

NEW!

PHYNIX 

Surfix Pro[®]

The multifunctional
fully menu driven
coating thickness
gauge Surfix Pro[®]



professional, precise, innovative

Surfix Pro[®] for measurements
on steel and non-ferrous metals

Surfix Pro® – go professional

Surfix Pro® is a multifunctional fully menu driven gauge for fast, professional and precise coating thickness measurement for

- varnish, paint and electroplated coatings on iron/steel and
- varnish, paint and anodising coatings on non-ferrous metals and on austenitic stainless steels

The recording and further processing of stored measurement data are just as easy to carry out as the measurement itself. The file names can be alphanumerically assigned via an input panel and managed in a data memory.

Where to use Surfix Pro®?

Wherever coatings are applied – whether on visual and aesthetic grounds, to prevent corrosion protection, or for functional and mechanical reasons – the coating thickness represents an essential quality feature. The Surfix Pro® is ideal for speedy, non-destructive and exceptionally precise coating thickness measurement.

Optical confirmation of readings via flashing LED



Never has the operation been so easy and straightforward as with Surfix Pro®. Similar to the menu control on mobile phones, the user receives clear and understandable operating instructions via the display. The free choice of language for operation and documentation makes the instrument handling secure and reliable.

The world's smallest measuring sensors guarantee reliable measurements even on difficult geometries. The newly developed scan mode enables a continuous coating thickness measurement for a quick assessment of large surfaces.

Surfix Pro® is used

- in paintshops and for electroplaters
- for wet and powder coating operations
- in the automobile industry and its supporting industry
- for incoming material inspection, during production and for final inspection
- in development engineering and expert assessments
- in laboratory and field operation

The innovative design of the instrument features a clear and straightforward operation and an easy-to-read display. The alphanumerical file names makes the data management easier and consequently ensure a save access for further processing.





Surfix Pro® F10

Surfix Pro® F10 – special design for measurements up to 10 mm / 0.4"

Surfix Pro® FN/90° – measurements in tubes and recesses

Surfix Pro® FN/90°

Innovative instrument technology

- Measurements on steel and non-ferrous metal using only one gauge
- Automatic identification of the substrate
- Calibration-free measurements (calibration only in exceptional cases)
- Mobile and stationary operation with only one gauge
- Highly wear-resistant measuring poles made of carbide metal
- Special probes for unusual measurement tasks



Wireless infrared data transfer to printer or PC

Practical functions

- Precise measurements on different geometries thanks to simple calibration methods
- Safe use even for special applications such as sand-blasted surfaces, small parts and curved surfaces
- Scan mode for the quick recognition of coating thickness variations on large surfaces, including display of minimum and maximum readings
- Display backlight for bad ambient lighting conditions
- Online statistics with all statistical parameters



Use of Windows® standard application

Self-evident operating concept

- Easy to operate, well-known from mobile phones
- Intuitive menu guidance via dialog with the user
- Free choice of language – German, English, French



Highly wear-resistant measuring poles made of carbide metal

For measurements in grooves down to 5 mm / 0.2", just unscrew the plastic food of the probe

Reliable documentation

- Extensive data memory for the management of different measurement series
- Alphanumerical file names can be individually stored for every measurement task
- Infrared interface for wireless data transfer to printer and PC
- No additional data transfer software required thanks to the use of Windows® standard application (HyperTerminal)



