TM550FN Coating Thickness Gauge

This compact gauge can be used for non-destructive coating thickness measurement of non-magnetic coatings, eg. paint, enamel, chrome on steel, and insulating coatings, e.g. paint and anodizing coatings on non-ferrous metals.

The internal probe can work on both principles, magnetic induction and the eddy currents. The probe can automatically detect the substrates type (Magnetic or not), and calculate the coating thickness and display it fast.

There are five data groups, and readings will be automatically stored to memory for general groups (Not for direct group). Each group has individual statistics, alarm limit settings and calibration. User can recall and delete specified readings easily. User does all operations via standard menu so easily. User can press the CAL button to start calibration freely.

Features

- 128*128 dot matrix LCD display, standard menu operations
- Two measure mode: single and continuous
- Two group mode: direct (DIR) and general(GEN), readings will be lost when power off in direct mode, and not be lost in general mode. 80 readings can be stored for each group
- Zero-point calibration and multi-point calibration (up to 4 points) for each group
- User can recall, delete specified readings, or delete group readings
- Statistics display: mean, minimum, maximum and standard deviation
- Three probe mode: auto, magnetic and eddy current
- User can set high or low limit alarm for each group
- Power off automatically
- USB interface to data transmission
- Low battery and error indication

Specifications:

Measuring principle	Magnetic induction (F-probe) and eddy current (N-probe)
Measuring range	0 to 1300μm (0 to 51.2 mils) (can up to 1500μm if needs)
Accuracy	± (3% of readings +2um) (3% of readings +0.078 mils)
Resolution	0μm ~ 999μm (1μm) 1000μm ~ 1300μm (0.01mm) 0mils ~ 39.39mils (0.01mils) 39.4mils ~ 51.2mils (0.1mils)
Calibration	One-to-four-point calibration, zero calibration
Data Group	One direct group (readings not be stored to memory), four general group (readings can be stored), and each group have individual statistics, alarm settings and calibration
Statistics	No. of readings, mean, minimum, maximum and standard deviation
Units	um, mm and mils
Alarm	User can set the high/low alarm, and alarm icon displayed on LCD when over the limit
Minimum curvature radius	convex 1.5mm (59mils) and concave 25mm (984mils)
Minimum measuring size	Diameter 6mm (236mils)
Minimum thickness of substrate	F-probe: 0.5mm (0.02"), N-probe: 0.3mm (0.012")
Computer interface	Download data via USB interface
Power supply	2x 1.5v AAA battery
Operation temperature	0℃ to 40℃ (32℉ to 104℉)
Storage temperature	-20℃ to 70℃ (-4℉ to 158℉)
Size	110mm*53mm*24mm (4.33"*2.09"*0.94")
Weight	92g (3.24oz)

Standard Delivery

- 1x Gauge
- 1x Aluminium substrate
- 5x Standard foil
- 2x 1.5V AAA battery
- 1x Technical manual
- 1x USB cable
- 1x Case