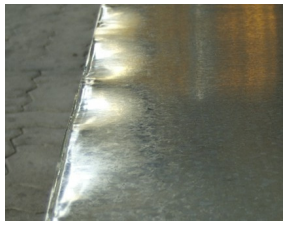
Our Products/Services at a Glance

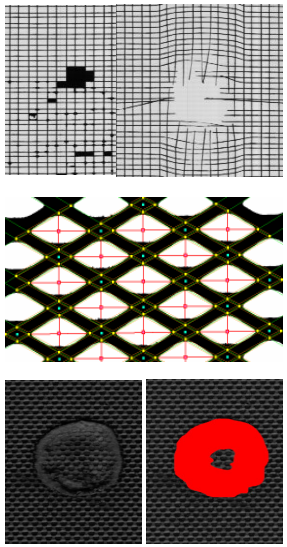
Optical 3D-Measurement Systems

- On-line 3D-measurement of endless material or objects with low curvature (flatness controll)
- Measurements of dents and waviness
- 3D gap measurements



Optical 2D-inspection

- Inspection of coarsely meshed fabric to detect weft and warp defects, holes, adhesive residue, foreign objects, etc.
- Inspection of punch and stretch metal, filter pads etc. Measurement of geometry data, e.g. mesh or knot size, mesh angle, open area ratio
- Inspection of uniformly and periodic textured fabric
- Position-, part- and pattern-recognition, control of completeness, defect analysis



Technical Consulting

- Analysis of optimization potentials
- Generation of requirement profiles
- Market analysis and determination of best suited products

Service und Maintenance

- Fast and reliable customer support
- Remote diagnostics

Customers Advantages

Quality

- Quality control at speeds, which exceeds the capability of the human eye
- Quality control of incoming material, the production process or the finished product
- Verified product control, reproducible and objective

Costs

- Rationalization of manual/monotone and tiring Inspection
- Prevention of following, cost intensive process steps for defective products
- Reduction of returns

Time

- Recognition of defects at an early stage
- Automatic protocol creation
- On-line statistcs

Achievements

Contacts

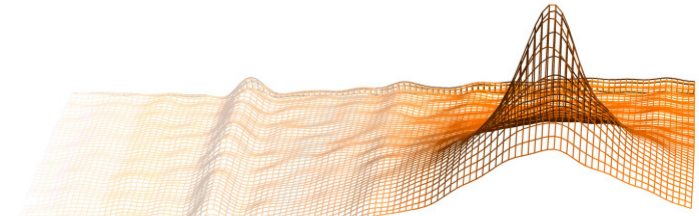
OSIF GmbH
Hollerithallee 17
D-30419 Hannover

Phone: (+49) 511 - 590135-25
Fax: (+49) 511 - 590135-26
EMail: info@osif.de
Web: www.osif.de

OSIF GmbH

Optical Sensor Techniques for Inspection und Form Recognition

OSIF GmbH



Have a look at our Homepage!

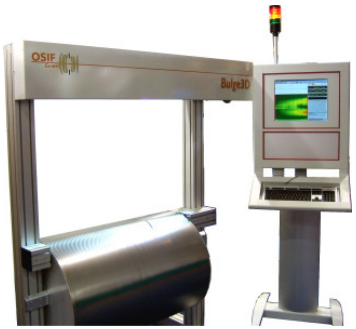
OSIF GmbH

Optical Sensor Techniques

For Inspection and Form Recognition

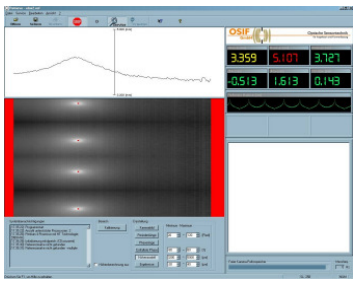
Optical 3D-Measurement Systems

OSIF's Bulge3D is a 3D flatness measurement system for production integrated and on-line flatness control of endless material or objects with low curvature. The system can measure local deviations like bumps, dents and waviness with an accuracy down to 30 μm. The measurement object can thereby vary from metal surfaces to all kinds of non-glossy and non-transparent material like paper, ceramics or plastic.



Demonstrator of the Bulge3D: **To test our customer's products in our laboratory, we mount the products on the drum of our demonstrator. With the rotation of the drum we can simulate the measurement of endless material and test the detection of periodic defects.**

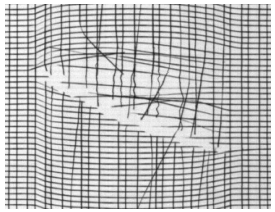
The very scalable system can measure in its standard setup a strip width of 1 m with a scan rate of up to 1300 cross-profiles per second. For this measurement Bulge3D uses the principle of optical triangulation. It incorporates a new evaluation method called static stripe projection.



Display of the cross-section and the topological data as well as defect mapping with the program Retrieve

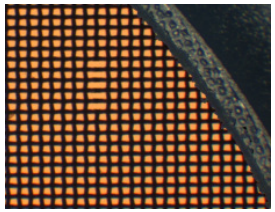
The objects to be measured are passed under a gate, and the projected strip pattern is digitised line by line. Based on the stripe pattern, a digital topographic map of the component is calculated and analysed. Every detected defect is shown in a colour shaded view of the measuring data. The main unique feature is the usage of one single, immutable stripe pattern, which enables the system to reach such a high performance and robustness against vibrations of the measured object.

The GridInspector is used for optical, contact-free inspection of coarsely meshed enless fabric. Typical inspection products are reinforcement fabrics and wire-cloth. The defect spectrum encloses holes, missing weft and warp filaments, foreign objects, frayed edges, etc.

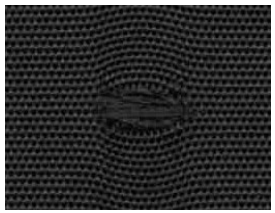


Optical 2D-Inspection Systems

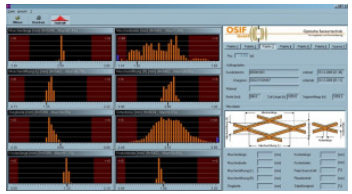
The MeshInspector has been developed for the measurement of wire-cloth, punch and stretch metal, filter pads, etc. Typical mesh parameters like mesh or knot size, mesh angle and open area ratio can be measured.



Our TexInspector is the third system in the inspector series. It can be used to identify deviations in Objects with a and regular texture.



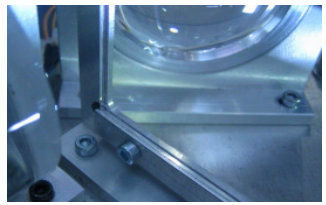
Another feature of the Inspector-Series is the possibility of the statistical analysis of the recorded data. This analysis can either be done with our add-on toolbox with fixed statistical algorithms or with our export filter to save the recorded information in a MS-Excel® readable format. This enables the customer to program special analysis like time series, material series or trend analysis himself.



Many customers have particular applications. To meet their requirements the OSIF develops customer specific measure- ments or inspection systems. Our focus hereby lies on geometry measurements, position-, part- and pattern- recognition, control of completeness and defect analysis.

Customer-Specific Systems

Production lines and project definitions often differ from customer to customer. In many cases a suitable standard system is not available on the marked, leaving the customer to look for customer specific solutions. In this case it is usually very difficult for the customer to find the right solution to his problem, due to the lac of specific technological knowledge in the field of optical measurement and inspection systems.



Technical Consulting

The OSIF therefore offers the analysis of optimization potentials, the preparation of system specifications, marked analysis and determination of the best suited product (independent of the OSIF products) as consulting service.