

SURFIX® PRO S-CT WITH PROBE F 30-C

Measurement of steel cord conveyor belts to reduce downtimes

Steel cord conveyor belts are often used in continuous operations for transporting piece or bulk goods. The tensile forces are transmitted through steel cables, which are embedded in rubber. The rubber is used to protect the transported goods, but also the steel cables.

Depending on the transported goods the rubber is exposed to heavy wearout. Regular monitoring of the rubber layer and measuring the thickness of rubber on the steel cables thus help to prevent a larger damage. Usual standard methods for rubber thickness measurement are destructive test methods that lead to long shutdowns and can usually only be carried out by external service providers.

To increase availability and lifetime of steel cord conveyor belts PHYNIX has developed the coating thickness gauge Surfix® Pro S-CT with the probe F30-C. After appropriate calibration this system can measure quickly, accurately and nondestructively rubber thickness on steel cord conveyor belts.

Combined with systematic documentation of measurements and their statistical analysis maintenance can be well scheduled and carried out accurately.



Application areas

- + Mining industry
- + Sand and gravel extraction
- + Transport and storage of bulk material
- + Construction industry

Advantages at a glance

- + Non-destructive and fast measurements of rubber thickness
- + No work-intensive splicing or removal of the rubber necessary
- + Scan-modes for detection of especially thick or thin spots
- + Calibration data memory for the application with various types of conveyor belts
- + Reasonably-priced measurement principle without subsequent costs
- + Memory and data interface for systematic wear recording
- + Reduction of downtime

Measurement of steel cord conveyor belts



Surfix® Pro S-CT with probe F 30-C

System for measuring the thickness of rubber on steel cord conveyor belts. Especially suitable for easy wear measurement without interference with the conveyor operation. Measuring range of 0–20 mm.

Technical specifications	Surfix® Pro S-CT with probe F 30-C
Measuring principle	F-mode (magnetic inductive) on iron / steel
Measuring Range	0 – 20 mm
Accuracy	with zero calibration $\pm (0.2 \text{ mm} + 5 \% \text{ of reading})$; with foil calibration $\pm (0.2 \text{ mm} + 3 \% \text{ of reading})$
Resolution	1 μm or $< 0.2 \% \text{ of reading}$
Calibration method	works calibration, zero, one-foil, two-foil calibration; offset: addition/subtraction of a constant value
Statistics	single-value/block-value statistics: n, \bar{x} , s, min., max., Kvar, cp, cpk
Display	4-digits; alpha-numeric; height: 10 mm; backlight
Memory	10,000 readings
Interface	Infrared, RS-232
Operating temperature	0 °C to 60 °C
Surface temperature	-15 °C to 60 °C
Dimensions gauge	137 mm x 66 mm x 23 mm
Dimensions probe	$\varnothing 75 \text{ mm} \times 55 \text{ mm}$
Weight	appr. 550 g incl. probe and batteries
Protection class	IP 52 (protection against dust and dripping water)
Standards	DIN, ISO, ASTM, BS
Warranty	2 years



Delivery content

- Gauge Surfix® Pro S-CT
- Probe F 30-C
- Protective rubber cover
- Carrying case
- 2 batteries AA
- Data transfer software PHYNIX.connect
- Manufacturer's certificate
- Instruction manual