

# **ELOTEST B300**

Multi-frequency eddy current test system with up to 4 channels

Universally applicable

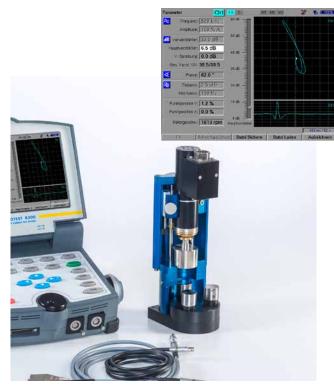


# **Eddy Current Test Instruments and Systems**

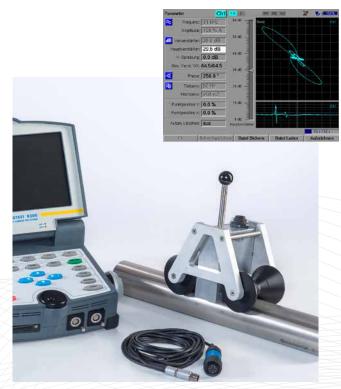
# **ELOTEST B300**

# for laboratory, training and mobile use

The ELOTEST B300 universal eddy-current test instrument offers numerous application possibilities.



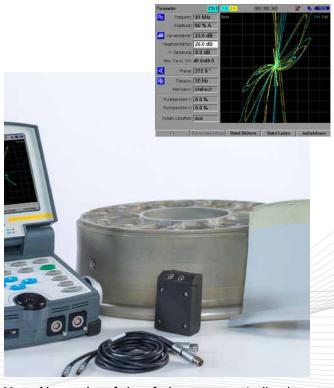
**ELOTEST B300 and HDR-18 Rotor** – dynamic testing with rotating sensors



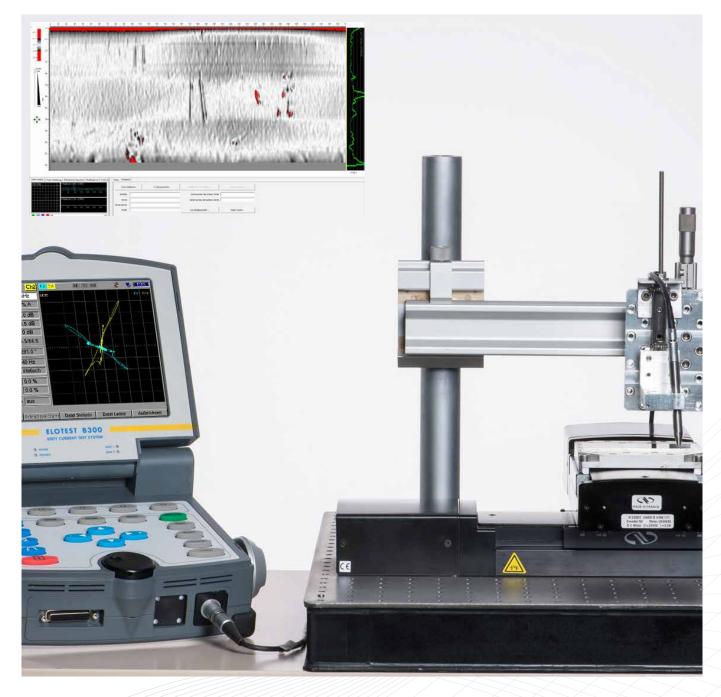
Segment coil with permanent magnets –for inner and outer surfaces of tubes, semi-finished products and Bar inspection with eddy current



**Conductivity test** – Measurement of the conductivity of non-ferromagnetic metals and coating thickness measurement



**Manual inspection of aircraft rims** – geometrically adapted sensors with 25 - 100 mm track width possible



ELOTEST B300 in combination with our ScanAlyzer software, processing and evaluation of surface scans.

