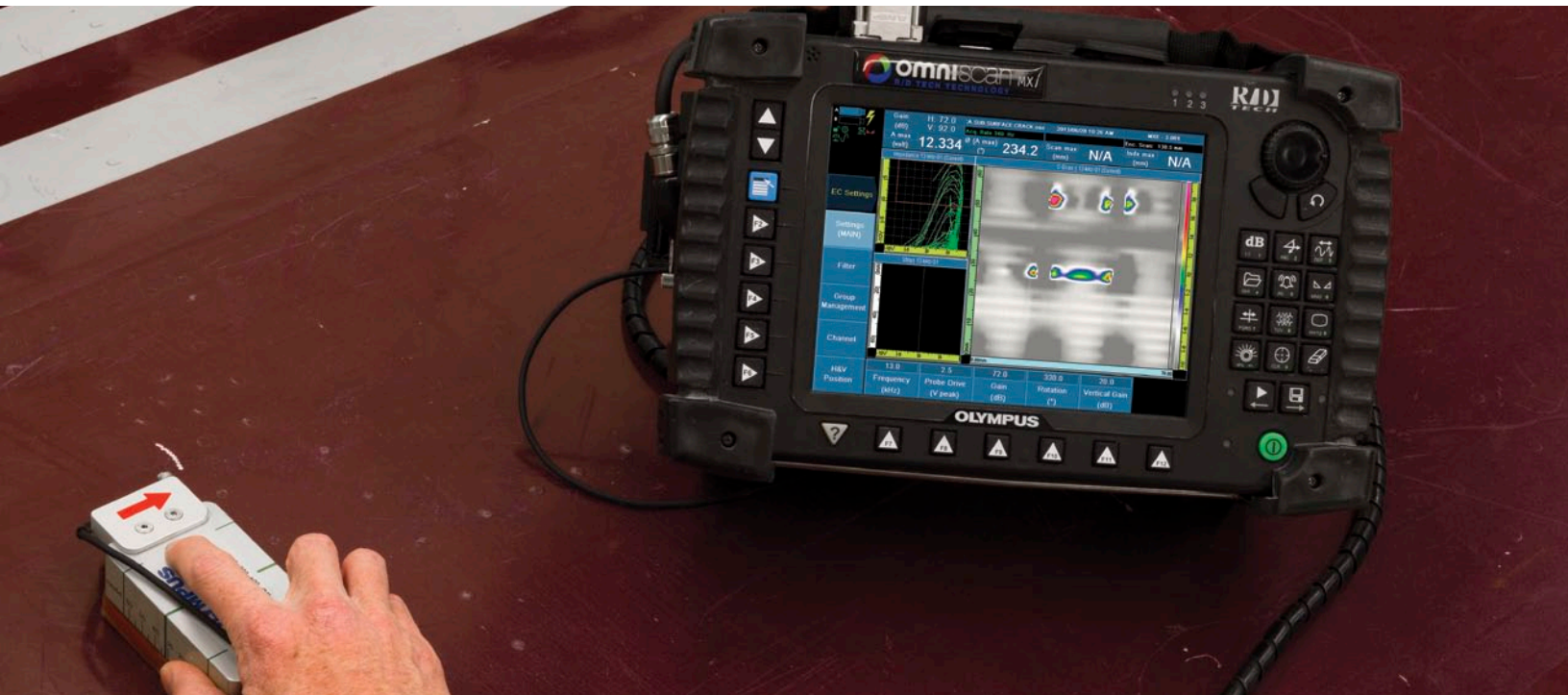


Fastener Inspection ECA Subsurface Crack Detection



Commercial and military aircraft are built by joining overlapping aluminum sheets together with thousands of fasteners. Fatigue cracks on the underlying layers of aluminum are often concealed by the first sheet layer. To guarantee the integrity of any airplane, these hidden flaws must be detected and repaired during regular in-service inspections.

