

- fully integrated without control cabinet
- complete 100%-inspection / protocol
- extreme reliable warp thread tracking



Founded in 2000, **opdi-tex** acts as competent and innovative technology partner for the industry in the field of intelligent image processing. We are specialized on integrated machine vision and develop customized camera solutions that are optimally matched to your requirements.

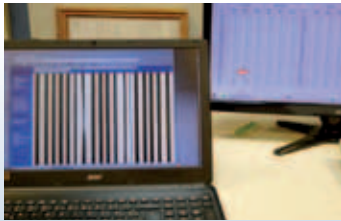
opdi-tex

Multi Thread Checker by **opdi-tex**

Your Technology Partner

Wir bringen Maschinen das Sehen bei

Threads form the base of all textile processes. Their quality decisively determines the quality of the final product. Whether in thread manufacturing or in processing machines – the timely and completely monitoring of the very numerous threads ensures quality and throughput. **Easy, fast, reliable, optical, opdi-tex!**



Capturing of:

- ✓ thread breakage
- ✓ grain
- ✓ burl / loop
- ✓ flipping on ribbons
- ✓ optional thickness measurement with variance
- ✓ optional width measurement for ribbons

We support our customers in a variety of automation tasks: from optical quality control, product tracking in flow production, measuring, inspection of products and stereo vision up to methods to increase productivity.



As individual ideal solutions for you, we completely produce all applications cost-effectively with TÜV Süd certified quality management according to ISO 9001:2015 in the vicinity of Munich: from the opto-electronic sensor to programmable logic and SoC-based hardware up to evaluation and user interface.

We teach machines to learn, spot and understand!

More than 2000 of our systems are used successfully in different industries worldwide and are often applied under the name of our customers in the production of:

- food & sweets
- packaging
- automobiles
- pharmaceuticals
- paper and foil printing
- woven textiles

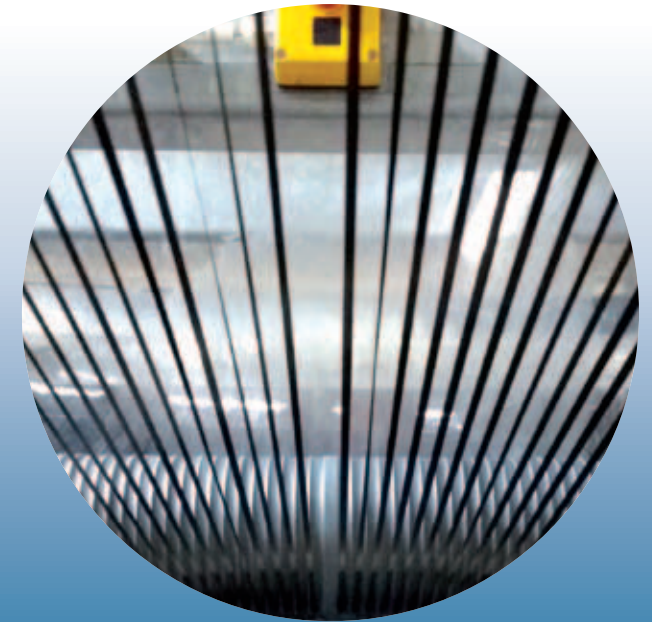
Contact

Karl-Ludwig Schinner · CEO & owner
+49 (0)171 468 35 93 · k.schinner@opdi-tex.de

Ralf Schimanski · sales / project support
+49 (0)176 10 32 72 05 · r.schimanski@opdi-tex.de



opdi-tex GmbH · Gewerbering 9 · D-86922 Eresing
+49 (0)8193 937103 · info@opdi-tex.de · www.opdi-tex.de



Intelligent
Image Processing
System Solutions

for **Textile Industry**

Textile Applications

The sensor is designed for an easy installation in your system. Due to its robustness, it is suitable for use in rooms exposed to carbon or fiberglass dust as well as for threads with sizing. It works **independently** and without influence of **thread colors** and **ambient light**!

Warp beam production

During the production of a warp beam the threads are checked and counted continuously. During operation, the collection is stopped when a thread break occurs. Short-term touches between threads are allowed.

Safety light barrier

The number of threads has to be constant at several points in production. Missing threads must lead to an error. If the number of threads deviates for a defined time, an alarm and an output of the broken place as a picture will be triggered.

Carbon production

For laying carbon ribbons, their position and width are checked. Broken edges, flip of the track are also recognized and reported as splice or lint.



