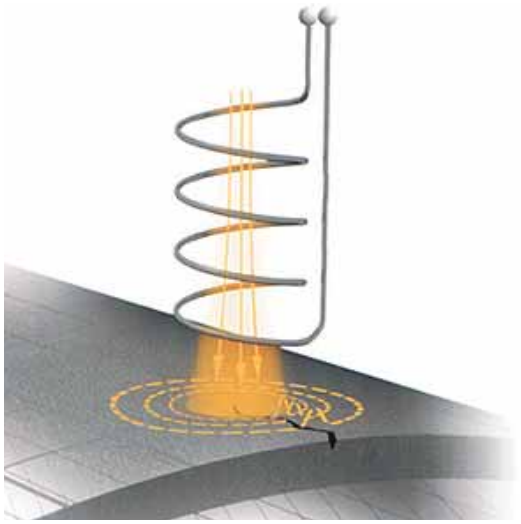
DEFECTOMETER® M

FOERSTER

Mobile Crack Detection

- Intelligent technique
- Easy operation
- Light and portable
- Robust design

DEFECTOMETER® M 1.837
Mobile crack measurement



The eddy current principle

When an alternating current flows in a coil the magnetic field of the coil induces circulating eddy currents in close proximity to a conducting surface. Any defects or irregularities in the grain structure will effect the loading on the coil and thus its impedance. By monitoring the voltage across the coil defects like cracks are detected in the material of interest.

Applications

- Testing for surface cracks on turbine blades, on wheels, on wings around rivets etc. at aircrafts
- Testing of surface cracks on bridges
- Testing of surface cracks on gas pipelines
- The flaw resolution is approximately 20 µm
- Simple sorting tasks, identification of hardness changes and detection of surface cracks on automotive components
- Detection and evaluation of surface cracks on semi-finished products

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Overview

Crack indication

Bright LED scale indication and transflexive LCD-display for excellent reading in all light conditions. Integrated acoustic indicator.

Probes

Use of only two probes for all materials. Probes of earlier DEFECTOMETER models can be used.

Lift-off indicator

LED and acoustic warning at lifted probe.

Adjustable threshold indicator

Acoustically and optically via red LED light.

Calibration

Integrated calibration standard (optional).

Documentation and visualization software

with PC via USB (optional).

Long battery life

24 hours with activated backlighting.

Ergonomic design

Smooth shaped and well balanced for easy one hand operation.

Accessories

Headphones, carrying bags, holding device.

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Accessories and technical data

Eddy current probes

Carrying bag
1.837.01-2700

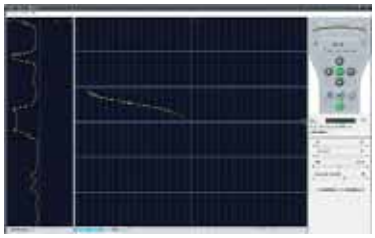
Holding device
1.837.01-7400

Calibration standards

Headphones foldable
1.837.01-5500

Universal power supply

PC software
1.837.01-8200



Technical data DEFECTOMETER® M 1.837

Flaw detection	> 20 µm crack depth
Sensitivity range	20 dB in steps of 0.5 dB
Flaw threshold	-99% to +99% in steps of 1% in combination with red LED and acoustic indicator
Zero offset	0 - 99 %
Lift off warning	LED and acoustic
Inspection speed	0 - 0.15 m/s
Batteries	6 NiMh Accus type AA or Standard Batteries
Battery charger	integrated into the device
Power supply	110 - 240 V
Serial interface	USB
Operation time	24 hours (with NiMh Accu)
Range of operation temperature	-10 - 55 °C
Dimensions	81 x 178 x 42 (w x h x d)
Weight	400 g

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