

## Quality Monitoring Technical and Industrial Yarn

**The monitoring of the mechanical quality of all technical yarns is essential, to guarantee performance in both downstream processes and end use applications.**

**Fibrevision are pleased to be able to offer the 2 leading Quality Monitoring Systems for Technical Yarns, offering users the choice between a long established system dedicated to Broken Filament monitoring and an advanced system providing a fuller range of yarn characterisation.**

### FRAYTEC

The original market leading Broken Filament monitoring system with over 8,000 sensors installed worldwide

### FibreTQS

An advanced multi-parameter monitoring system, providing measurement of Interlace, Denier Variation and Slubs in addition to Broken Filaments

The key features of each system are highlighted below.

## Fraytec MV

**The Fraytec sensors have been in use for many years in Technical Yarn production and processing and the reliability has always been an outstanding feature.**

**Fibrevision Fraytec MV (Multi-Vision) is a complete new system concept for this tried and tested system, with innovative technology for sensors and data processing.**

### Sensor Technology

Key Sensor Features are:

- Fully encapsulated sensors (IP64) for Industrial applications combined with a compact design for easy machine integration.
- Broken Filaments down to 5µm detected at distances of 3, 4.5 or 6mm from the yarn at speeds up to 8,000m/min
- Auto-adjustment of sensitivity with alarm output in case of contamination.
- LED display for quality and operation status
- Optionally equipped with a self cleaning device for extreme environmental conditions



### Benefits

Substantial improvement in the Quality by:

- Identification of quality trends that allows preventative maintenance to be more effectively planned
- Control of extreme positions reducing overall quality variation
- Rapid Identification of repeating faulty threadlines

Cost benefits to the customer are:

- Reduction of Claims
- Maintenance Optimisation
- Improved Process Performance
- Elimination of Testing



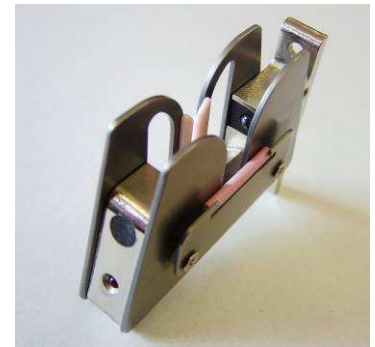
## **FibreTQS**

**Fibrevision FibreTQS for Technical & Industrial Yarns is a unique advanced multi parameter monitoring system for the Industrial Extrusion Process, providing very accurate absolute data that offers clear benefits for the user in terms of excellent correlation with downstream performance.**

### **Sensor Technology**

Key Sensor Features are:

- Measurement of:
  - Interlace
  - Broken Filaments
  - Slubs (large Broken Filament events with the filament wrapped around the yarn)
  - Denier Variation
- Differentiation of Fault Sizes
  - Broken Filament Size - sensitivity can be adjusted in normal setpoint / merge files.
  - Slub Measurement – differentiates between normal Broken Filaments and the larger Slub events.
- Robust Compact design
  - Fully Protected from Yarn Damage
  - Fully integrated in to the threadline of extrusion equipment for easy operation with minimum guide contact
- Maintenance Free
  - Automatic Contamination compensation, cleaning is not required in most processes
  - Integrated health monitoring
  - Fully Encapsulated design
- Not prone to false counts caused by waste or contamination - only faults running at yarn speed counted.



### **Benefits**

**Substantial improvement in Quality due to excellent correlation of FibreTQS data with downstream performance, due to:**

- Differentiation between faults of different sizes, specifically between Slubs and Broken Filaments
- No False Broken Filament Counts from Contamination /Debris
- Accurate Interlace Measurement, ensuring yarns with low or variable Interlace are downgraded.

Additional benefits include:

- Fully Automatic Package Grading with full quality reports for each package.
- Full Quality Monitoring Software
- Process Improvement Tools

The Overall result is

- Substantial improvements in downstream processing, including:
  - Higher Operating Efficiencies with lower break rates
  - Lower levels of Off Quality
  - Excellent Return on Investment
  - Lower Total Costs