Materials:

Suitable for cotton, synthetic fiber, carbon and glass fiber, also ribbons made of these materials

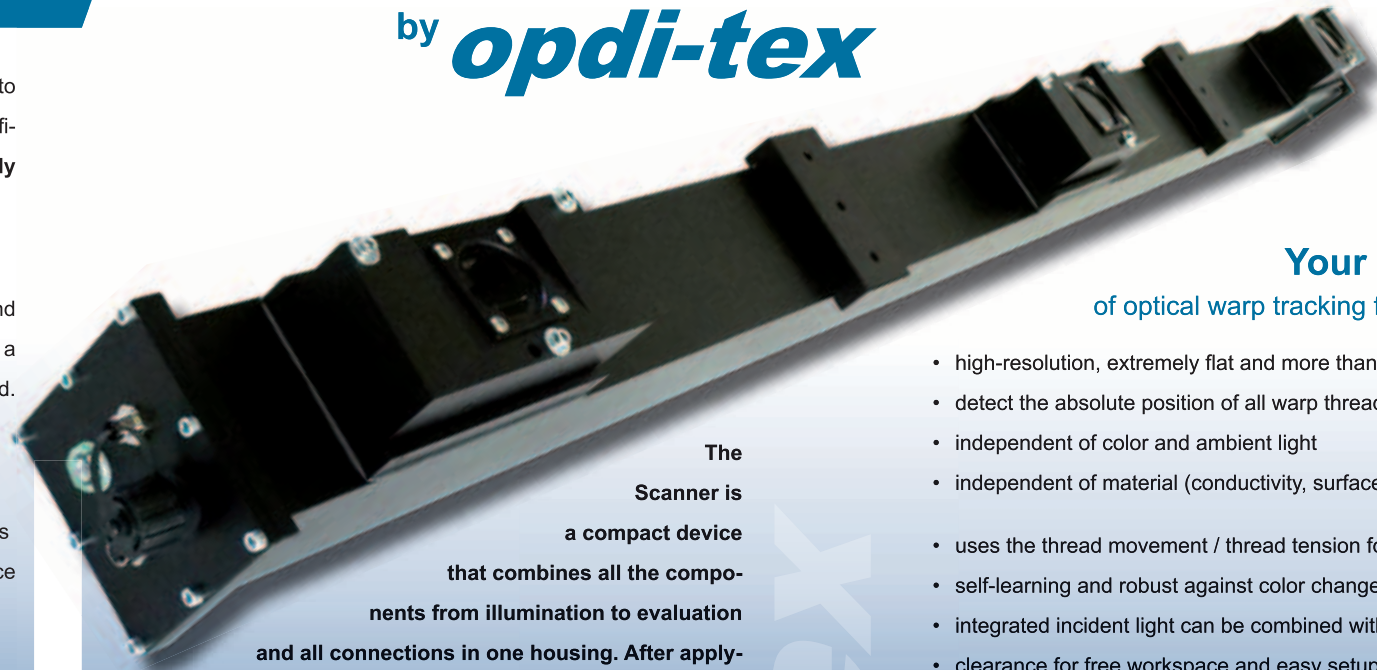
Number of simultaneously monitorable threads > 1000

Thread diameter:	minimum 0.1 mm
Thread distance:	bigger than 0.2 mm
Thread color:	arbitrary, also mixed possible

Technical Data

Multi Thread Checker

by **opdi-tex**



The Scanner is a compact device that combines all the components from illumination to evaluation and all connections in one housing. After applying a 24 V/DC supply voltage and a rotary encoder signal, the result is available via Ethernet and local signal.

Thousands of threads up to 2500 mm width can also be controlled simultaneously with up to 3 kHz sampling frequency – reaction time less than 0.1 sec.

Mode of operation: Scanner FS 2500

- optically aligned line scan cameras, contactless
- only one passive external reflector

Working width:	2500 mm, alignable and scalable
Working distance:	1000 mm / depth of field up to 100 mm
Dimensions:	ca. 250 x 150 x 2000 mm, 15 kg
Power supply:	24 V, 1 A
Type of protection:	IP68
Interface:	Vcc (24 V/DC), rotary encoder, Ethernet

Your advantages

of optical warp tracking from opdi-tex are:

- high-resolution, extremely flat and more than 2 meters wide
- detect the absolute position of all warp threads
- independent of color and ambient light
- independent of material (conductivity, surfaces, ...)
- uses the thread movement / thread tension for breakage detection
- self-learning and robust against color change
- integrated incident light can be combined with IR transmitted light
- clearance for free workspace and easy setup

Quality Control & Quality Assurance

Output:

- adjustable result information, with an external module also a programmable digital signal
- direct control connection and logging
- browser access for an easy operation, language independent by using symbols

The result can go directly to a PLC or other controller. The extremely simple setup and high reliability allow it to be used as a measuring device for a closed-loop and also for 100%-logging to increase the value of the final product.

For more information give us a call or visit

www.fadenkontrolle.de