessity for automated inspection has also increased. While manual inspection is time-consuming and operator-dependent, IAMIS has increased efficiency and quality production. This technology is aimed at reducing manual inspection and improving AFP quality using data analytics.

Our target customers include the aerospace industry, the automotive industry, or any other manufacturers producing additively manufactured composites.

The market opportunity extends to an expected growth of over \$439.6 million by 2028. Such significant market growth further highlights the necessity of IAMIS implementation to reduce the labor-intensive inspection and increase efficiency, time, and productivity of AFP composite manufacturing.

Contact

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