

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

Subject to change

Specifications

Probe	Type F and Type N
Measuring range Type F	0 ... 5000 µm / 0 ... 5 mm / 0 ... 196 mils
Measuring accuracy Type F	± (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	± (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

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