

R-Evolution

Ultrasonic array roller probe



R-Evolution is an ultrasonic array probe housed in a lightweight water-filled roller, delivering fast immersion quality C-scan inspections in the palm of your hand.

Designed to minimise operator fatigue, it is small and light making it ideal for use on large areas and particularly overhead inspections.

Benefits

- Lightweight and ergonomic - <1kg
- High resolution with high frequencies - up to 10MHz
- Self-normalises on curved components
- Two guidance lasers mark the outer extents of the array
- Compatible with Tracer for dual-axis, large area inspections
- Indexing and start/pause buttons to interface with compatible instruments

Applications

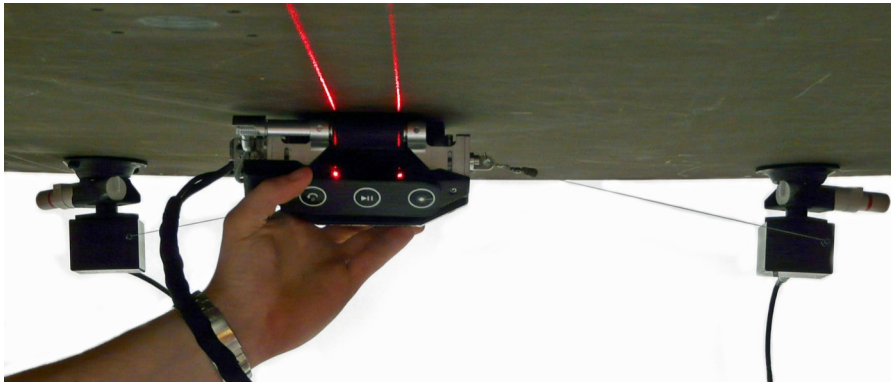
Typical applications for R-Evolution include:

- **Aerospace -**
In-service C-scans, Bond Inspection, Delamination or defect detection in composites
- **Wind Energy -**
Blade spar, leading and trailing edge bond inspection
- **Pipelines and Vessels -**
Corrosion mapping, Bond testing on overlapping joints

Ergonomic in design, R-Evolution contains an ultrasonic array probe, mounted in a small diameter, water-filled roller. With its durable thin tyre, high frequency probes can be used to give excellent near surface resolution enabling the inspection of thin components.

R-Evolution's buggy self-normalises on curved surfaces ensuring the array is perpendicular without adjustment. Additionally, the array angle can be easily fine-tuned externally.

The buggy handle features two line lasers for guidance and buttons that can be configured with appropriate instruments to start, stop or increment scans.



R-Evolution has a single axis encoder for inspecting C-scan strips or can be attached to the Phoenix Tracer system for a versatile and portable large area C-scan inspection solution.

Order Information

Available to order with handle featuring laser guidance and start/increment buttons or blank handle

Product Code	2 MHz	3.5 MHz	5 MHz	10 MHz	Lasers
	64 elements, 0.8mm pitch				
AE-REVLTN-2-64-HNDL	•				•
AE-REVLTN-3.5-64-HNDL		•			•
AE-REVLTN-5-64-HNDL			•		•
AE-REVLTN-10-64-HNDL				•	•
AE-REVLTN-2-64	•				
AE-REVLTN-3.5-64		•			
AE-REVLTN-5-64			•		
AE-REVLTN-10-64				•	

Spares and Accessories

- AEP-REVLTN-PROBE-2-64 Wheel probe only, 2MHz
- AEP-REVLTN-PROBE-3.5-64 Wheel probe only, 3.5MHz
- AEP-REVLTN-PROBE-5-64 Wheel probe only, 5MHz
- AEP-REVLTN-PROBE-10-64 Wheel probe only, 10MHz
- AEP-REVLTN-TYRE Spare replacement tyre
- AEP-REVLTN-HNDL Handle with lasers
- Encoder splitter cable to enable lasers to operate whilst connected to Tracer

Kit

- Array roller probe (specify frequency and instrument when ordering)
- Self-normalising buggy with laser guidance or blank handle
- Integrated encoder (specify instrument when ordering)
- Tool Kit and Tyre filling accessories
- Water spray bottle
- 2 x Spare tyres
- Protective carry case

