Advancing with Technology ElektroPhysik

Coating Thickness Measurement



MiniTest 650E/650B

Focusing on the substance

- Rugged design, with external sensor
- Thickness gauges for use in the industrial corrosion protection, steel and bridge constructions or shipyards
- High degree of ergonomics, technology and product quality
- For all non-magnetic layers such as paint, enamel, chrome, zinc plating on steel
- For all insulating coatings such as paint, anodised layers, ceramics on non-ferrous metals such as aluminium, copper, zinc die cast, brass, etc.

Single-button operation – switch on and take readings

MiniTest 650E and MiniTest 650B

The robust models **MiniTest 650E** and **650B** are particularly suited for the rough environment in the industrial corrosion protection. Thanks to their rugged design, these wearresistant coating thickness gauges provide reliable high accuracy readings throughout an extended service life.

Particularly adapted to harsh working environments, the two models are most convenient for use in the automotive industry, in shipyards, steel and bridge construction. Their rubber protection and durable housing provide excellent protection against shocks and impacts.

The models **MiniTest 650E F** and **MiniTest 650B F** measure all nonmagnetic coatings such as paint, enamel, chrome or zinc plating on steel whereas the dual models MiniTest 650E FN and B FN are also suited for all insulating coatings on non-ferrous metals such as paint, anodised layers, or ceramics applied to aluminium, copper, zinc die-cast, brass, etc. The external, extremely wear-resistant one-pole measuring sensor connects to the gauge via a one-meter cable. The dual sensor FN identifies the ferrous or non-ferrous substrate and automatically adjusts to the correct measuring mode. The measuring principle conforms to DIN, ISO, BS and ASTM.

Scope of Delivery

- Gauge incl. sensor
- 3 AAA batteries
- 1 and/or 2 zero reference plate(s)
- control standard
- operating instructions
- soft pouch

Further Gauges from the ElektroPhysik Range of Products

- MikroTest thickness gauges
- MiniTest digital thickness gauges
- QuintSonic 7 ultrasonic coating thickness gauges
- MiniTest 7200/7400 FH digital wall thickness gauges
- MiniTest 420, 430, 440 ultrasonic thickness gauges
- PoroTest 7 holiday detectors

Technical Data				
	650E		650B	
Gauge type	F	FN	F	FN
Measuring range	03 mm / 120 mils	02 mm / 80 mils	03 mm / 120 mils	02 mm / 80 mils
Measuring uncertainty	± (5 µm + 5 % of reading) ± (0.2 mils + 5 % of reading)		± (2 μm + 3 % of reading) ± (0.12 mils + 5 % of reading)	
Low range resolution	5 μm / 0.2 mils		1 μm / 0.04 mils	
Geometry of measuring sample				
Curvature radius, convex	F: > 50 mm / 2" N: > 200 mm / 8"		> 10 mm / 0.4"	
Curvature radius, concave	F: > 100 mm / 4" N: > 250 mm / 10"		> 50 mm / 2"	
Diameter of measuring spot	> 50 mm / 2"		> 50 mm / 2"	
Minimum substrate thickness	F: 0.7 mm / 28 mils N: 0.1 mm / 4 mils		F: 0.7 mm / 28 mils N: 0.1 mm / 4 mils	
Units of measurement	according to model $\mu\text{m/mm}$ or mils/inch		according to model $\mu\text{m/mm}$ or mils/inch	
Calibration	factory calibration		factory calibration, zero calibration	

ElektroPhysik

Pasteurstr. 15 · 50735 Cologne · Germany Phone: +49 221 75204-0 · Fax +49 221 75204-67 www.elektrophysik.com · info@elektrophysik.com

