

Coating Thickness Measurement

**MiniTest 70E / 70B**  
**MiniTest 650E / 650B**



**Focusing on the substance**

- Gauges for use on the shop floor, in the automotive or other industries and quality inspection
- High degree of ergonomics, technology and product quality
- For all non-magnetic layers such as paint, enamel, chrome, galvanic zinc plating on steel
- For all insulating coatings such as paint, anodizing, ceramics on non-ferrous metals such as aluminium, copper, zinc die cast, brass, etc.

**Single-button operation – switch on and take readings**

## MiniTest 70E and MiniTest 70B

Especially designed for quick and easy non-destructive coating thickness measurement, the economical and basic models **MiniTest 70E** and **70B** are suitable for all non-magnetic coatings applied on steel and insulating coatings applied on non-ferrous-metals.

Focusing on easy operation, the small and handy gauges are the ideal tool for the mobile on-site use. No prior knowledge or instructions are required: Just switch on and proceed on measurement. The acquisition of a reading is confirmed by an audible signal.

A built-in dual sensor FN is available to identify the substrate material. According to the material, the gauge will automatically set to the matching measuring principle: magnetic induction or eddy-currents.

### Supply schedule

- Gauge with built-in sensor
- 2 zero reference plates
- 1 control standard
- 1 AA (Mignon) battery
- operating instructions
- belt pouch

### Technical Data

	70E FN	70B FN
Measuring range	F: 0...3 mm / 120 mils N: 0...2.5 mm / 100 mils	F: 0...3 mm / 120 mils N: 0...2.5 mm / 100 mils
Measuring uncertainty	± (3 µm + 5 % of reading) ± (0.12 mils + 5 % of reading)	± (2 µm + 3 % of reading) ± (0.08 mils + 3 % of reading)
Resolution	2 µm / 0.08 mils	1 µm / 0.04 mils
<b>Geometry of measuring sample</b>		
Curvature radius, convex	> 50 mm / 2"	> 10 mm / 0.4"
Curvature radius, concave	> 100 mm / 4"	> 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	metric / imperial (user selectable)	metric / imperial (user selectable)
Calibration procedure	factory calibration	factory calibration, zero calibration

## 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 wear-resistant 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 ship-yards, 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 non-magnetic coatings such as paint, enamel, chrome or galvanic 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, anodizing, 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.

### Supply schedule

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

### Technical Data

	650E		650B	
	F	FN	F	FN
Gauge type				
Measuring range	0...3 mm / 120 mils	0...2 mm / 80 mils	0...3 mm / 120 mils	0...2 mm / 80 mils
Measuring uncertainty	± (3 µm + 5 % of reading) ± (0.12 mils + 5 % of reading)		± (2 µm + 3 % of reading) ± (0.12 mils + 5 % of reading)	
Resolution	2 µm / 0.08 mils		1 µm / 0.04 mils	
<b>Geometry of measuring sample</b>				
Curvature radius, convex	> 50 mm / 2"		> 10 mm / 0.4"	
Curvature radius, concave	> 100 mm / 4"		> 50 mm / 2"	
Diameter of measuring spot	> 50 mm / 2"		> 50 mm / 2"	
Minimum substrate thickness	F: 0.70 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 µm/ mm or mils/inch		according to model µm/ mm or mils/inch	
Calibration	factory calibration		factory calibration, zero calibration	

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