

Rebound behaviour of the felt

In paper production the paper web is transported over a felt from the screen station to the pressing station. This felt removes the residual moisture from the paper. For water separation the felt passes a defined gap between the central and the suction roller. The wear and the rebound behaviour of the felt determine the hygroscopy and are thus of decisive importance for the paper quality.

Laser-optical position measuring systems monitor the wear at a guide roller. Measuring with two sensors compensates the ovality / stroke of the guide roller. The result of the measurement is the effective thickness of the felt. If the measured value falls below the specified limits of wear, the production can be stopped and the felt can be replaced. Because of the difficult environmental conditions the sensors are installed in a protective housing.

Technical details

- Measuring range: 10 mm
- Accuracy: 0,01 mm
- Resolution: 0,01 mm
- Band width: 10 kHz (-3 dB)

Ambient conditions

- Temperature: up to 40 °C
- Medium:
 - splash water
 - high humidity

Reasons for choosing the system

- Non-contact displacement measuring
- small spot diameter
- long stand off distance
- High accuracy
- High frequency response

