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# Bliss NDT Instruments

## MCT 300 Mobile Generation Coating Thickness Guage



#### **PRODUCT INTRODUCTION:**

MCT:300 Coating Thickness Gauge is an intelligent coating thickness measurment device that works on highly integrated sensing technology that replaces the traditional interface with the Mobile Phone via dedicated software App. This series subverts the user's perception of the way traditional coating thickness gauges are used. A smooth connection can be established between the mobile phone and the smart senor probe that can perform highly accurate coating thickness measurements, data storage, data sharing on multiple social media platforms and inter-connections which greatly increases the convenience of testing.

#### FEATURES

- Sensor probe establishes and processes signals while using the Mobile Phone to utilize full standard display, Distributed storage and automatic data output.
- Super strong resistance to electromagnetic interference through full shielding technology, which is suitable for on-site measurements.
- Convenient report generation and report printing
- Supports user defined watermarks with ease of forwarding through various social media platforms
- Operates on Android Mobile Phones
- Can connect with multiple devices through USB hub





#### **TECHNICAL SPECIFICATIONS**

| Particulars  | MCT 300 Mobile Generation Coating<br>Thickness Guage |   |
|--|--|---|
| Working principle  | Magnetic induction                                   | Eddy current                                  |
| Probe type   | F  | Ν   |
| Measuring range ( $\mu$ m)   | 0 ~ 1500   | $0 \sim 1500$ Chromium plating on copper 0-40 |
| Lower limit of resolution ( $\mu$ m)   | 0.1  | 0.1   |
| Indication Value   |  |   |
| Zero calibration (μm)<br>(H refers to the actual thickness<br>of the measured object)      | ±(3%H + 1)   | ±(3%H + 1.5)                                  |
| Two point calibration (μm)<br>(H refers to the actual thickness<br>of the measured object) | ± [(1 ~ 3)% H +1]                                    | ± [(1 ~ 3)% H +1.5]                           |
| Indication Value   |  |   |
| Minimum radius of curvature (mm)   | Convex 3   | Convex 3                                      |
| Diameter of minimum area (mm)  | Ø7   | Ø7  |
| Critical thickness of matrix (mm)  | 0.5  | 0.3   |

#### FACTORS AFFECTING MEASUREMENT ACCURACY (▲ indicates influence)

| Factors /<br>Method                    | Magnetic<br>Induction | Eddy<br>Current |
|--|-----------------------|-----------------|
| Magnetic properties of<br>base metal   |                       |                 |
| Electrical properties of<br>base metal |                       |                 |
| Base metal thickness                   |                       |                 |
| Edge effect                            |                       |                 |
| Curvature                              |                       |                 |
| The deformation                        |                       |                 |
| Surface roughness                      |                       |                 |
| Magnetic field                         |                       |                 |
| Attached substance                     |                       |                 |
| Pressure of the probe                  |                       |                 |
| Direction of the probe                 |                       |                 |