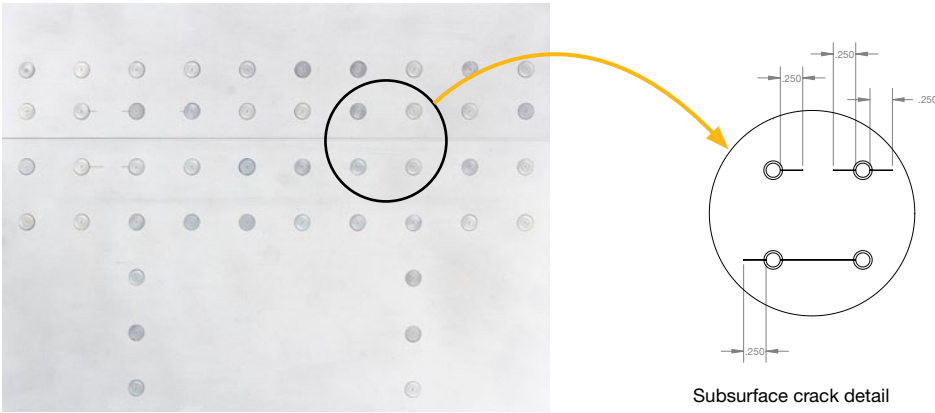
As a part of its series of aerospace solutions, Olympus proposes an innovative fastener and subsurface crack inspection technique, which propels eddy current technology into previously uncharted territory. This new technology provides an incredibly clear image of cracks under the first layer of aluminum aircraft skin, providing efficient and reliable results.

Features

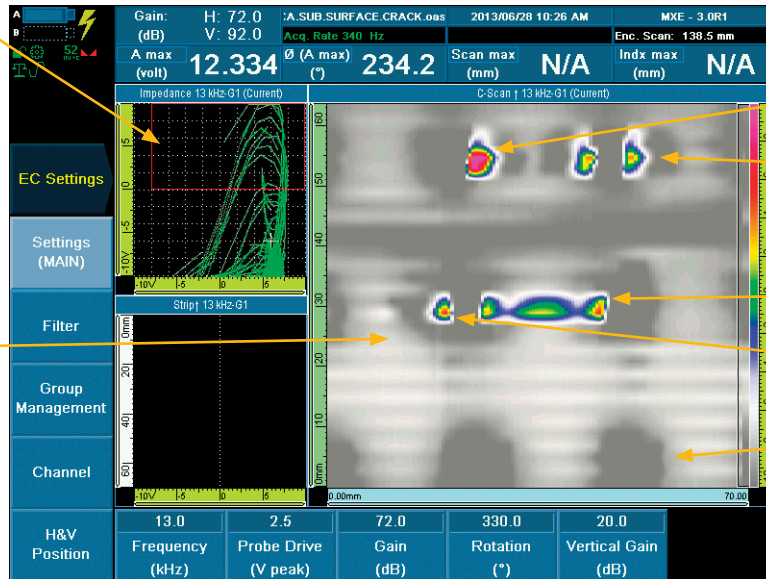
- Replaces magneto-optical imaging (MOI).
- The 32-coil probe provides large coverage.
- Avoids paint removal; simplified process equals time-savings.
- With continuous mode, the scan imagery reveals inspection results without interruption.
- Data recording for professional reports.
- Probe positioning not as critical as a sliding probe.
- Optimized to detect typical subsurface cracks in aluminum sheets of commercial and military aircraft.



Subsurface Crack Area



Conventional eddy current impedance plane with a 32-channel signal



Detailed subsurface crack ECA imagery

Crack orientation on the right
 Crack on both sides of the fastener
 Zipper crack indication
 Crack orientation on the left
 Good fastener indication

Ordering Information

Item Number	Part Number	Description	Penetration in Aluminum
U8270093	SAB-064-030-032	ECA semi-rigid probe for subsurface crack detection, TX-RX mode double resolution, 64 mm coverage, 4 kHz to 225 kHz, 32 elements, 2.4 m cable, including mounted ENC1-K-ECA encoder.	Up to 1.2 mm (0.05 in.) (Commercial)
U8270163	SAB067-ENC	ECA semi-rigid probe for subsurface crack detection, TX-RX mode double resolution, 67 mm coverage, 1 kHz to 25 kHz, 32 elements, 3 m cable, including mounted ENC1-K-ECA encoder.	Up to 2.5 mm (0.1 in.) (Military)
Spare Parts			
U8779368	ENC1-K-ECA	Eddy current array probe encoder with full holder 2.9 m cable with DE15 connector type.	
U8270106	E400038	Spare ECA probe, SAB-064-030-032 without encoder.	
U8270006	SAB-067-005-032	Spare ECA probe, SAB067-ENC without encoder.	

OLYMPUS NDT INC. is ISO 9001 and 14001 certified

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