

APPLICATION NOTE

FLAW DETECTION, MATERIAL AND HARDNESS DETERMINATION WITH EDDY CURRENT

Cracks or faulty heat treatment on hot rolling rolls cause costly downtime. Fast, portable on-site inspection prevents unplanned failures.

**THE CHALLENGE**

Hot rolling rolls in steel production operate continuously under extreme temperatures and high mechanical loads. Surface cracks, material inconsistencies or incorrect heat treatment can directly affect the quality of rolled products and cause costly production interruptions. During maintenance, rolls must be inspected quickly and reliably to detect remaining surface defects and confirm proper material and hardness condition before reinstallation.

THE SOLUTION

The DEFECTOMETER M is a portable eddy current device designed for intuitive on-site use. By simply placing the probe on the roll surface, cracks can be located, material differences identified and heat treatment conditions evaluated. The LED level indicator provides immediate OK/NOK feedback without complex setup or advanced operator training. Testing can also be performed using the DEFECTOSCOP TCM module for extended inspection flexibility.

**THE RESULT**

Surface defects on hot rolling rolls are detected and verified directly during maintenance. Material mix-ups in storage can be avoided, and deviations in hardness after heat treatment are identified instantly. The mobile solution enables fast decision-making, reduces downtime and ensures consistent roll performance in demanding steel production environments.

THE PRODUCTS

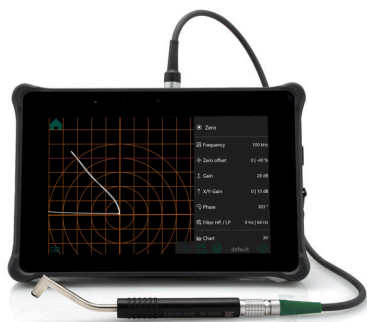
DEFECTOMETER

Compact mobile crack testing device for aircraft, automotive, and infrastructure components



DEFECTOSCOPE TCM

Universal eddy current testing with rotating, HF and LF probes



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