

#### **TM510FN** Coating thickness gauge



- 2 Measuring modes: continuous/single
- 2 Shutdown modes: manual/automatic
- •Wide measuring range with 5 probes available (next page)
- •Direct testing mode and block statistics mode (APPL/BATCH)
- •Can connect with printer to out of statistical values
- •Dataview to connect with PC with USB 2.0 port
- •500 datas can be stored

#### **Main features**

Can use various probe (F400, F1, F1/90 °, F10, N1, N400, etc.) measurement; Three calibration methods: one point calibration, two point calibration, the basic calibration; Display resolution: 0.1 um (measuring range of less than 100 um)  $1\mu$  m (range greater than 100 u m) Have five statistics, data storage 500 There are two working methods: direct ways and means of group There are two measurements: continuous measurement and a single measurement There are two shutdown: manual and automatic shutdown shutdown Can be set Bound: The gauge of the measured value can be automatic alarm and a number of measurements available on the histogram value analysis; Deleted features: the gross error and error settings can be deleted; Printing: Print Measurement measurement, statistics, gauges, histogram A music tone in the operation carried out at any time tips



A power supply under-voltage direct function

An error function

And printers, computer communications (communications software operating environment for the Window operating system) connectivity.

## **Technical specifications :**

| Measuring range             | 0-1250µ with standard probe F1.N1   |  |  |  |
|-----------------------------|---|--|--|--|
|                             | (10.000mm max)  |  |  |  |
| Probes available            | 5 probes available for F (ferrous: on steel/iron)<br>and N (non-ferrous metals)       |  |  |  |
| Tolerance                   | F1: $\pm$ (1µ+3%H) N1. $\pm$ (1.5µ+3% H)<br>H: actual thickness tested                |  |  |  |
| Resolution                  | Alphanumeric with 4 large digits  |  |  |  |
| Operation language          | English   |  |  |  |
| Standards                   | DIN, ISO, ASTM,BS   |  |  |  |
| Min. measuring area         | F1:(standard probe)   |  |  |  |
| Min. curvature radius       | convex:3mm, concave:50mm  |  |  |  |
| Min. substrate<br>thickness | type F: 0.5mm, type N: 50mm   |  |  |  |
| Calibration                 | Zero and foil calibration   |  |  |  |
| Statistics                  | Number of measurements, mean, standard deviation, maximum and minimum of 3000readings |  |  |  |
| Data memory                 | 500 measuring data  |  |  |  |
| Limits                      | Adjustable with acoustic alarm  |  |  |  |
| Interface                   | USB 2.0   |  |  |  |
| Operating temperature       | 0-40°C  |  |  |  |
| power supply                | AA size 1.5V  |  |  |  |
| Dimensions                  | 125*67*31mm (main unit)   |  |  |  |
| Weight                      | 345.g   |  |  |  |

### Standard delivery

| Main unit          | 1 |
|--------------------|---|
| Probe F1 or N1     | 1 |
| Calibration foils  | 5 |
| Instruction manual | 1 |
| Cetificate         | 1 |
| Warranty card      | 1 |
| Carrying case      | 1 |



Communication cable

PC software Dataview

## **Optional accessories**

5 probes for different applications

Calibration foils in various thickness



# Type F probe :

|                             | Probe                         | F400            | F1 |           | F1/90° | F10       |
|-----------------------------|-------------------------------|-----------------|----|-----------|--------|-----------|
| Measuring Principle         |                               | Magnetic method |    |           |        |           |
| Measuring range(µm)         |                               | 0~400um         |    | 0∼1250 um |        | 0~10000   |
| Min resolution(µm)          |                               | 0.1             |    | 0.1       |        | 10        |
| Tolerance                   | One-point<br>calibration (µm) |                 | )  | ±(2%H+1)  |        | ±(2%H+10) |
|                             | Two-point<br>calibration (μm) | ±(1%H+0.7)      |    | ±((1%H+1) |        | ±(1%H+10) |
| Minimum radius of curvature |                               | 1               |    | 1.5       | flat   | 10        |

1

1



| Minimum measuring area(mm) | Φ3  | Φ7  | Φ7  | Φ40 |  |
|----------------------------|-----|-----|-----|-----|--|
| Minimum thickness of base  | 0.2 | 0.5 | 0.5 | 2   |  |

# Type N probe :

| Probe                       |                      | N400 N1             |             | CN02     |  |  |
|-----------------------------|----------------------|---------------------|-------------|----------|--|--|
| Measuring Princij e         |                      | Eddy current method |             |          |  |  |
| Measuring                   | range (µm)           | 0~400 0~1250 10~20  |             |          |  |  |
| Min resolut                 | lution(μm) 0.1 0.1 1 |                     | 1           |          |  |  |
| Tolerance                   | One-point            | ±(2%H+0.7)          | ±(2%H+1.5)  | ±(2%H+1) |  |  |
|                             | Two-point            | ±(1%H+0.7)          | ± (1%H+1.5) |          |  |  |
| Minimum radius of curvature |                      | 1.5                 | 3           | flat     |  |  |
| Minimum measuring           |                      | Φ4                  | Φ5          | Φ7       |  |  |
| Minimum thickness of base   |                      | 0.3                 | 0.3         | 0        |  |  |

Note: H—Measured Value