# **Special features**

- Intuitively operable inspection device for hand-held eddy current sensors, inspection rotors and scanner systems
- Portable test system for demanding applications, equally suitable for use in the laboratory and test field
- ▶ 24 Volt power supply
- Standard with C-Scan for bore-hole inspection
- Multifunctional signal processing, display, mix, analysis, storage and documentation
- ► Fast, high-performance interface for bidirectional, digital communication

- ▶ Complete remote operation via included Win-Client software
- Optional connection for video camera, e.g. endoscope inspection
- Conductivity and layer thickness measurement, separately switchable bargraph display, sorting threshold setting: positive or negative
- ► Compatible with ScanAlyzer software running on an external PC (Windows 7)

# **ELOTEST B300**

## **Technical Data**

#### **Device data**

- ▶ Up to 4 test channels, frequency 10 Hz 10 MHz
- ▶ Transmitter driver: dual, 15Vss, max. 250 mA, short-circuit proof
- Preamplifier 6 dB to 52 dB in 0.5 dB steps
- ▶ Main amplifier 0 dB to 60 dB in 0.5 dB steps
- Y-axis spread 0 dB to 30 dB in 1 dB steps
- ▶ Phase adjustment 0° to 359.5° in 0.5° steps
- Signal filter TP/HP; 0 Hz to 10 kHz in 40 steps, separately adjustable, bandpass filter with variable bandwidth

#### sensor connection

- Suitable for all sensor types
- ▶ 3-RS adapter, exchangeable
- Optional 24-pin (Fischer) multi-function plug for use with special sensors with integrated characteristic curve or multi-sensor system (e.g. abs./ diff. sensor systems); alternatively second ELOTEST B1 standard adapter socket

# **Universal Scanner Interface (USI)**

 Multifunctional connection for rotary encoder, analog displacement encoder and digital I/O opt. decoupled

#### Interfaces

- ▶ Ethernet port (10/100 Mbit/s; RJ45, 100BaseT)
- ▶ RS232 (D-Sub 9) for mouse or external PC (optional)
- ▶ USB port (2x)
- VGA port for external monitor
- ▶ Parallel printer interface (D-Sub 25)

# Display

 Active TFT colour display with 210 mm (8.4") diagonal, 640 x 480 pixels with integrated LED lighting

#### Case

- ▶ Impact- and shock-resistant ABS industrial plastic housing
- Housing cover with built-in display, rotatable by 180°, closed as protection for display and keypad
- Silicon keyboard with specific direct function keys, cursor block and softkeys
- ▶ Rotary knob for quick parameter setting
- ▶ Integrated, quick-change battery pack

## Power supply

- Fast charging Li-lon battery with intelligent charging electronics and autonomous battery status display; 5 hours operating time
- ▶ Wide range power supply, external; input 100-250 V/AC 50-60 Hz;
- Output 24 V/DC; 90 VA

# **Operating features**

- Automatic preamplifier adjustment
- Automatic lift-off setting
- Mix function for multi-frequency applications
- Waterfall display for dynamic tests

#### Software

- ▶ C-Scan Software
- ▶ Conductivity measurement (60 kHz, with calibrated special sensors)
- ▶ Layer thickness measurement (60 kHz, with calibrated special sensors)
- Sensor array multiplex (additional hardware option)
- Windows remote control software WinClient
- ► ScanAlyzer software (optional) on external PC (Windows 7)

#### **Device versions**

- ELOTEST B310: Instrument with one test channel; sensors, rotors and cables of the series are compatible to ELOTEST M2/ M3
- ▶ ELOTEST B320: Device with two test channels; signal mix function
- ▶ ELOTEST B330: Device with three test channels; signal mix function
- ▶ ELOTEST B340: Device with four test channels; signal mix function

# Dimensions (mm)

- ▶ Length: 370 mm (14.56 inch)
- ▶ Width: 242 mm (9.52 inch)
- ▶ Height: lid closed 95/110 mm (3,7/4,3 inch) lid open 300 mm (11,81 inch)

## Weight

- ▶ Device without battery: 4,200 g
- Li-ion battery: 1,450 g

#### Order number

- ▶ ELOTEST B310 Set ... A0EZ10951010
- ▶ ELOTEST B320 Set ... A0EZ10952010
- ▶ ELOTEST B330 Set ... A0EZ10953010
- ▶ ELOTEST B340 Set ... A0EZ10954010

## Set consists of:

- ▶ Test instrument
- ▶ Battery pack Li-Ion B300-BA5 18 V / 9 Ah
- ▶ Mains adapter B300-NT2
- ▶ B3-RS Sensor adapter
- ▶ Carry handle
- ▶ B300 Cordura Nylon protective bag

## Individual components on request.

