


04




Coating thickness measurement

Measurement of coating thicknesses is known from, for example, the paint measurement for coating thickness at cars. In fact, these measurements are used much more widely in industrial applications. This is where the thickness of the surface finish is measured, such as galvanisation, zinc coating etc, or also lacquers.


Fundamentally there are two measuring principles for determining coating thickness:

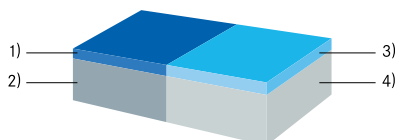
 **Typ F:** Non-magnetic coatings on magnetic metals, such as iron or steel (magnetic induction principle). Here are some sample material combinations:

- 1) [aluminium, chrome, copper, rubber, lacquer] on
- 2) [steel, iron, alloys, magnetic s tainless steel]

 **Typ N:** Insulating coatings on non-magnetic metals, such as aluminium (eddy current principle). Here are some sample material combinations:

- 3) [lacquer, paints, enamel, chrome, plastics] on
- 4) [aluminium, brass, sheet metal, copper, zinc, bronze]

 **Typ FN:** All coatings as for type F and N on all metals as for type F and N (combination of magnetic induction and eddy current principle)



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Quick-Finder

Readout [d] µm	Measuring range [Max] µm	Model SAUTER	Price excl. VAT, ex works €	Page
0,1 1	100 1000	TB 1000-0.1F	320,-	51
0,1 1	100 1000	TB 1000-0.1N	360,-	51
0,1 1	100 1000	TC 1000-0.1FN	400,-	51
0,1 1	100 1250	TC 1250-0.1F	260,-	52
0,1 1	100 1250	TC 1250-0.1N	400,-	52
0,1 1	100 1250	TC 1250-0.1FN	460,-	52
0,1 1	100 1250	TC 1250-0.1FN-CAR	470,-	52
0,1 1	100 1250	TE 1250-0.1F	360,-	53
0,1 1	100 1250	TE 1250-0.1N	400,-	53
0,1 1	100 1250	TE 1250-0.1FN	460,-	53
0,1 1	100 1250	TF 1250-0.1FN	530,-	54
0,1 1	100 1250	TG 1250-0.1FN	530,-	54
0,1 1	100 2000	TB 2000-0.1F	290,-	51



Practical measuring device for measuring the thickness of layers for daily use

Features

- External sensor for difficult-to-access measuring points
- Base plate and calibration foils included
- **1** Delivered in a robust carrying case
- Offset-Accur: This function allows you to adjust the instrument precisely on the locally measured range by a two-point calibration. This results in a superior accuracy of approx. 1 % of the measured value
- Selectable measuring units: mm, µm, mil
- Auto-Power-Off
- SAUTER TB 2000-0.1F: Specifically designed for the automobile industry, Precision: Standard 5 % of measured value

Technical data

- Measuring precision:
 - Standard: 3 % of measured value
 - Offset-Accur: 1 % of measured value
- Smallest sample surface (radius)
- Type F:
 - Convex: 1,5 mm
 - Flat: 6 mm
 - Concave: 25 mm
- Type N:
 - Convex: 3 mm
 - Flat: 6 mm
 - Concave: 50 mm
- Minimum thickness of base material: 300 µm
- Dimensions W×D×H 69×32×161 mm
- Battery operation, batteries standard 4× 1.5 V AA
- Net weight approx. 0,26 kg

Accessories

- **2** Calibration foils for increased measuring accuracy (covers the range from 20 up to 2000 µm, with < 3 % tolerance), sim. to illustration, SAUTER ATB-US07, **€ 105,-**
- **3** External sensor, Type F, SAUTER ATE 01, **€ 105,-**
- **4** External sensor, Type N, SAUTER ATE 02, **€ 110,-**



Model	Measuring range [Max] µm	Readout [d] µm	Test object	Price excl. of VAT ex works €	Option Factory calibration certificates	
					KERN	€
SAUTER TB 1000-0.1F	100 1000	0,1 1	Non-magnetic coatings on iron, steel (F)	320,-	961-110	120,-
TB 2000-0.1F	100 2000	0,1 1	Non-magnetic coatings on iron, steel (F)	290,-	961-110	120,-
TB 1000-0.1N*	100 1000	0,1 1	Insulating coatings on non-magnetic metals (N)	360,-	961-110	120,-
TB 1000-0.1FN	100 1000	0,1 1	Combination instrument: F/N	400,-	961-112	170,-

1 *ONLY WHILE STOCKS LAST



Robust measuring device for layer thickness – compact and easy to use

Features

- Ergonomic design for easy handling
- Data interface RS-232, standard
- Base plate and calibration foils included
- **1** Delivered in a robust carrying case
- Offset-Accur: This function allows you to adjust the instrument precisely on the locally measured range by a two-point calibration. This results in a superior accuracy of approx. 1 % of the measured value
- Selectable measuring units: µm, mil

2 SAUTER TC 1250-0.1FN-CAR:

- Specifically designed for the automobile industry
- Automatic recognition of measuring mode (F or N): “point and shoot”
- Simple and convenient 1-key operation

Technical data

- Measuring precision:
 - Standard: 3 % of measured value or ± 2,5 µm
 - Offset-Accur: 1 % of measured value or ± 1 µm
- Smallest sample surface (radius)
- Type F:
 - Convex: 1,5 mm
 - Flat: 6 mm
 - Concave: 25 mm
- Type N:
 - Convex: 3 mm
 - Flat: 6 mm
 - Concave: 50 mm
- Minimum thickness of base material: 300 µm
- Dimensions W×D×H 65×28×131 mm
- Battery operation, batteries standard 4× 1.5 V AAA
- Net weight approx. 81 g

