

 **SaveCoat**



[®] *SaveCoat C-1*

Electromagnetic contact
thickness gauging





/ Application area

The outstanding feature of this new SaveCoat gauge is the brilliant color graphic display with improved text presentation and allows a variety of operating languages. The internal memory allows the storage of up to 2,000 measured values. The connection to a computer is simple via USB 2.0. Cable and data transfer program SaveCoat-Transfer is part of the delivery. The latter allows transfer of readings to all modern Windows systems and export to Excel. The SaveCoat C-1 can be connected to a variety of EM-Probes. This ensures the highest possible flexibility which enables the device to fulfill many different measurement tasks.

The application areas

- in the electroplating industry
- in the painting industry
- in the automotive industry
- in the chemical industry
- in aerospace engineering
- in shipbuilding
- in research labs and universities
- in the workshop
- for consultants and assessors

Advantages at a glance:

- Innovative and user-friendly measurement technology
- High-resolution color graphics display
- USB interface
- Automatic recognition of the base material
- Data memory for up to 2,000 measured values
- Online statistics
- Intuitive menu guidance
- Measurements on hot surfaces up to 150 °C or 300 °C (optional)
- Manufacturer's test certificate

Technical data

Measurement range	depending on the probe, up to 30 mm
Accuracy	depending on the probe up to +/- (0.7 µm + 1 % of reading)
Resolution	0.1 µm or < 0.2 % of reading (with standard probe)
Calibration method	works calibration, zero calibration, one-foil calibration; zero-offset
Statistics	Number of measured values, mean value, standard deviation, minimum and maximum measured value
Memory	max. 2.000 readings
Data transfer	USB 2.0
Display	high-resolution color display
Operating temperature	0 °C bis + 50 °C
Surface temperature	-15 °C to + 60 °C (standard) -15 °C to + 150 °C or 300 °C (with optional high temperature feet)
Dimensions gauge	137 mm x 66 mm x 23 mm
Weight	205 g (incl. FN 1.5 probe and batteries)
Protection class	IP 52 (protection against dust and dripping water)
Standards	DIN, ISO, ASTM, BS

Example of standard package

- Gauge
- Protective rubber-cover
- 2 calibration foils
- Zero plate(s) (steel/aluminium)
- 2 batteries AA
- "SaveCoat Transfer" software
- USB cable
- Operating manual
- Manufacturer's certificate
- Transport case

Additional options

- Probe guide for precision measurements on small parts
- Calibration standards
- Manufacturer's certificate TYP M DIN 55350

The probes ...

... the heart of our thickness gauging. Innovations and ongoing further developments provide optimal results with high accuracy and flexibility for a wide range of industrial applications.

/ Probe overview

The various measurement tasks of our customers are reflected in our comprehensive probe program.

To determine the optimal probe the following aspects need to be considered:

- **Material combination of layer and base material**
- **Thickness of the layer and of the base material**
- **Dimensions of the measurement object**
- **Surface texture of the object**

- **F-type probes (ferromagnetic)**

Magnetic-inductive method (according to DIN EN ISO 2808/2178 and ASTM B499) on ferromagnetic base materials, such as iron and steel.

- **N-type probes (non-ferromagnetic)**

Eddy current method (according to DIN EN ISO 2808/2360 and ASTM D7091) on non-magnetic, metal based materials, such as aluminium, zinc, copper, etc.

- **FN-type probes (combination probes)**

Suitable for magnetic and non-magnetic base materials such as iron / steel and non-ferrous metals. The appropriate measurement method for each base material is automatically activated and is indicated in the display.

/ Characteristics of our probes

- **Durability**

Our probes are extremely robust and resistant to wear and have a nearly unlimited lifespan.

- **Made in Germany**

All probes are designed and manufactured in Germany under the highest quality standards.

- **Curvature compensation**

The different calibration methods allow measurement on highly curved surfaces by a simple calibration procedure.

- **Works calibration**

Each probe passes through an individual, internal calibration to ensure maximum accuracy.

- **Switch on and measure**

In most cases, a measurement without additional calibration is possible.



/ Standard probes

Technical data		FN 0.2	FN 1.5	F 1.5	N 1.5
Measurement range		0–200 µm on steel/iron and non-ferr. metals	0–1.500 µm on steel/iron and non-ferr. metals	0–1.500 µm on steel/iron	0–1.500 µm on non-ferrous metals
Accuracy	with works calibration	+/- 2,5 µm or 2,5 % (whichever is greater)	+/- 3 µm oder 3 % (whichever is greater)		
	with zero calibration	+/- (0,7 µm + 1,5 %)	+/- (1 µm + 2 %)		
	with foil calibration	+/- (0,7 µm + 1,0 %)	+/- (1 µm + 1 %)		
Acid-resistant pole-tip		—	optional	—	optional
Temperature range		0 °C bis 60 °C			
Dimensions		Ø 14 mm x 83 mm			
Weight		ca. 70 g			
Hot measurement foot		–15 °C bis 150 °C			
High temperature foot		—	–15 °C bis 300 °C (0 bis 1.000 µm)		

/ Special probes



Technical data		FN 1.5R F 1.5R	FN 1.5/90° (for pipes and tubes)	FN 3.5 F 3.5	F 10	F 30
Measurement range		0–1.500 µm	0–1.500 µm	0–3.500 µm (F) 0–3.000 µm (N)	0–10 mm	0–30 mm
Accuracy	with works calibration	+/- 3 µm or 3 % (whichever is greater)	+/- 3 µm or 3 % (whichever is greater)	+/- 5 µm or 3 % (whichever is greater)	+/- 10 µm or 3 % (whichever is greater)	n. a.
	with zero calibration	+/- (1 µm + 2 %)	+/- (1 µm + 2 %)	+/- (2 µm + 2 %)	+/- (5 µm + 2 %)	+/- (10 µm + 4 %)
	with foil calibration	+/- (1 µm + 1 %)	+/- (1 µm + 1 %)	+/- (2 µm + 1 %)	+/- (3 µm + 1 %)	+/- (10 µm + 2 %)
Temperature range		0 °C to 60 °C				
Dimensions		Ø 16 mm x 24 mm x 62 mm	8 mm x 12 mm x 180 mm	Ø 25 mm x 47 mm	Ø 25 mm x 47 mm	Ø 75 mm x 55 mm
Weight		appr. 90 g	appr. 85 g	appr. 105 g	appr. 85 g	appr. 400 g