







comprehensive eddy current acquisition, data analysis and reporting software designed and developed for the most demanding industry experts, by industry experts at SG NDT.

EMMA is a powerful and intuitive software designed for use across the entire range of SG NDT electronics and supporting several electromagnetic methods, including:

- 🐞 Eddy Current / Eddy Current Array
- RFT / RFT Array
- NFT / NFT Array
- MFL / MFL Array



EMMA software can be installed with just a few clicks on any desktop or laptop PC for comfortable data review and analysis.

Install EMMA on a laptop PC for increased field portability, EMMA can even be installed on a tablet PC for ultimate flexibility and portability.

A standard Ethernet cable is used to connect to the inspection instrument for a reliable and stable connection, and there is also an option to connect the EMMA software and electronics via Wi-Fi making for the most portable and flexible inspection system.

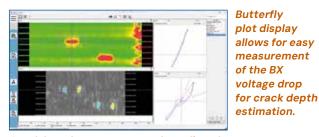
### EMMA software

has been developed through many years of continuous research and development to support the most demanding of electromagnetic inspection applications, some of which include:

### **EMMA for Surface Inspection**

Eddy Current Testing (ECT) and Eddy Current Array (ECA) surface inspections.

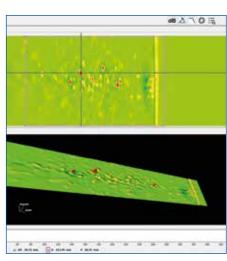
- Offers a "greener alternative" to MPI or LPI techniques with no consumables or harmful waste
- Rapid scanning of large areas or complex geometries
- Provides recorded, traceable inspection data
- Enables accurate measurements and data annotations
- 🌞 3D data visualization
- Encoder inputs for fully encoded C-scan data
- Quick and simple calibration for surface applications



Crack length measurement done directly on the Cscan. The probe built-in encoder allows for accurate crack lengh sizing.

#### **Applications include:**

- Stress corrosion cracking
- 🜞 Turbine blade surface inspection
- Turbine rotating component inspection
- Turbine dovetail slot inspection
- Surface and sub-surface corrosion detection and monitoring
- Ferrous and non-ferrous weld inspection



EMMA Software displaying pitting corrosion example.



Inspection

EMMA is also a powerful accompaniment for any electromagnetic tube inspection, supporting:

- 🐞 Eddy Current Testing (ECT) for non-ferrous tubes
- Remote Field Testing (RFT) for ferrous tubes
- Near Field Testing (NFT) for finned air cooler tubes
- Ragnetic Flux Leakage (MFL) for rapid inspection of ferrous tubes

### **EMMA** for Weld **Inspections**

EMMA software supports eddy current and eddy current array inspection for ferrous and nonferrous welds of all configurations. Easily measure and assess crack length and depth using EMMA.

### EMMA also supports advanced arraybased tube inspection techniques like:

- 🐞 Eddy Current Array (ECA)
- Remote Field Array (RFA)
- Near Field Array (NFA)

Nhatever inspection method you need to use, EMMA software is ready, offering unrivaled useability and technical capability.



# Advanced features in EMMA include:

Customizable data presentation views to include:

- Strip charts
- 🌲 Lissajou display
- Tube inspection list and next tube indicator
- Advanced depth curves and measurement tools
- Simple, quick calibrations
- # Full reporting capabilities

## NDT Analyzer: LabVIEW Software

NDT Analyzer is an ideal solution for configuring customized applications, such as in-line wire or tube inspections, that require greater software control and flexibility than can be provided in the standard EMMA interface. The LabVIEW and C++ drivers support machine integration, enabling seamless data and control integration across all platforms.

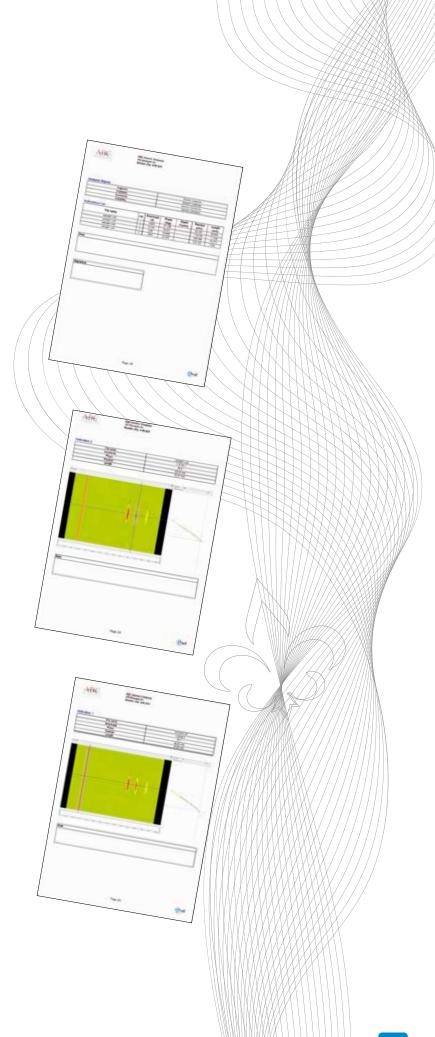
Remote control function in EMMA can be used for integration with your own software when supporting larger integration projects.

## Report Generation with EMMA

The Inspection Report provided to the customer after a NDE inspection is the most important component of a successful inspection. As well as fulfilling technical and legal inspection requirements, the inspection report must also be able to convey critical information in a clear, understandable way to those who must review it in order to comply with the inspection requirements. SG NDT's EMMA software makes the process of producing such inspection reports easy, quick, and efficient.

### EMMA Inspection Reports allow you to:

- Provide your customers with a professional, readable, valuedriven inspection report
- Customise reports using your own company logo
- Customize the inspection data that you display in your reports
- Customize the layout of the data presentation



### Are you interested in EMMA software?

Our team are ready to answer your questions.

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**Through innovation,** we surpass standard expectations



