

## Profile measurement system

In the field of quality assurance, e.g. in the tire industry, profile measurements of the tread and sidewall must be carried out.

Sensors or complete profile measurement benches with precision laser and computer systems can be used for this which realize a fully automatic sequence through to the finished output of the required layout.

### Reasons for the optoNCDT system selection

The optical displacement sensors measure reliably and accurately without making physical contact and are therefore wear-free with respect to a wide variety of material surfaces. The sensor can be taught to operate under extreme surface conditions using the digital signal processor.



Pic.: Kurschat GmbH, Buxtehude

### Measurement system requirements

- Measurement range: 30 mm
- Accuracy: 0.03 % of measuring range
- Resolution: 0.005 % of measuring range
- Bandwidth: 10,000 measurements /s

### Ambient conditions

- Temperature: approx. 24 °C
- Medium: Air

### Measurement system setup ILD2000-100

ILD2000-100 Laser-based optical displacement sensor

C2001-3 Sensor connecting cable

PS2000 Power supply unit

Option:

IF2000 Interface card

C2002-10 Interface connecting cable

KH2000 Clamp

Measurement bench

Computer system

Special software

### Requirements on the system

- Thickness measurement range 30 mm
- Measurement accuracy  $\pm 0.1$  mm
- Width measurement range 500 mm
- Measurement accuracy  $\pm 0.1$  mm
- Traversing speed adjustable from 0 - 10m/min.
- System setup according to customer's specification