

Coating thickness measurement



MiniTest 650

Rugged coating thickness gauge

- for any non-magnetic coatings on steel such as paint, enamel, chrome, zinc, etc.
- for any insulating coatings on non-ferrous metals such as paint, anodising, ceramics on aluminium, copper, zinc die-cast, brass, etc.

Ram- and impact-protected through rubber rimmed casing

Sensor with newly developed wear-resistant carbide metal tip

MiniTest 650 – Durability and High-Precision

Application

Designed for durability and high-precision, MiniTest 650 is the ideal tool for any measuring task in the finishing industry.

The rugged and easy-to-handle thickness gauge combines extended mechanical life on the one hand and high accuracy on the other hand to meet the requirements of any professional user in the shipbuilding, automotive, bridge building, construction or other industry.

According to model, MiniTest 650 is suitable to measure

- any non-magnetic coatings such as paint, enamel, chrome and zinc on steel
- any insulating coatings on non-ferrous metals such as paint, anodising, ceramics on aluminium, copper, zinc die-cast, brass, etc.

Description

The battery-operated gauge features a backlit display and a one meter sensor cable. The newly developed one pole sensor is made of a wear-and-tear resistant carbide material to ensure a virtually unlimited life cycle under normal condition use.

An optimal ram- and impact-protection is provided through the rubber rimmed casing. Via an USB interface, the MiniTest 650 can be connected to a PC for on-line measurements or display of the statistics.

MiniTest 650 is available in three different models:

- with a magnetic-induction sensor for measurements on steel substrates
- with an eddy currents sensor for measurements on non-ferrous metals

- with a dual sensor for measuring on both, steel or non-ferrous metals

Special feature of the FN model:

Its dual sensor identifies the substrate material. Upon contact with the surface, the gauge automatically switches to the suitable measuring principle based on your application. The measuring principle conforms to the DIN, ISO, BS, and ASTM norms and standards.

Scope of delivery

- Gauge with sensor and three batteries
- Control standard(s) and calibration standard(s)
- Operating instructions
- Soft pouch
- Data transfer program Msoft7000 basic edition

Technical specifications

Measuring range	model F (steel)	0 ... 3000 μm / 120 mils
	model N (non-ferrous metal)	0 ... 2000 μm / 80 mils
	model FN (dual sensor)	0 ... 2000 μm / 80 mils
Measuring uncertainty	\pm (2 % of reading + 2 μm) / \pm (2 % of reading + 0.08 mils)	
Minimum curvature radius	5 mm / 0.2" convex	25 mm / 1" concave
Minimum measuring area	\varnothing 20 mm / 0.8"	
Minimum base thickness:	0.5 mm / 20 mils (F)	50 μm / 2 mils (N)
Display	4-digit screen data (11 mm / 0.44")	
Measuring units	μm – mils user selectable	
Calibration	standard, 1-point and 2-point calibration	
Statistics	calculated from maximum 9.999 readings, mean value, standard deviation, number of readings, minimum and maximum	
Interface	USB	
Power supply	3 Micro AAA batteries (for more than 10,000 readings)	
Dimensions and weight	housing: 70 mm x 122 mm x 32 mm / 2.7" x 4.8" x 1.26" sensor: \varnothing 15 mm x 62 mm / \varnothing 0.60" x 2.44"; 225 grams / 7.93 ozs	
Ambient temperature	gauge: 0 to 50 °C / 32 ° to 122 °F sensor: -10 ° to 70 °C / 14 ° to 158 °F	

Recommended accessories

- High-precision measuring stand for measuring small parts
- Rechargeable batteries with battery charger
- USB connecting cable