EC-770   Coating thickness gauge (DFTG)

FEATURES

1. 128*128 dot matrix LCD display, standard menu operations
2. Two measure modes: single and continuous
3. Two group modes: 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
4. Zero point calibration and multi-point calibration (up to 4 points) for each group
5. User can recall, delete specified readings or delete group readings
6. Statistics display: mean, minimum, maximum and standard deviation
7. Three probe modes: auto, magnetic and eddy current
8. User can set high or low alarm limit for each group
9. Power off automatically
10. USB interface to data transmission (Text file transfer)
11. Low battery and error indication

APPLICATION

This instrument can measure the coating thickness without any damage easily. It can be widely used in testing fields such as manufacturing industry, metal-processing industry, chemical industry, commodity inspection and it is the indispensable instrument of material surface treatment project. It can stably work in the laboratory, workshop and outdoor.

DESCRIPTION

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

The internal probe can work on two measuring principles, magnetic induction and 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.

SPECIFICATIONS

1. Measuring principle: Magnetic induction (F-probe) and eddy current (N-probe)
2. **Measuring range: 0 to 2000um**
3. **Accuracy: ± (3% of readings+1um)**
4. **Resolution: 0~99.9(0.1um), 100um~999um (1um), 1000um~2000um (0.01mm)**
      0mils~3.933mils (0.004mils), 3.934mils~39.39mils (0.01mils), 39.4mil~51.2mil (0.1mil)
5. Calibration: One to four points calibration, zero calibration
6. Data Group: One direct group (readings not be stored to memory), four general groups (readings can be stored), and each group have individual statistics, alarm settings and calibration
7. Statistics: No. of readings, mean, minimum, maximum and standard deviation
8. Units: um, mm and mil
9. Alarm: User can set the high/low alarm and alarm icon displayed on LCD when over the limit
10. Minimum curvature radius: convex 1.5mm (59mils) and concave 25mm (984mils)
11. Minimum measuring area: Diameter 6mm (236mils)
12. Minimum thickness of substrate: F-probe: 0.5mm (0.02"); N-probe: 0.3mm (0.012")
13. Computer interface: Download data via USB interface as Text file
14. Power supply: Two 1.5v AAA battery
15. Operation temperature: -10C to 50°C
16. Storage temperature: -20C to 70°C
17. Size: 110mm*53mm*24mm (4.33"*2.09"*0.94")
18. Weight: 92g (3.24oz)

SELECTION GUIDE

Model	EC-770
Probe	Integral F-Probe & N-Probe
Measuring Principle	Magnetic induction & Eddy Currents (Auto detect)
Measuring Range	0 to 2000um
Accuracy	± (3%+1um)
Resolution	0~99.9(0.1um) 100um~999um(1um) 1000um~2000um(0.01mm)
Calibration	One point to four point calibration, zero point calibration
Data Group	One direct group (readings not be stored to memory) Four general group (readings will be stored automatically) NOTE: each group have individual statistics, alarm limit settings and calibration
Statistics	No. of readings, mean, minimum, maximum and standard deviation
Units	um , mm, mil
Alarm	**User can set the high/low alarm limit; RED LCD alarm when over the limit**
Minimum Curvature Radius Convex	1.5mm
Minimum Curvature Radius Concave	25mm
Minimum Measuring Area	Diameter 6mm
Minimum Thickness Of Substrate	F-probe: 0.5mm (0.02") N-probe: 0.3mm(0.012")
Maximum Measuring Rate	Two readings per second
Computer Interface	Download data via USB as Text file
Power Supply	Two 1.5V AAA battery
Operation Environment	Temperature: -10 to 50°C
Storage Environment	Temperature: -20 to 70°C
Standard Certification	ROHS, CE
Dimensions	110mm*53mm*24mm (4.33"*2.09"*0.94")
Case Material And Weight	ABS; 92g(3.24 oz)