Ideal measuring station for precision measurements on small parts

Specifications

Gauge versions	Surfix Pro® FN for measurements on iron/steel and non-ferrous metals Surfix Pro® F for measurements on iron/steel Surfix Pro® N for measurements on non-ferrous metals Surfix Pro® FN/90° for tube ID measurements on iron/steel and non-ferrous metals Surfix Pro® F10 for measurements on iron/steel
Gauge type	Gauge with separate probe (1 m of fixed cable)
Measuring principle	Magnetic induction method (F-version); Eddy current method (N-version)
Measuring range	0 ... 1,500 µm/60 mils for Surfix Pro® FN, F, N, FN/90° (selectable units µm/mils) 0 ... 10 mm / 0 ... 0.4" for Surfix Pro® F10 (selectable units µm/mils)
Tolerance	± (0.7 µm/0.04 mils + 1% of reading) for Surfix Pro® FN, F, N, FN/90° ± (5 µm/0.2 mils + 1% of reading) for Surfix Pro® F10 (referred to PHYNIX standards)
Resolution	0.1 µm/0.004 mils or < 0.2 % of reading (Surfix Pro® FN, F, N, FN/90°) 1 µm/0.04 mils or < 0.2 % of reading (Surfix Pro® F10)
Display	4-digit display (digit height 10 mm/0.4") and 32 alphanumeric characters; switchable backlight
Minimum measurement area	5 mm x 5 mm/0.2" x 0.2" (Surfix Pro® FN, F, N, FN/90°), 20 mm x 20 mm/0.8" x 0.8" (Surfix Pro® F10)
Minimum curvature radius	convex 2 mm/0.08"; concave 5 mm/0.2" (Surfix Pro® FN, F, N) convex 5 mm/0.2"; concave 16 mm/0.6" (Surfix Pro® F10); minimum tube ID 12 mm/0.5" (Surfix Pro® FN/90°)
Minimum substrate thickness	0.2 mm/8 mils (for F-versions); 50 µm/2 mils (for N-versions) 0.5 mm/20 mils (Surfix Pro® F10)
Calibration methods	<ul style="list-style-type: none"> ■ Factory calibration: no calibration required for standard applications ■ Zeroing (1-point calibration): measurements on small geometries ■ Zeroing and foil calibration (2-point calibration): increased measuring accuracy ■ Two-foil calibration: especially for rough, sand-blasted surfaces ■ CTC: calibration on coated object if zeroing is not possible ■ Zero offset: addition/subtraction of a constant value to/from the reading
Limit values	Selectable; optical and acoustic signal if limit value is exceeded
Scan mode	For continuous measurements; for the quick recognition of coating thickness variations; with permanent display of minimum and maximum reading
Statistics	Single-value statistics: n, \bar{x} , s, $\overline{\text{kvar}}$, min, max, cp, cpk from max. 10,000 readings Block-value statistics: n, $\bar{\bar{x}}$, \bar{s} , $\overline{\text{kvar}}$, min, max, cp, cpk; block size 3 to 100 readings
Data memory	10,000 readings in max. 500 selectable files; alphanumeric file names; stored readings and statistical values individually recallable
Interfaces	Infrared and serial RS232 interface
Language	Operator prompting and documentation in German, English, French (optional other languages)
Operating temperature	0 °C to 50 °C/32 °F to 122 °F (storage temperature -20 °C to +60 °C/-4 °F to 140 °F)
Surface temperature	-15 °C to 60 °C/5 °F to 140 °F (briefly above 60 °C/140 °F up to 150 °C/302 °F)
Power supply	2 x round cell (AA) 1.5 V up to 60 hours of operating time
Housing/keypad	Protection class IP52 (protection against dust and dripping water)
Dimensions	Gauge: 140 mm x 62 mm x 30 mm/5.6" x 2.5" x 1.2" (H x W x D) Probes FN, F, N: dia. 14 mm x 83 mm/dia. 0.56" x 3.3" Probe FN/90°: 8 mm x 10 mm x 180 mm/0.32" x 0.4" x 7.2" (W x D x L) Probe F10: dia. 25 mm x 45 mm/dia. 1" x 1.8"
Weight	approx. 200 g/7 oz (gauge including batteries and probe)
Standards	DIN EN ISO, ASTM, BS

Delivery schedule

- Gauge incl. probe
- Manufacturer's certificate
- Zero standard(s)
- 2 calibration foils
- 2 batteries
- Soft carrying pouch
- Instruction manual
- Plastic carrying case

Optional accessories

- Infrared adapter for printer DPU-414 and PC's
- Portable data printer DPU-414 (RS232 or CENTRONICS)
- RS232-Interface cable 1.5 m
- Calibration foils in various thicknesses from 10 µm to 10 mm/0.4"
- Probe guide for precision measurements
- Compendium of Coating Thickness Measurement

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