

Automated Laser Mapping of External Corrosion

A Technique for Evaluating External Anomalies

The Laser Mapper makes external corrosion mapping of extensive metal loss features practical when used in conjunction with the AUT Solutions AccuScan automated scanner systems. The laser beam intensity self adjusts based on variable surface conditions (dull or shiny) to obtain a depth reading without loss of data. Scanning speeds can be achieved at speeds up to 30" per second. Practical application has shown the capability of scanning 40' of 16" pipe, 360 degrees, in approximately 2 hours with near immediate inspection results.

Features & Specifications

- Fast - Scan up to 30"/sec
- Accurate - Accuracy to +/- 0.002"
- Laser type: Red semi-conductor, wavelength 655nm
- Laser output 220µW
- Class: FDA Class-
- Size: 1.9" x 0.85" x 1.3"
- Weight: 120g
- Spot diameter: 200µm x 750µm (0.008" x 0.030")
- Repeatability 2µm (<0.001")
- Sensor water sealed to IP67 rating
- Temperature rating -10C to +50C (14 to 131F)
- Acquisition speed: 330µS
- Cable length: 100ft
- Sensor stand-off distance: 1" or 25mm
- Measurement range: 1" range (-5mm to 20mm)

