FOERSTER

DEFECTOMAT DA

Digital Eddy Current Testing for Reliable Detection of Transverse Defects in Long Products such as Tubes, Bars, Wire and Profiles

DEFECTOMAT DA

Digital Eddy Current Testing for Reliable Detection of Transverse Defects in Long Products such as Tubes, Bars, Wire and Profiles

A new definition of premium class. The DEFECTOMAT DA sets new standards in non-destructive eddy current testing of long products. Combining fully digital signal processing, a modular system architecture and powerful software, it delivers outstanding inspection quality, maximum flexibility and intuitive operation.

The innovative evaluation electronics digitize inspection signals directly at the sensor. This significantly reduces electromagnetic interference and ensures exceptional repeatability, even at inspection speeds of up to 150 m/s. Patented digital tracking filters automatically adapt to the current inspection speed, providing stable and reliable inspection results even under demanding production conditions.

Its modular architecture allows the system to be easily adapted to new inspection tasks and future requirements. Up to 16 TEST SYSTEM DA modules with a total of 256 inspection channels can be combined without multiplexing, providing maximum performance for a wide range of applications.

Together with the DEFECTOTEST DA software and the comprehensive portfolio of FOERSTER sensors, the DEFECTOMAT DA forms a future-proof platform for automated eddy current testing. An intuitive user interface, automatic sensor recognition, multi-user capability, and comprehensive reporting and documentation functions support efficient, fully digital inspection workflows.

YOUR ADVANTAGES AT A GLANCE

Fully digital inspection system: Digital signal processing directly at the sensor for outstanding inspection quality

Modular platform: Flexible system architecture for future expansion and evolving inspection requirements

High performance: Up to 256 inspection channels without multiplexing

Maximum flexibility: Connection of up to 16 TEST SYSTEM DA modules

Patented tracking filters: Dynamic adjustment of digital filters to the inspection speed

High inspection speed: Reliable testing of long products at speeds of up to 150 m/s

Wide frequency range: Continuously adjustable inspection frequencies from 1 kHz to 1 MHz

High signal dynamics: Dynamic range of up to 126 dB

Intuitive operation: Touch-optimized software with multi-user capability and context-sensitive online help

Comprehensive documentation: Customizable inspection reports and complete archiving of inspection results

NORMS

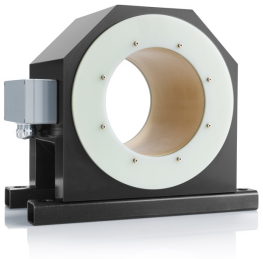
DIN EN ISO 15549: Describes the general bases of eddy current testing.

TECHNICAL INFORMATION

MEASUREMENT CHANNELS:	Up to 16 TEST SYSTEM DA modules with 16 measurement channels each, optionally for differential probes, clearance probes, and Ferromat probes
EXCITATION FREQUENCIES:	1 kHz - 1 MHz (endlessly adjustable)
FILTERING PROCESS:	Digital speed shift filter; filters move along dynamically with the speed
TESTING SPEED:	max. 150 m/s
AMPLIFICATION:	max. dynamic range 126 dB
SENSOR MONITORING:	Broken wires, overload, automatic sensor recognition
PATENT:	The DEFECTOMAT DA uses processes patented to Institut Dr. Foerster GmbH & Co. KG, including US 8907828 B2 "METHOD AND DEVICE FOR TESTING THE MATERIAL OF A TEST OBJECT IN A NONDESTRUCTIVE MANNER". Also protected in many other countries worldwide.

ACCESSORIES

DEFECTOTEST DA ECT
The Software Platform for Eddy Current Testing with DEFECTOMAT DA and CIRCOGRAPH DA



EMAG
Demagnetization unit for ferromagnetic wires, rods, and tubes

TEST DEFECT SAW
Precise Reference Notches for Reliable Calibration

MAG
Magnetization supply for ferromagnetic wires, rods, and tubes

COLOR MARKING SYSTEM
Precision marking of defects on the test piece

DEFECTOMAT PROBES
Probes for non-destructive crack detection using eddy current

FOERSTER

foerstergroup.com

The FOERSTER Group is represented by subsidiaries and representatives in over 60 countries worldwide. You can find a complete overview on our website.

Headquarters
Institut Dr. Foerster GmbH & Co. KG

In Laisen 70
72766 Reutlingen
Germany

+49 7121 140 0
info@foerstergroup.com

© Copyright 2026 – Copyright notice: All contents of this work, in particular texts, photographs and graphics, are protected by copyright. Unless explicitly stated otherwise, the copyright lies with Institut Dr. Foerster GmbH & Co. KG. Please contact us if you wish to use any part of this work.

Generated: 2026-10-15 06:52:53