



Coriolis AIS

CORIOLIS in process Automatic Inspection System (AIS) for Automated Fiber Placement (AFP)

- Inspection at the AFP lay up speed
- Coriolis AFP head compacity maintained
- Ability to inspect complex parts



Automatic Inspection System

TECHNICAL SPECIFICATIONS

AIS Hardware

Fiber configuration	1/4" or 1/2"
Compacity	Head compacity kept
Inspection speed	Up to 1.2m/s
Measurement distance	Short measurement distance after the roller

AIS Software

HMI	Fully integrated in Coriolis HMI V5
Viewer	Operator 3D viewer
Mode	Offline to post analysis & export of the data in standard format

AIS specifications for V1 version - Available now

Qualified for Thermoset material	Hexcel M21
Validated for 2D application	
Link to laser projector for repairs	
OK for Gap & Overlap detection. Mini sizes:	
Length	5mm (0.2 in.)
Width	0.3 mm (2.42 in.)

OK for FOD & Fuzzball detection. Mini sizes :

Length	3 mm (0.12 in.)
Width	3 mm (0.12 in.)
Height	0.18 mm (0.007 in.)

OK for twisted tows detection. Mini sizes:

Length	Length 5 mm (0.2 in.)
Width	3 mm (0.12 in.)

OK for Fiber waviness detection. Mini sizes:

Length	3 mm (0.12 in.)
Width	3 mm (0.12 in.)
Height	1 mm (0.04 in.)

OK for Add and Cut detection

AIS specifications for V2 version - Available in 2024/25

Addition in the detection software

- Overlap detection
- Splice detection
- Corner path detection method
- 3D Shape inspection

Analysis & visualization software

- Sector gap measurement
- Cumulative analysis of the whole ply

Hardware

- No further development on the device compare to V1
- Compatibility with Thermoplastic and Dry Fiber materials (laser)