

Thickness Gauge PCE-CT 5000H



PCE-CT 5000H Thickness Gauge

Non-destructive coating and dry film thickness (DFT) measuring device for use on ferrous (Type F) and non-ferrous (Type N) metal substrates

PCE-CT 5000H is a thickness measuring instrument used for the rapid determination of coating thicknesses on ferrous (Type F) and non-ferrous (Type N) metals. The coating thickness gauge automatically detects the type of metal to be measured. The PCE-CT 5000H coating thickness gauge uses magnetic induction (ferrous) or eddy current (non-ferrous) to take non-destructive measurements of coating and dry film thickness (DFT) on metal substrates such as steel and aluminum.

This thickness gauge is ideal for painted and powder-coated surface testing, automotive paint inspection, coated material testing, and manufacturing quality control applications. Alarm limits can be set in the coating thickness gauge to notify the user when a coating is too thick or too thin. If a coating thickness measurement falls outside the established limits, a message appears on the display to alert the user.

- ▶ Designed for non-destructive testing and inspection
- ▶ Measures coating thickness on Fe and nFe metals
- ▶ Displays measuring units in μm , mm or mils
- ▶ Saves up to 2000 measurements to internal memory
- ▶ Practical V-groove on the measuring head
- ▶ One- to four-point and zero calibration
- ▶ Comfortable one-handed operation
- ▶ Programmable alarm limits
- ▶ High measuring range
- ▶ High measuring accuracy
- ▶ Automatic shutdown
- ▶ Optional ISO calibration certificate available for purchase separately - see accessories tab for details

Specifications

| | |
|---|---|
| Probe | Type F and Type N |
| Measuring range Type F | 0 ... 5000 μm / 0 ... 5 mm / 0 ... 196 mils |
| Measuring accuracy Type F | \pm (2% + 1 μm) |
| Resolution Type F | 0 ... 99.9 μm : 0.1 μm , 100 ... 999 μm : 1 μm > 1000 μm : 0.01 mm |
| Measuring principle Type F | Magnetic induction |
| Smallest thickness of the base material | 0.02 mm |
| Measuring range Type N | 0 ... 3000 μm / 0 ... 3 mm / 0 ... 118 mils |
| Measuring accuracy Type N | \pm (2% + 1 μm) |
| Resolution Type N | 0 ... 99.9 μm : 0.1 μm , 100 ... 999 μm : 1 μm > 1000 μm : 0.01 mm |
| Measuring principle Type N | Eddy current |
| Smallest thickness of the base material | 0.05 mm |
| Calibration | One-point to four-point calibration, zero calibration |
| Data storage | Direct measurement (no measurement data storage), four data groups (automatic measurement data storage of up to 2000 measured values) |
| Statistical functions | Number of measurements, average, minimum, maximum, standard deviation |
| Measurement units | μm , mm, mils |
| Alarm | Alarm limits adjustable, alarm symbol is displayed when limits are exceeded |
| Minimum radius of curvature (convex) | 5 mm / 0.2 in |
| Minimum radius of curvature (concave) | 25 mm / 1 in |
| Smallest measuring surface | Diameter of 20 mm / 0.8 in |
| Maximum measuring rate | 2 x per second |
| Data interface | Data transfer via USB |
| Power supply | 2 x 1.5V AAA batteries |
| Menu languages | German, English, Russian, Chinese |
| Operating conditions | 0 ... 50°C / 32 ... 122°F, 20 ... 90% RH |
| Storage conditions | -10 ... 60°C / 14 ... 140°F |
| Standards | CE ROHS FCC |
| Dimensions | 110 x 53 x 24 mm / 4.33 x 2.09 x 0.95 in |
| Material housing | ABS plastic |
| Weight | 92 g / < 1 lb |

Subject to change