

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 $0 ... 5000 \, \mu \text{m} / 0 ... 5 \, \text{mm} / 0 ... 196 \, \text{mils}$

Measuring accuracy Type F $\pm (2\% + 1 \mu m)$

 $0 \dots 99.9 \ \mu m$: $0.1 \ \mu m$, $100 \dots 999 \ \mu m$: $1 \ \mu m$ Resolution Type F

 $> 1000 \mu m: 0.01 mm$

Measuring principle Type F Magnetic induction

Smallest thickness of the base 0.02 mm

material

Calibration

Measuring range Type N $0 ... 3000 \, \mu \text{m} / 0 ... 3 \, \text{mm} / 0 ... 118 \, \text{mils}$

Measuring accuracy Type N $\pm (2\% + 1 \mu m)$

Resolution Type N 0 ... 99.9 μm: 0.1 μm, 100 ... 999 μm: 1 μm

 $> 1000 \ \mu m$: 0.01 mm

Eddy current Measuring principle Type N

Smallest thickness of the base 0.05 mm

material

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 transfer via USB Data interface 2 x 1.5V AAA batteries Power supply

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

110 x 53 x 24 mm / 4.33 x 2.09 x 0.95 in **Dimensions**

Material housing **ABS** plastic 92 g / < 1 lb Weight

More information

Manual

More product info



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