Sensoptic Vision

A picture is worth a thousand words.
Sensoptic Vision
Are you ready to see the invisible?

THE GAME CHANGER IN THE WORLD OF WIRES AND FILAMENTS QUALITY CONTROL

Sensoptic Vision is the first system that captures instant photographs of small imperfections running at high line speeds, ideally suited for automatic quality inspection in production machines and in test winding stations.

Main features

- High line speed up to 1000 m/min
- Quality image 5 megapixel sensor
- Microscopic visualisation 10 µm resolution
- Intelligent software user-friendly operation
- Easy integration in production machines
What if you could certify the quality of your spools 100%? What if you could observe faults continuously during production in order to fine-tune your process? Now you can.

It's all about automatic and objective quality certification vs. subjective time-consuming visual inspection under the microscope.

**Round and flat targets**
- bare and coated wires
- mono- and multifilaments
- medical sutures and tubing
- optical fibers and cables

**Type of imperfections**
- lumps, neck-downs
- blisters, bubbles
- coating dropouts
- scratches, contusions
What does all the magic.

Sens optic Vision is composed of an optical Profile Sensor PXL for fault detection, a camera unit with an ultra fast LED flash for image recording, a Network Controller unit for electronic signal processing and a computer with Sensoft Vision software.

**PROFILE SENSOR PXL**

Our technology is based on light intensity shadow measurements and employs LED sources instead of lasers. Since it has no moving parts, it is more reliable, requires lower maintenance and benefits from a longer lifespan.

Features:

- Non-contact detection in 2 planes
- For round and retangular targets
- For targets sizes up to 5mm
- Line speeds up to 2500 m/min
- Micrometric resolution of defects
- Unaffected by intense stray light

**CAMERA UNIT**

Ultrafast instrument to record high quality images of microscopic defects in one plane. With a dual-camera configuration, it is possible to record images of rectangular wires from two opposite directions, to observe all four sides.

Features:

- Instant photos at 1000 m/min
- 5 megapixel image resolution
- Ultrafast power LED flash
- Adjustable zoom magnification
- Precision roller guides setup
- Integrated line speed encoder
SENSOFT VISION

Intuitive software to manage the complete measuring system.

Features:

- Ultrafast data acquisition and data visualization software
- Intelligent detection of faults beyond specified threshold values
- Display of pictures and graphs of all detected defects
- Automatic data recording and data saving for post-processing
- Elaboration of comprehensive statistics of measured spools
- Reload options of past recorded results for spool comparison

NETWORK CONTROLLER

Advanced electronic unit to control Sensoptic Vision system including hardware for data acquisition, input connection to communicate with a Profile Sensor, flash unit interface, encoder connection and Ethernet connection to a personal computer.

Features:

- Ultrafast data acquisition
- Reconfigurable FPGA
- Real-time processor
- Integrated linear power supply
- Digital inputs and outputs
- Output USB or PCI connection
- Ready for network integration

NETWORK CONTROLLER FOR ONE OR TWO CAMERA UNITS
Do you want to reduce costs by minimizing rejects?

Thanks to Sensoptic Vision, you can now certify the quality of all your spools before delivery!

Do you want to improve your production yield?
Thanks to Sensoptic Vision, you can now adjust and optimize your manufacturing process in real time!