# **FRAY VIEW**

# YARN DEFECTS VISUALISATION



Sometimes, you need more information about detected yarn defects than total number of defects, their position and various statistical data.

Lenzing Instruments **FRAY VIEW** offers not only the above mentioned information, but also the possibility of analysing an image of each defect.

**FRAY VIEW** combines the advantages of a **PROMPT FFD** sensor with a high resolution digital CMOS area camera.

Broken filaments or fluff are detected by the **PROMPT FFD** sensor. Each detected event triggers the integrated camera to generate a separate image of each defect.

The images give yarn producers a sophisticated tool for thorough problem analysis and further action taking towards improved product quality.

The optical **PROMPT FFD** sensor is characterised by its ability to detect both broken filaments and fluff, with a clear distinction between the two kinds of defects. It is suitable for all kinds of production environments thanks to its fully encapsulated design.

**FRAY VIEW** is the ideal equipment for circumstances when more thorough defects analysis is needed.

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# **FRAY VIEW**

## YARN DEFECTS VISUALISATION

### Scope:

Image analysis of broken filaments and fluff by means of a combination of the optical **PROMPT FFD** sensor and a high resolution digital CMOS area camera.

### Method:

The filament is guided through the **PROMPT FFD** sensor, which features 6 light barriers with fault trip level selectable at 3; 4,5 and 6 mm from the yarn. One central light barrier is used for fluff classification. The intelligent sensor performs the calculation (evaluation) and the sensor status is displayed via two LED lights.

Each time the sensor detects a defect, the camera is triggered automatically and an image is captured.

### Results:

The FRAY VIEW software displays the captured images in real time. Each event is also graphically displayed as a function of winding length or winding time. Additionally, results analysis can be carried out in the PROMPT FFD software, which offers both real time monitoring as well as statistical evaluation of the measurements.

The measurement data are communicated to the PC via the FRAY VIEW bridge box.

Detection range:

Broken filaments down to 5 µm

Production speed: Up to 8000 m/min

Fault trip level 3; 4.5; 6 mm from the yarn

Illumination:

Flat LED lamp (white)

Observed image area:

30 x 22 mm

Yarn guide:

Ceramic (exchangeable)

Evaluation and control unit: PC with Windows® based software

Data communication:

Can BUS from PROMPT FFD to bridge box and Ethernet from bridge box to PC

Ethernet from FRAY VIEW camera to PC

High speed digital signal from PROMPT FFD to flash control unit

FV box configuration:

• 1 connection for communication with FRAY VIEW Ambient conditions:

15 to 50 °C

max. 90 %, not condensing

Protection class:

IP 67

Dimensions:

FRAY VIEW:

Height: 160 mm Width: 100 mm Depth: 200 mm

WHEELED CASE:

Height: 604 mm Width: 473 mm Depth: 283 mm

Note: FRAY VIEW is also available as laboratory system with a yarn take-off unit (FRAY VIEW LAB)

Technical data and pictures are subject to change!





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