

THE LASER UT[®] SYSTEM



NON-DESTRUCTIVE • FAST • DATA AUTOMATICALLY ARCHIVED • RESULTS IN REAL TIME







ABOUT THE LASER UT

- The Laser UT is a non-destructive ultrasonic inspection test unit for composite materials
- A piece that would take 8 hours to scan using conventional methods may take as little as 1 hour with the Laser UT
- All data is automatically archived digitially, making it easy to go back to previously scanned parts for trend analysis and reassessment
- Results are displayed in real time, and with two computers one part can be scanned while another is being analyzed
- Laser UT uses laser beams to generate and detect ultrasound in composite parts
- · Can scan complex shapes at high speeds without the need for: contour following, custom tooling, and couplant
- Size: X = 180" Y = 204" Z = 120"
- Manufacturer: PaR Systems



A-Scan





A-Scan: A one dimensional scan, where higher spikes show the reflection of the ultrasonic pulse caused by a defect or part surface.

Porosity: Unwanted space or air between layers of composite materials



B-Scan: A two-dimensional cross section of the object, where lines show the ultrasonic pulse reflections and depth of a defect.

Delamination: The seperation of layers in the material, resulting in loss of strength

C-Scan



C-Scan: Shows the plan view of the scanned surface and can show the area and position of a defect. Several viewing options are available, including depth and amplitude.

Inclusions: Impurities in the material or resin of the composite

ABOUT MAGELLAN AEROSPACE

Magellan Aerospace is a global aerospace company that provides complex assemblies and systems solutions to aircraft and engine manufacturers, and defence and space agencies worldwide. Magellan designs and manufactures aeroengine and aerostructure assemblies and components for aerospace markets, advanced proprietary products for military and space markets, and provides engine and component repair and overhaul services worldwide. Magellan is a public company whose shares trade on the Toronto Stock Exchange (TSX: MAL), with operating units throughout North America, Europe, and India.



Magellan Aerospace, Winnipeg • PO Box 874 • 660 Berry Street • Winnipeg, Manitoba • R3H 0S5 • Canada Phone: +1 (204) 775-8331 Email: info@magellan.aero

Printed in Canada

Magellan Aerospace 3160 Derry Road East Mississauga, ON Canada L4T 1A9 905 677 1889 www.magellan.aero