

# 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

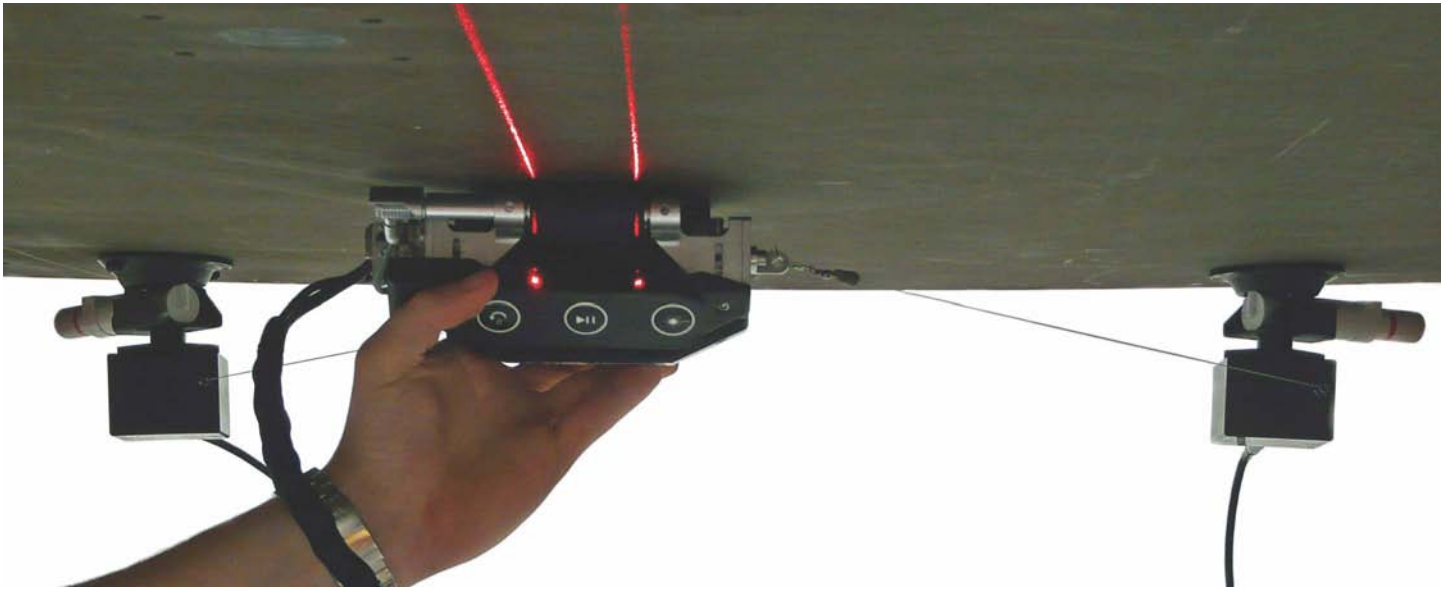
Typical applications for R-Evolution include:

- **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 for a versatile and portable large area C-scan inspection system.

## Order Information

	5MHz 64 elements 0.8mm pitch	10MHz 64 elements 0.8mm pitch	Lasers
AE-REVLTN-5-64-HNDL	●		●
AE-REVLTN-10-64-HNDL		●	●
AE-REVLTN-5-64	●		
AE-REVLTN-10-64		●	

## Options and Accessories

- Available with handle featuring laser guidance and start/increment buttons or blank handle
- Spare replacement tyres
- Encoder splitter cable to enable lasers to operate whilst connected to Tracer

### Scan

For more information and video of R-Evolution



## 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)
- Tyre filling accessories
- Water spray bottle
- Protective carry case



**Phoenix Inspection Systems Limited**, Dalton House, 40 Hardwick Grange, Warrington, WA1 4RF, United Kingdom

t: +44 (0) 1925 826000 | f: +44 (0) 1925 838788 | e: sales@phoenixisl.com | [www.phoenixisl.com](http://www.phoenixisl.com)

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