

## FILA INSPECT

### FIBRE INSPECTION WITH MULTI-DIRECTIONAL ILLUMINATION

Complex carbon fibre textiles possess specific optical properties which make their automated optical inspection highly difficult. Conventionally used vision systems are not able to inspect these dark-grey or black colored and highly reflective fibres. FILA INSPECT, the imaging sensor system with multi-directional illumination engineered by PROFACTOR skillfully masters these challenges. Through a combination of multiple individual images, position and orientation of fibres as well as seams can be calculated exactly. The built-in laser line provides the possibility to simultaneously record the 3D-profile.



FILA INSPECT inspecting a carbon fibre mat

#### Your Benefits

- Constant product quality through inline inspection systems
- Compact and robust casing
- Flexible programming
- Fibre analysis, visual and 3D measurement with only one camera

#### Applications

- GRP/CFRP (carbon fibre/glass fibre reinforced plastics)
- Technical textiles with and without seams
- Tyres, wood fibres, etc.

#### Technical Data

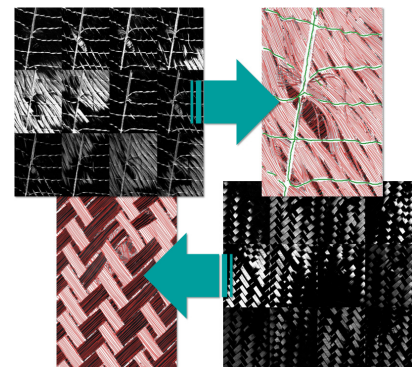
- CMOS sensor, 200 pictures/s, 1024 x 300 pixels
- 120 high-performance LEDs (programmable depending on the application)
- Line Laser for 3D measurements
- Analysis based on industrial PC: 20 processed images/s
- Maximum inspection speed: 200 mm/s
- Dimensions: 210 x 190 x 140 mm (W x H x D)
- Field of View: 30 x 30 mm
- Optical resolution: 0.1 mm

#### Target Group

- Automotive
- Aerospace
- Lightweight construction
- Racing and sailing



FILA INSPECT in bottom view



Single pictures and calculated position/orientation: stitch bonded carbon fibre (top) and woven carbon fibre (below)

#### Contact

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