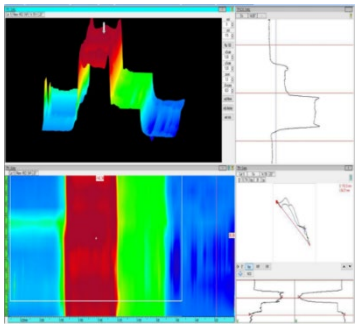
Eddy Current Array (ECA)

ECA Eddy current array (ECA) is a non-destructive testing technology that provides the ability to electronically drive multiple eddy current coils, which are placed side by side in the same probe assembly. Each individual eddy current coil in the probe produces a signal relative to the phase and amplitude of the structure below it. This data is referenced to an encoded position and time and represented graphically as a C-scan image.

Corrosion detection using eddy current array technology offers major advantages. Because each individual eddy current coil generates a unique electrical signal in relation to the structure below it, the coils can detect very small changes in material thickness, along with other parameters, and display these changes as a colour-coded C-scan image.

Imaging using eddy current array allows easy interpretation of the data generated from the probe coils. After it has been collected, the inspection data can be stored, transmitted, and analysed.





Applications

- Far-Side Corrosion
- External Corrosion
- Weld Inspection
- Near Surface Defects

APPLICATION	FERROUS	NON-FERROUS
Welds	☑	☑
Far side Corrosion		☑
Surface Breaking defect	☑	☑
Near surface defects		☑

Advantages

- Increased inspection-time efficiency large probe coverage
- Inspect through coatings
- Real-time imaging for instant results
- Range of application-specific probes
- Very fast data acquisition
- No couplant required

