- grease oil over the probe and the substrate to prevent from rusting.
- 7.4 Probes will eventually wear. Probe life will depend on the number of measurements taken and how abrasive the coating is. Replacement separate can be fitted by qualified persons only.

DIGITAL COATING THICKNESS GAUGE (FTYPE)

This Coating Thickness Meter is small in size, light in weight, easy to carry. Although complex and advanced, it is convenient to use and operate. Its ruggedness will allow many years of use if proper operating techniques are followed. Please read the following instructions carefully and always keep this manual within easy reach.

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4. MEASURING PROCEDURE

- 4.1 Press the power key 3-6 to turn on the power. And '1' shows up on the Display (3-2) while the probe is away from the iron substrate or the measured body or other magnetic materials. If not in such state, you should re-calibrate the gauge as per steps described below in calibration part.
- 4.2 Place the probe (3-1) onto the coating layer to be measured. The reading on the Display is the thickness of coating layer.
- 4.3 If suspecting the accuracy of measurement, you should calibrate the gauge before taking measurements. For the calibration procedures, please refer to the calibration part 5.
- 4.4 To switch off the power supply, just press the power key. The gauge can switch itself off about 2 minutes after the last operation.

5. CALIBRATION

5.1 Zero calibration

Place the probe (3-1) steadily onto the iron substrate and press the L-CAL (3-3). So that '0' shows on the Display (3-2).

5.2 High end calibration at 1960 um
Place the standard foil (1960 um, PVC)
onto the substrate. and then press the
sensor (3-1) steadily onto the test block.
After pressing the H-CAL key, the reading

1. FEATURES

- * Widely used to measure the thickness of non-magnetic materials (e.g. paint, plastic, porcelain enamel, copper, zinc, aluminium, chrome etc.) on magnetic materials (e.g. iron, nickle etc.) . often used to measure the thickness of plating layer, lacquer layer, porcelain enamel layer, phosphide layer, copper tile, aluminium tile, some alloy tile, paper etc.
- * Used the exclusive Micro-computer LSI circuit and crystal time base to offer high accuracy measurement & fast measuring time.
- * Wide measuring range and high resolution.
- * Digital display gives exact reading with no guessing or errors.
- * The use of durable, long-lasting components, including a strong, light weight ABS-plastic housing assures maintenance free performance for many years. The housing has been carefully shaped to fit comfortably in either hand.

2. SPECIFICATIONS

Display: 4 digits, 10 mm LCD

Range: 0~2000 um

Resolution: $0.1 \text{ um} (0 \sim 99.9 \text{ um})$ 1 um (over 100 um)

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Accuracy: $\pm 5\%$ n or 3um

(Whichever is the greater)

Power supply: 4x1.5 AAA(UM-3) battery

Operating condition: Temp. $0 \sim 50^{\circ}$ C,

Humidity < 80%

Size: 161x69x32 mm

Weight: about 260g (including batteries)

Accessory:

Carrying case	1	pc.
Operation manual	1	pc.
Probe (F type)	1	pc.
Calibration foil(1960 um)		
Substrate block (Iron)		

on the Display is the value measured. The values are very close to 1960. If not, just repeat 5.2.

6. BATTERY REPLACEMENT

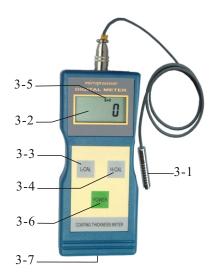
- 6.1 When it is necessary to replace the battery, i.e. battery voltage less than approx. 5v, the battery symbol - + will appear on the Display.
- 6.2 Slide the Battery Cover (Fig. 1, 3-6) away from the instrument and remove the batteries.
- 6.3 Install the batteries (4x1. 5v AA/UM-3) correctly into the case.
- 6.4 If the instrument is not to be used for any extended period, remove batteries.

7. CONSIDERATIONS

- 7.1 The probes of coating thickness gauges can not be interchanged in any cases even if same models from the same factory. Otherwise, an error will take place or will degrade the accuracy of the instrument.
- 7.2 In order to weaken the influence of the measured material on the accuracy of measurement, it is recommended that the calibrations should be done on the uncoated material to be measured.
- 7.3 If the instrument is not to be used for any extended period, please wipe a coating of

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3. FRONT PANEL DESCRIPTIONS



- 3-1 Sensor
- 3-2 Display
- 3-3 Zero Key
- 3-4 High-end calibration Key
- 3-5 Measurement Indicator
- 3-6 Power key
- 3-7 Battery Compartment/Cover