

Measurement system for the flat setting on carding machines

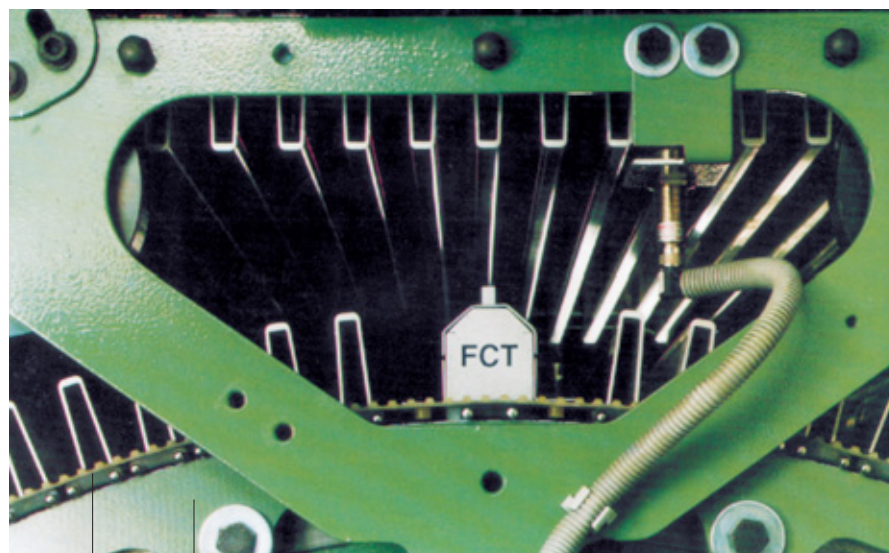
The setting of the distance between the drum and the flat is crucial for carding quality of fibre, e.g. wool. Investigations have shown that manual gap settings with the gauge to the left and right on the carding machine are not equal and that with the machine at standstill slight deviations from the operating conditions arise. The remedy is provided by a measuring flat rod (FCT) with two or three capacitive sensors which is exchanged for a flat rod. The sensors measure the distance to the drum via the drum width. The other distance signals are passed to the PC. The fully automatic measurement sequence eliminates erroneous settings and shortens the setup time. The inspection and documentation of the results facilitates practical quality assurance.

Technical details

- Measuring range: 2 mm
- Accuracy: 0.02 mm
- Resolution: 0.02 mm
- Band with: 0-100 Hz

Ambient conditions

- Temperature: 0-50 °C
- Medium: air
- Measurement against a rough drum surface
- Battery backed operation mode (± 15 VDC, 7 mA)



Flat
Drum

Application

Measurement system

DT 619.04

Single-channel electronic unit, Miniature version,
40 x 80 x 8 mm

Sensor connecting cable 20 cm

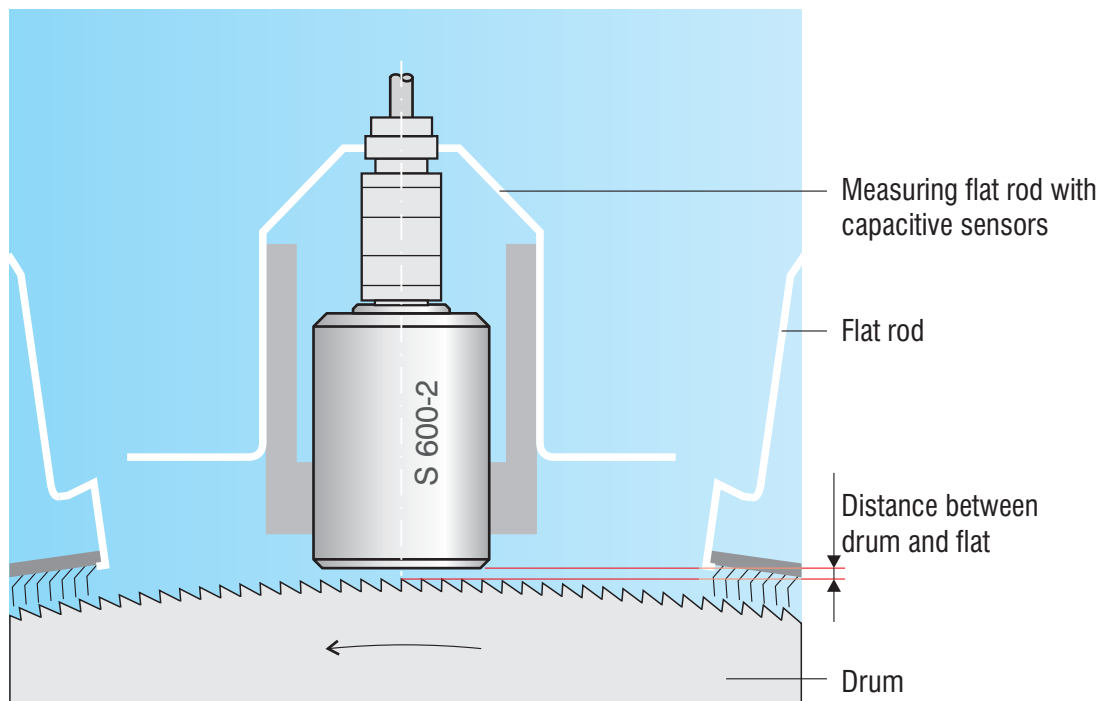
Angled plug

Sensor S 600-2

Reasons for the system selection

- High accuracy and resolution.
- Excellent temperature and long-term stability.
- Independent of material, i.e. constant sensitivity and linearity for all metals.
- Rugged, economical system implementation.
- Easy fitting and use.

Principle sketch



MICRO-EPSILON

Koenigbacher Str. 15
94496 Ortenburg / Germany

Tel.: 0 85 42/1 68-0
Fax: 0 85 42/1 68 90

info@micro-epsilon.com
www.micro-epsilon.com

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