PHYNIX

ACCESSORIES

We have developed a wide range of accessories such as the hot temperature feet, the precision probe guide or the traceable calibration standards in order to optimize the use of our gauges in special applications and measurement tasks.

Our printer, the infrared adapter and the software complete our program of accessories to further process, handle and evaluate the measurement data.

High temperature feet

High temperature feet

up to 150 °C Product No. 10098
up to 300 °C Product No. 10844

For measurements of hot surfaces you need to consider that metals change their magnetic and electrical properties at higher temperatures. When measuring on hot surfaces with our gauges from the Surfix® family with standard probes (0.2 and 1.5 mm measuring range), calibration is usually not necessary, owing to the non-sensitivity of the sensor to permeability and conductivity changes.

Phynix offers two high temperature feet for measurments on hot surfaces:

- Hot coating measurement up to 150°C, e.g. freshly burnt-in powder coatings, can be measured with Surfix® E, Surfix® S oder Surfix® Pro S. In such cases you should use the fawn-coloured contact ring (Product No. 10098) made of heat-resistant plastic.

- Hot surfaces up to 300°C can be reliably measured with the high temperature contact ring (Product No. 10844). The required modification of the measurement probe FN 1.5 or F 1.5 (measurement range 1.5 mm) can be carried out quite easily by attachment of the screw contact ring. This contact ring can measure thicknesses of up to 1,000 μm on hot surfaces.

Application areas

The hot temperature feet are used in the:

- Foundry industry
- Electroplating industry
- Paint industry
- Automotive industry
- Aerospace industry
- Ship building industy

Advantages at a glance

- Easy installation by simply replacing the probe prism
- Compatible with all Standard probes
- Deatiled user manual

Technical specifications

	Hot-temperature foot up to 150 °C	Hot-temperature foot up to 300 °C
Measurement range	0 – 1.500 μm	0 – 1.000 μm
Accuracy (with foil calibration)	± (1 μm + 2 % of reading)	± (10 μm + 2 % of reading)
Calibration method	Factory-, zero and foil-calibration	Factory-, zero and foil-calibration
Surface temperature	-15 °C to + 150 °C	-15 °C to + 300 °C
Dimensions	⌀ 19 mm x 12 mm	⌀ 19 mm x 10 mm
Weight	2 g	2 g

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Precision probe guide

Probe guide for a precise coating thickness measurement on small parts such as screw heads, nuts, washers etc. The press-down lever for letting down the probe can be set in an appropriate ergonomic angle position by easy pulling-turning-locking. For secure measurement the guide can be fixed to a table board with a clamp. For easy reading of the display the gauge Surfix® can be fixed to the steel cylinder of the probe guide using an appropriate holder.

Specifications

Design	all-metal (AL-anodised)
Support hole for the probe	ø 14 mm
Max. lift over press-down lever	12 mm
Max. height adjustment range	100 mm
Measurement table, polished Al plate	120 mm x 160 mm x 20 mm
Weight	ca. 2.4 kg

Probe guide

Product No. 10026

Calibration standards and sets

The PHYNIX calibration standards with a thickness range between 10 µm and 10 mm are used to verify and calibrate coating thickness gauges. If used for a foil calibration, calibration standards whose thickness are in the range of the measured coating thickness, will increase the measurement accuracy.

PHYNIX calibration standards consist of wear-resistant hard-plastic films or plates. All standards up to 3 mm thickness have a size of 35 mm x 50 mm, above a size of 50 mm x 50 mm. The thickness values given in the table are nominal values. Deviations from these nominal values are possible due to fluctuations in the films production. All PHYNIX standards are individually measured with a certified length measuring system and labeled in accordance with the determined thickness.

Therefore we can guarantee the specified tolerance of 1 µm (for thicknesses up to 100 µm) or 1 % (for thicknesses greater than 100 µm).

All calibration standards can be calibrated with a manufacturer test certificate type M in accordance with DIN 55350-18. For further details see certificates for calibration standards.

