



The quantity and quality of applied spin finish oil is of vital importance in the production of filament yarn. Thereby, the amount of applied spin finish influences the occurrence of static electricity and friction problems in the downstream handling. Efficient and stable production conditions demand for frequent and continuous control of the spin finish amount. In order to get continuous information about the spin finish amount in the ongoing process, the implementation of online spin finish sensors is inevitable.

With Lenzing Instruments online sensor **PROMPT OLF**, continuous and real-time information is given about the momentary relative spin finish amount on the running yarn.

The quick feedback to any spin finish deviations minimizes the amount of downgrades and enables an optimisation of the spin finish consumption. **PROMPT OLF** is both available as a single-end sensor, and as a multi-end unit for multiple yarn ends.

For calibration of **PROMPT OLF** only one reference value is needed, thereby still offering consistently high accuracy and reliability. With its compact and robust design, the sensor is insensitive to any influence of the production environment.

Scope:

Real time online monitoring of the relative spin finish content of running filament yarn.

Method:

As the yarn passes through the **PROMPT OLF** sensor, the relative spin finish content thereof is determined by means of conductivity based technology.

Results:

The results presentation of the received sensor signals depends on if **PROMPT OLF** is used together with a PC system or a PLC. If the parameterisation of the sensor signals is done via a PC, the results will be presented in the PROMPT Visualization software, which offers numerous analysis possibilities. If the parameterisation is done via a PLC, the active sensor status is given by means of the LED display of the sensor and digital signals.

Measuring ranges:

0.05 - 3 %

Resolution:

0.001

Yarn speeds:

60 - 8000 m/min

Sampling rate:

1.6 kHz

Spin finish pins:

Conductive ceramic pins

Measuring principle:

Conductivity

Evaluation and control unit:

PC with Windows® based software

Data communication:

CAN bus from the PROMPT OLF sensor to the bridge box and Ethernet from the bridge box to the PC

Input voltage range:

5 - 24 VDC

Temperature range:

15 - 45 °C

Relative humidity:

Max. 90 %, not condensing

Protection class:

IP 65

Dimensions:

Depends on the number of ends

Housing:

Synthetic material

Technical data and pictures are subject to change.