Accessories

- Data transfer software, interface cable included, SAUTER ATC-01, **€ 90,-**
- Calibration foils for increased measuring accuracy (covers the range from 20 up to 2000 µm, with < 3 % tolerance), SAUTER ATB-US07, **€ 105,-**

STANDARD

CAL.BLOCK FOCUS RS 232 ZERO BATT 1 DAY

OPTION

SOFTWARE +4 DAYS ISO

Model	Measuring range [Max] µm	Readout [d] µm	Test object	Price excl. of VAT ex works €	Option Factory calibration certificates	
					KERN	€
SAUTER TC 1250-0.1F	100 1250	0,1 1	Non-magnetic coatings on iron, steel (F)	260,-	961-110	120,-
TC 1250-0.1N*	100 1250	0,1 1	Insulating coatings on non-magnetic metals (N)	400,-	961-110	120,-
TC 1250-0.1FN	100 1250	0,1 1	Combination instrument: F/N	460,-	961-112	170,-
TC 1250-0.1FN-CAR	100 1250	0,1 1	Combination instrument: F/N	470,-	961-112	170,-

1 *ONLY WHILE STOCKS LAST

Price reduction



Ergonomic design and external sensor for highest ease of use

Features

- External sensor for difficult-to-access measurements
- Data interface RS-232, standard
- Base plate and calibration foils included
- **1** Delivered in a robust carrying case
- Offset-Accur: This function allows you to adjust the instrument precisely on the locally measured range by a two-point calibration. This results in a superior accuracy of approx. 1 % of the measured value
- Selectable measuring units: µm, mil
- Auto-Power-Off

Technical data

- Measuring precision:
 - Standard: 3 % of measured value or ± 2,5 µm
 - Offset-Accur: 1 % of measured value or ± 1 µm
- Smallest sample surface (radius)
- Type F:
 - Convex: 1,5 mm
 - Flat: 1,5 mm
 - Concave: 25 mm
- Type N:
 - Convex: 3 mm
 - Flat: 5 mm
 - Concave: 50 mm
- Minimum thickness of base material: 300 µm
- Dimensions W×D×H 65×28×131 mm
- Battery operation, batteries standard 4× 1.5 V AAA
- Net weight approx. 81 g

Accessories

- Data transfer software, interface cable included, SAUTER ATC-01, **€ 90,-**
- Calibration foils for increased measuring accuracy (covers the range from 20 up to 2000 µm, with < 3 % tolerance), SAUTER ATB-US07, **€ 105,-**
- **2** External sensor, TypeF, SAUTER ATE 01, **€ 105,-**
- **3** External sensor, TypeN, SAUTER ATE 02, **€ 110,-**

STANDARD

OPTION

Model	Measuring range [Max] µm	Readout [d] µm	Test object	Price excl. of VAT ex works €	Option Factory calibration certificates	
					KERN	€
SAUTER TE 1250-0.1F	100 1250	0,1 1	Non-magnetic coatings on iron, steel (F)	360,-	961-110	120,-
TE 1250-0.1N	100 1250	0,1 1	Insulating coatings on non-magnetic metals (N)	400,-	961-110	120,-
TE 1250-0.1FN	100 1250	0,1 1	Combination instrument: F/N	460,-	961-112	170,-

PREMIUM
★★★

PREMIUM
★★★



SAUTER TF

SAUTER TG

Premium coating thickness gauge for paint coating, lacquer coating etc.

Features

- **1** LCD display, backlit, display of all information at a glance
- Offset-Accur: This function allows you to adjust the instrument precisely on the locally measured range by a two-point calibration. This results in a superior accuracy of approx. 1 % of the measured value
- Scan mode for continuous measurement or single point measuring mode
- Mini Statistics Kit: displays the measured result, the average value and the max and the min value
- Internal memory up to 99 values
- Selectable measuring units: μm, mil
- Base plate and calibration foils included
- Data interface RS-232 standard
- **2** Delivered in a robust carrying case, figure shows SAUTER TF

Technical data

- Measuring precision:
 - Standard: 3 % of measured value or ± 2,5 μm
 - Offset-Accur: 1 % of measured value or ± 1 μm
- Minimum thickness of base material: 300 μm
- Dimensions W×D×H 65×35×126 mm
- Battery operation, batteries standard 2× 1.5 V AAA
- Net weight approx. 81 g

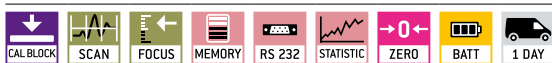
Accessories

- Data transfer software, interface cable included, SAUTER ATC-01, **€ 90,-**
- Calibration foils for increased measuring accuracy (covers the range from 20 up to 2000 μm, with < 3 % tolerance), SAUTER ATB-US07, **€ 105,-**
- SAUTER TG: External sensor, TypeFN, SAUTER ATG 01, **€ 130,-**

SAUTER TG:

- External sensor for difficult-to-access measuring points

STANDARD



OPTION



Model	Measuring range [Max] μm	Readout [d] μm	Test object	Smallest sample surface (radius) mm	Price excl. of VAT ex works €	Option Factory calibration certificates	
						KERN	€
SAUTER TF 1250-0.1FN	100 1250	0,1 1	Combination instrument: F/N	F: Convex: 1,5 Concave: 25	530,-	961-112	170,-
SAUTER TG 1250-0.1FN	100 1250	0,1 1	Combination instrument: F/N	N: Convex: 3 Concave: 50	530,-	961-112	170,-