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Precision Standard
504 µm ± 1 %
19.84 mils ± 1 %

Calibration standards

Product No. see table

Calibration standard sets

Product No. see table

Product No.	Description (all nominal values)
10037	Calibration standard 10 µm (+/- 1 µm)
10038	Calibration standard 30 µm (+/- 1 µm)
10039	Calibration standard 40 µm (+/- 1 µm)
10241	Calibration standard 50 µm (+/- 1 µm)
10040	Calibration standard 100 µm (+/- 1 µm)
10041	Calibration standard 200 µm (+/- 1 %)
10042	Calibration standard 360 µm (+/- 1 %)
10043	Calibration standard 500 µm (+/- 1 %)
10044	Calibration standard 800 µm (+/- 1 %)
10045	Calibration standard 1.000 µm (+/- 1 %)
10266	Calibration standard 1.500 µm (+/- 1 %)
10731	Calibration standard 2 mm (+/- 1 %)
10500	Calibration standard 3 mm (+/- 1 %)
10349	Calibration standard 4 mm (+/- 1 %)
10501	Calibration standard 5 mm (+/- 1 %)
10350	Calibration standard 6 mm (+/- 1 %)
10351	Calibration standard 8 mm (+/- 1 %)
10352	Calibration standard 10 mm (+/- 1 %)

Calibration standards are also available as sets. There are three sets in different coating thickness ranges available:

- Calibration standards set 1 for thickness up to 200 µm
- Calibration standards set 2 for thickness up to 1.000 µm
- Calibration standards set 3 for thickness up to 3.000 µm

Each set consists of 5 calibration standards, one zero standard in iron (Fe) and one zero standard in aluminum (Al), all clearly kept in a plastic case.

Product No. 10979 - Calibration standards set 1

Calibration standard
10 µm (+/- 1 µm)

Calibration standard
30 µm (+/- 1 µm)

Calibration standard
50 µm (+/- 1 µm)

Calibration standard
100 µm (+/- 1 µm)

Calibration standard
200 µm (+/- 1 %)

Product No. 11123 - Calibration standards set 2

Calibration standard
50 µm (+/- 1 µm)

Calibration standard
100 µm (+/- 1 µm)

Calibration standard
200 µm (+/- 1 %)

Calibration standard
500 µm (+/- 1 %)

Calibration standard
1.000 µm (+/- 1 %)

Product No. 11124 - Calibration standards set 3

Calibration standard
100 µm (+/- 1 µm)

Calibration standard
360 µm (+/- 1 %)

Calibration standard
800 µm (+/- 1 %)

Calibration standard
1.5 mm (+/- 1 %)

Calibration standard
3.0 mm (+/- 1 %)

Application areas

Calibration standards are used

- to increase the measurement accuracy (foil calibration)
- to review and validate coating thickness gauges
- to verify a gauge calibration

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Infrared-adapter USB

USB Infrared-adapter

Product No. 10641

To transfer the stored measurement values from Surfix® devices to your PC, an external infrared adapter is required. This adapter is connected directly to the USB port of the PC. The necessary software drivers can be downloaded from either the PHYNIX website or installed from a CD.

The stored measuring data in the devices Pocket-Surfix®, Surfix®, and Surfix® Pro can be transferred with the optional infrared adapter in two different ways:

1. With the free programm "Hyperterminal" which is a general component of Windows®.
2. In a simple way with the inexpensive FixSoft transfer program. The data will be transferred to Excel as well as the statistic values, a trend representation and a histogram. Afterwards you can add customized data, like the date, data of the load and the company etc. You can transfer only one series of measurments in each case.
3. The extensive data communication and management program ProSoft for comfotable processing is available for Surfix® Pro. The program transfers as many as desired series of measurements including all statistics parameters to the PC for processing and graphic presentation.

Application areas

The infrared adapter is used

- in laboratories for measurement analysis
- in the production area for connection to a quality assurance systems
- for statistical analysis
- for long-term documentation

Advantages at a glance

- simple driver installation via software downloads or CD
- Easy connection to USB port
- wireless data connection

Technical specifications

Interface	USB 2.0
Temperature range	-40 °C to + 85 °C
Dimensions	55 mm x 35 mm x 18 mm
Weight	42 g

Wet film thickness measurement

Product No. 10373

Inexpensive instrument with simple handling for determining the thickness of freshly applied layers of paint on flat surfaces in accordance with DIN EN ISO 2808. The wet film comb with regularly graded and appropriately labeled teeth is pressed into the wet ink film up to the base material. The layer thickness can then be read with reference to the label: The thickness of the layer lies between the shortest still wet tooth and the next no longer wetted tooth.

Specifications

Wet film thickness gauge. Quality and sturdy design made of aluminum. Scale with solvent resistant marking. Measuring unit in µm:

Size	82 x 57 mm
Thickness	0,85 mm
Measurement range	25–2,000 µm
Package unit	5 pieces

Scale values in µm

25	50	75	100	125	150		
175	200	225	250	275	300		
350	400	450	500	550	600	650	700	750
900	1.000	1.150	1.250	1.400	1.500	1.650	1.800	2.000