

Thickness and Flaw Inspection Solutions

OmniScan MX ECA/ECT

Contact Us

Get a Quote

Request a Demo



Please note that product availability varies by region. Contact your local Olympus sales office for more information.

Overview

The OmniScan MX
A Field-Proven, Dependable Instrument

With thousands of units being used throughout the world, the OmniScan® MX is a field-proven, reliable instrument that is built to withstand harsh and demanding inspection conditions. Compact and lightweight, its two Li-ion batteries provide up to 6 hours of manual or semi-automated inspection time.

The highly legible 8.4 in. (213 mm) real-time color display of the OmniScan MX enables you to see defects and details under any light conditions. Navigate your way through the instrument's simple and intuitive interface using the scroll knob and function keys, or by connecting a USB mouse to facilitate the inspection analysis.



One Platform, Two Modules, Three Technologies: More Flexibility

To meet the requirements of a broader range of applications, eddy current testing (ECT), eddy current array (ECA) and the new bond testing (BT) C-scan technology are available in two module versions. Both of these modules are compatible with the MXE (ECT/ECA) and MXB (BT C-scan) software, providing easy transition between technologies and a very short learning curve.



We would like to use Cookies

To provide an optimal experience, we would like to use Cookies. This allows us to track the use of our websites and social media, facilitate their functionality and optimize content. We would also like to use cookies which enable us to display adverts in a browser and in social media which we consider interesting for users; to do so, social media providers will also receive data collected via these cookies. Please click "Cookie Settings" for additional information and to manage your preferences. Click "Accept" if you agree to our use of all cookies or "Reject" if you only agree to necessary cookies. More Information is provided in our Cookie-Policy.

Cookies Settings

Reject All

Accept All Cookies

Not supported

√

ECA4-32 module

√

√

√

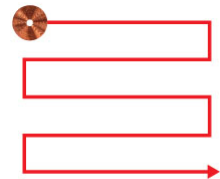
Most Nortec probes supported

Supports 32 onboard channels and 64 channels with external multiplexer

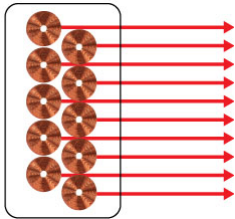
Requires special adaptor and scanner

ECA is just like ECT
Large Coverage, Fast Scanning, and Higher Probability of Detection

Eddy current array (ECA) technology incorporates several traditional bridge or reflection (driver-pickup) probe coils in order to achieve a much larger coverage in a single inspection pass. Additionally, each ECA probe model is carefully designed to maintain a high probability of detection of a targeted defect range, all along the probe length. With the OmniScan® MX ECA, you can use ECA probes at fast manual-inspection speeds, offering a powerful and productive inspection with color representation and archiving capability.



Single coil: raster scanning

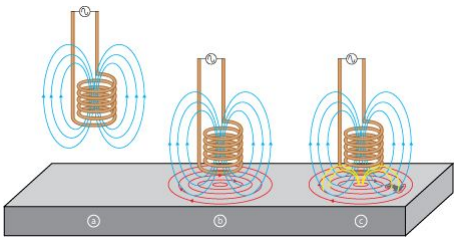


Array probe: one-line scanning

Inspection through Thin Coatings

Eddy current testing (ECT) technology works on the principle of magnetic coupling of a probe sensor (coil) close to a test specimen (conductive material, ferromagnetic or non-ferromagnetic), generating eddy currents inside the test specimen, and displaying signals on the instrument's impedance plane. With eddy current technology, you can detect defects through thin coatings (such as paint), as long as the distance from the probe to the metal is kept reasonably low—typically in the order of 0.5 mm to 2.0 mm.

As eddy current array and ECT technology share the same basic principles (and physics), it can also perform inspections through paint while offering all advantages of ECA, including large coverage, fast scanning, high probability of detection and color imaging.



Probes used to perform eddy current inspections are made with a copper wire wound to form a coil. The coil shape can vary to better suit specific applications.

1. The alternating current flowing through the coil at a chosen frequency generates a magnetic field around the coil.
2. When the coil is placed close to an electrically conductive material, an eddy current is induced in the material.
3. If a flaw in the conductive material disturbs the eddy current circulation, the magnetic coupling with the probe is changed and a defect signal can be read by measuring the coil impedance variation.

Specifications

Bond Testing

Eddy Current Array Software

Eddy Current Software

Applications

We would like to use Cookies

To provide an optimal experience, we would like to use Cookies. This allows us to track the use of our websites and social media, facilitate their functionality and optimize content. We would also like to use cookies which enable us to display adverts in a browser and in social media which we consider interesting for users; to do so, social media providers will also receive data collected via these cookies. Please click "Cookie Settings" for additional information and to manage your preferences. Click "Accept" if you agree to our use of all cookies or "Reject" if you only agree to necessary cookies. More Information is provided in our Cookie-Policy.

Eddy Current Array Products

OmniScan MX ECA/ECT

Eddy Current Probes

Subscribe to the Evident email

[Home](#) | [Products](#) | [Flaw Detectors / Phased Array Flaw Detectors](#) | [Eddy Current Array Products](#) | [OmniScan MX ECA/ECT](#)

Print

Thickness and Flaw Inspection Solutions

Videoscopes and Borescopes

Industrial Microscopes

XRF Analyzers

Support

Resources

Copyright EVIDENT, All rights reserved.

[Terms Of Use](#) | [Privacy Notice](#) | [Cookies](#) | [Cookies Settings](#) | [About Us](#) | [Sitemap](#)

We would like to use Cookies

To provide an optimal experience, we would like to use Cookies. This allows us to track the use of our websites and social media, facilitate their functionality and optimize content. We would also like to use cookies which enable us to display adverts in a browser and in social media which we consider interesting for users; to do so, social media providers will also receive data collected via these cookies. Please click "Cookie Settings" for additional information and to manage your preferences. Click "Accept" if you agree to our use of all cookies or "Reject" if you only agree to necessary cookies. More Information is provided in our Cookie-Policy.