

Digital Precise Dry Film Thickness Gauge - Ferro & Non

Ferro

BGD 547

Product Description

According to the actual application requirements, we offer three different types of thickness gauges which combine the Hall effect and Eddy current principles to measure the thickness of non-ferromagnetic coatings on ferromagnetic metal substrates (iron, cobalt, nickel and gadolinium) and the thickness of non-conductive coatings on non-magnetic metal substrates (copper, aluminum, magnesium, zinc, chromium, etc). The instrument is widely used in metal processing, coating, hardware, shipbuilding, aerospace and other fields.



Standards

ISO 2178, ISO 2360, DIN/EN/ISO 2808, ASTM D1186, ASTM D1400, ASTM D7091, DIN 50981, DIN 50984 etc

Technical Specification

- Sensitive response, and the data can be measured in 0.5 seconds.
- With simple design and small size, it is easy to carry and operate.
- Ruby probe has abrasion and corrosion resistance, which ensures long service life and can avoid errors caused by wear.
- Two units of $\mu\text{m}/\text{mil}$ can be selected.
- The advanced digital probe is used to keep the zero position stable for a long time without drifting. The test data is stable after testing the same position for multiple times.
- The thickness gauge adopts unique algorithm to solve the linearity of the instrument and ensure measurement accuracy.
- It doesn't need to be calibrated, only need zero adjustment.
- The good repeatability to ensure that it passes the inspection of Chinese national metrological testing.
- Conform to standards: ISO 2178, ISO 2360, DIN/EN/ISO 2808, ASTM D1186, ASTM D1400, ASTM D7091, DIN 50981, DIN 50984 etc.

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Main Technical Parameters

BGD 547 is specially designed for measuring the thickness of ultra-thin coatings or platings below 10µm, and it adopts ultra-thin probe design, which is especially suitable for measuring coatings on small workpieces such as screws and bolts. The probe adopts digital oscillation technology and high-speed ADC acquisition, which ensure that the instrument has ultra-high measurement accuracy and repeatability. In addition, BGD 547 also has the function of data statistics, which can store up to 9 measurement values and automatically calculate the maximum, minimum, average and standard deviation of the measured data.

Technical Parameters:

- Probe: External cable probe
- Substrate: Magnetic material
- Measuring Range: 0.0-500µm
- Resolution: 0.1µm (<100µm); 1µm(100µm~999µm); 10µm (>1000µm)
- Accuracy: $\leq (\pm 2\% \text{ reading} + 0.3\mu\text{m})$
- Minimum Curvature: Convex: 1.5mm / Concave: 10mm
- Minimum Measuring Area: Diameter: 7mm
- Minimum Substrate Thickness: 0.1mm
- Display: 240x160 dot matrix LCD
- Power Supply: 4pcs of 1.5V AAA alkaline battery
- Dimension/Weight: 148mmx76mmx26mm/194g (with battery)
- Optional Accessories: Hand test fixture

Disclaimer

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