



Coating Thickness Gauge

PCE-CT 90 for metallic substrates



PCE-CT 90

The coating thickness gauge is a versatile measuring instrument. This is made possible by the various optional sensors on the layer thickness gauge. For example, the coating thickness gauge can easily measure the layer thicknesses of paints, galvanic coatings, galvanizing or even anodic oxide layers on metal. With the sensors, for example, layer thickness measurements with a thickness of up to 60 mm are possible.

In addition to the layer thickness sensors for the layer thickness gauge, there is also the climate sensor. With this climate sensor at the coating thickness gauge, the ambient temperature, the ambient humidity and the dew point can be measured. Also, in the film thickness gauge, there is the surface temperature sensor. Thanks to the surface temperature sensor, the surface temperature of an object in a measuring range of -50 ... 125°C / -58 ... 257°F can be determined with the

Coating Thickness Gauge.

In addition, the roughness of surfaces can be determined with the layer thickness gauge. This is made possible by the optional roughness meter. With the roughness sensor from the layer thickness gauge, the Rz value of the surface can be determined within a very short time. The measuring range here is between 0 ... 300 µm.

- ▶ Different sensors
- ▶ Measuring range up to 60 mm
- ▶ Automatic sensor detection
- ▶ Zero point and one-point calibration
- ▶ Power supply 2 x 1.5V AAA batteries
- ▶ Temperature measurement up to 125°C / 257°F

General Features PCE- CT 90	
Measuring range	0 ... 60 mm (with M60 Sensor, included)
Accuracy	± (0.03xh + 0.003) mm (with M60 sensor, included)
Measurable materials	non-magnetic layers on Fe base materials (eg aluminum, copper)
Min. Radius of curvature	0.3 ... 50 mm (depending on the sensor used)

Calibration	Zero calibration, one-point calibration
Units	µm, mm, °C, °F
Power supply	2 x 1.5V AAA batteries (DC)
Display	Graphic display
Operating conditions	-10 ... 40°C / 14 ... 104°F, 20 ... 98% r. F., non-condensing at 35°C / 95°F
Storage conditions	5 ... 40°C / 41 ... 104°F, 80% r. F., non-condensing at 25°C / 77°F
Dimensions	136 x 75 x 32 mm / 5.4 x 3 x 1.3 in
Weight	168 g / < 1 lb



Model	Measuring range
Fe-0.3 *	0 ... 300 µm
Fe-0.5 *	0 ... 500 µm
Fe 2 *	0 ... 2000 µm
Fe-5*	0 ... 5000 µm
NFe 2 **	0 ... 2000 µm
M12 ***	0 ... 12 mm
M30 ***	0 ... 30 mm
M60 ***	0 ... 60 mm
DT	-50 ... 125°C / -58 ... 257°F
DTVR	Temperature: -50 ... 125°C / -58 ... 257°F
	Humidity: 0 ... 100%
	Dew point: -15 ... 40°C / 5 ... 104°F
DSH	1 ... 300 µm

h is the nominal height of the coating or the depth of the grooves in mm (roughness).

* Fe: only for ferromagnetic substrates

** NFe: only for non-ferromagnetic substrates

*** Fe and NFe: for ferromagnetic and non-ferromagnetic substrates

Accuracy	Measurement Description
± (0.03xh + 0.001) mm	Paint, lacquer, galvanic coating
± (0.03xh + 0.001) mm	Paint, lacquer, galvanic coating
± (0.03xh + 0.002) mm	Paint, varnish
± (0.03xh + 0.002) mm	Paint and thick coating
± (0.03xh + 0.002) mm	Anodic oxide layer, paint layers
± (0.03xh + 0.001) mm	Thick coating
± (0.03xh + 0.002) mm	Thick coating
± (0.03xh + 0.003) mm	Thick coating
± 1°C / 1.8°F	Surface temperature
± 1°C / 1.8°F	Air temperature, humidity, dew point
± 5%	
± 2°C / 3.6°F	
± (0.03xh + 0.002) mm	Roughness

Subject to change