

Eddy Current Inspection Systems

EloScan –

The flexible robot-based inspection system

The EloScan system was primarily designed for the eddy current inspection of rotating symmetrical components of aircraft engines. Because of its universal design, it can also be used to scan complex geometric structures that require precise probe guidance with high repeating accuracy.

The EloScan system meets all, and exceeds many, technical requirements of the GEAE-specification for the automated inspection of engine components. In addition, the specifications of other engine manufacturers are fulfilled. Special requirements may be realised quickly and to the customer's individual demand.

The EloScan system consists of a multi-axis industrial robot in conjunction with a ROHMANN eddy current test instrument and a special version of the ScanAnalyzer software. The instrument and the software fulfil all requirements of the inspection guidelines "GE SPM 70-32-10" and "CFMI SPM 70-38-11". Additionally, the system may be equipped with a ROHMANN

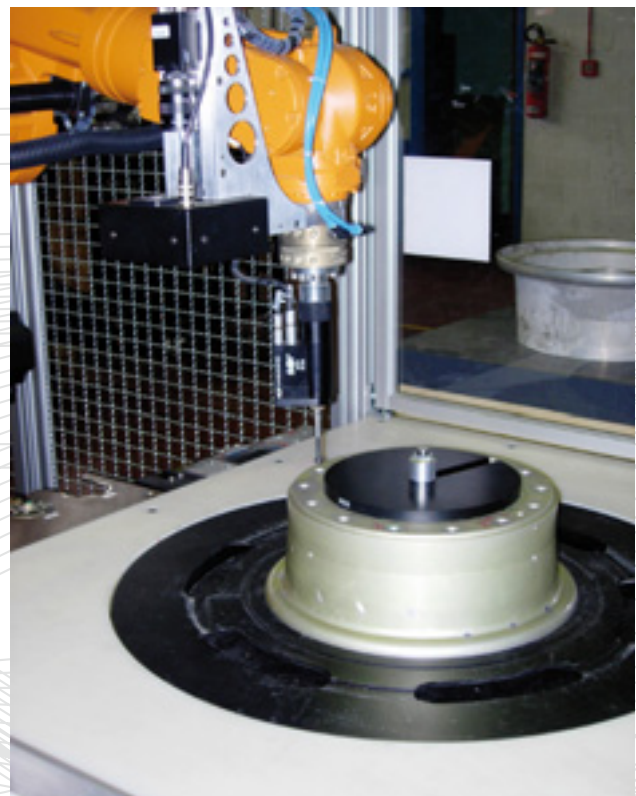
rotor scanner to inspect components in accordance with inspection guideline "GE SPM 70-32-07". The following main components are integrated into the EloScan system and thus offer a user-friendly system:

- Reliable multi-axis industrial robot for exact probe guidance
- Positioning turntable with flat mounting plate (Ø 800mm) for a steady rotating speed and the precise positioning of the components that are to be inspected
- Teach-in with colour display
- ScanAnalyzer software to acquire, display and analyze the eddy current signals
- IP54-cabinets including an industrial PC

For the inspection of (aircraft) wheels there is the WheelTester, a customized version to check for geometry, defects along the surface and the back wall and heat damages by measuring the conductivity.



EloScan



EloScan -WheelTester