

## Coating thickness measurement



## MiniTest Series 70 MiniTest 70F/70FN

### Versatile coating thickness gauges

- for fast and precise measurements of
  - non-magnetic coatings on steel  
0 ... 3,000  $\mu\text{m}$
  - insulating coatings on non-ferrous metals  
0 ... 2,500  $\mu\text{m}$
- automatic identification of the substrate material
- built-in sensor
- proven measuring methods
- statistics function

## MiniTest 70 – Pocket-sized Coating Thickness Gauge

### Application

Designed for quick and easy non-destructive coating thickness measurement, the MiniTest 70 series is available in two models:

- **MiniTest 70 F** with built-in sensor for measuring non-magnetic coatings applied on steel
- **MiniTest 70 FN** with a built-in dual sensor for measuring nonmagnetic coatings applied on steel and insulating coatings on non-ferrous metals.

### Description

The MiniTest 70 Series are compact, pocket sized coating thickness testing gauges. The simple 4-button operation, clear display and built-in statistics displaying the number of readings taken, the minimum, maximum, mean values and standard deviation makes the MiniTest 70 Series ideal for on-site applications. With new simplified operation, no special training is required to operate these gauges. An audible signal confirms reading acquisition. The MiniTest 70 Series are powered by a standard single AA battery and when the battery gets low, a BAT symbol appears to indicate that the battery needs to be changed.

Special feature of the MiniTest 70 FN model: It incorporates a dual sensor for automatic identification of the substrate material. The gauge upon contact with the surface automatically switches to the suitable measuring principle based on your application: magnetic-induction or eddy currents.

### Scope of delivery

- MiniTest 70 F or FN
- Steel test plate (for model 70 F)
- Steel and aluminium test plates (for model 70 FN)
- Calibration foils
- Operating instructions
- Gauge tether
- Belt pouch

Properties	Model	MiniTest 70 F	MiniTest 70 FN
Measuring range		0 ... 3 mm/120 mils	F: 0 ... 3 mm/120 mils / N: 0 ... 2.5 mm/100 mils
Measuring principle		magnetic-induction	magnetic-induction/eddy currents
Signal processing		Sensor integrated 32-bit signal processing (SIDSP)	
Accuracy <sup>1</sup>		± (1.5 µm + 2% of reading) with 2-point calibration / ± (0.06 mils + 2% of reading) with 2-point calibration	
Repeatability		± (1 µm + 1% of reading) / ± (0.04 mils + 1% of reading)	
Low range resolution		0.5 µm; 0.02 mils	
Minimum curvature radius convex		5 mm; 0.2"	
Minimum curvature radius concave		40 mm; 1.60"	
Minimum measuring area		Ø 30 mm ; 1.20"	
Minimum substrate thickness		F: 0.5 mm; 0.02" / N: 0.04 mm; 0.0016"	
Measuring units		metric/imperial switchable	
Calibration modes		1-point calibration, 2-point calibration	
Statistics		n, $\bar{x}$ , s, Min, Max	
Operating temperature range		-10°C ... +60°C, 14°F...140°F	
Storage temperature range		-20°C ... +70°C, -4°F...158°F	
Power supply		1 x AA (Mignon)-battery	
International standards		DIN EN ISO 1461, 2064, 2178, 2360, 2808, 3882, ASTM B 244, B 499, D7091, E 376	
Dimensions		approx. 157 mm length, Ø 27 mm 5.2" length, Ø 1.06"	
Weight incl. battery		approx. 80 g, 2.8 oz	

<sup>1</sup> according to DIN 55350 Part 13

<sup>2</sup> with calibration close to the thickness to be expected and related to ElektroPhysik calibration standards