FOERSTER

DEFECTOMAT ECM

Compact eddy current inspection for cost-effective quality assurance of long products

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The simple solution for reliable pass/fail inspection. The DEFECTOMAT ECM is a compact, modular eddy current inspection instrument for the non-destructive testing of long products such as tubes, bars, wire and profiles. Designed as a cost-effective entry-level solution, it provides reliable surface defect detection and fast pass/fail classification directly within the production line.

Its modular design allows the DEFECTOMAT ECM to be tailored to a wide range of inspection tasks. Various fixed-frequency modules and an optional multi-frequency module provide application-specific flexibility, while optional extensions such as an absolute channel support additional applications, including the detection of open weld seams.

With its compact footprint, straightforward operation and easy integration into control cabinets, the DEFECTOMAT ECM is ideally suited for standard inline inspection tasks. Connected to a host computer, inspection results can be logged, statistically evaluated and archived for complete quality documentation.

YOUR ADVANTAGES AT A GLANCE

Cost-effective entry into eddy current testing: Compact and economical solution for automated quality assurance of long products.

Modular and expandable: Configure the system with fixed-frequency, multi-frequency or absolute channel modules to match your inspection requirements.

Reliable pass/fail classification: Fast and straightforward evaluation of inspection results for efficient production processes.

Simple operation: Intuitive controls and an LED bar graph provide clear signal visualization and easy parameter adjustment.

Compact integration: Space-saving design for easy installation into existing control cabinets and production lines.

PLC connectivity: Integrated interfaces support inspection sequence control, sorting functions and threshold monitoring.

Inspection data documentation: Log, evaluate and archive inspection results via a connected host computer.

Scalable to your needs: Expand the system with additional functions as your inspection requirements evolve.

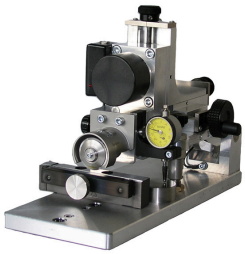
NORMS

DIN EN ISO 15549: Describes the general bases of eddy current testing.

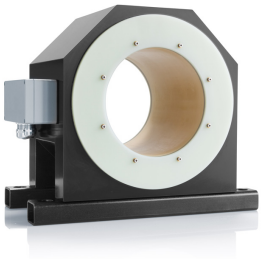
TECHNICAL INFORMATION

MEASUREMENT CHANNELS:	1, optional additional absolute channel
EXCITATION FREQUENCIES:	10 kHz, optional frequency module, max. 8 levels
FILTERING PROCESS:	HP+TP, manual adjustment, 25 levels, 1 Hz – 16 kHz
AMPLIFICATION:	max. dynamic range 102 dB
TEST SPEED:	max. 150 m/s
SENSOR MONITORING:	disruption, overload

ACCESSORIES



TEST DEFECT SAW
Precise Reference Notches for Reliable Calibration



EMAG
Demagnetization unit for ferromagnetic wires, rods, and tubes

MAG
Magnetization supply for ferromagnetic wires, rods, and tubes

COLOR MARKING SYSTEM
Precision marking of defects on the test piece

FOERSTER

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