



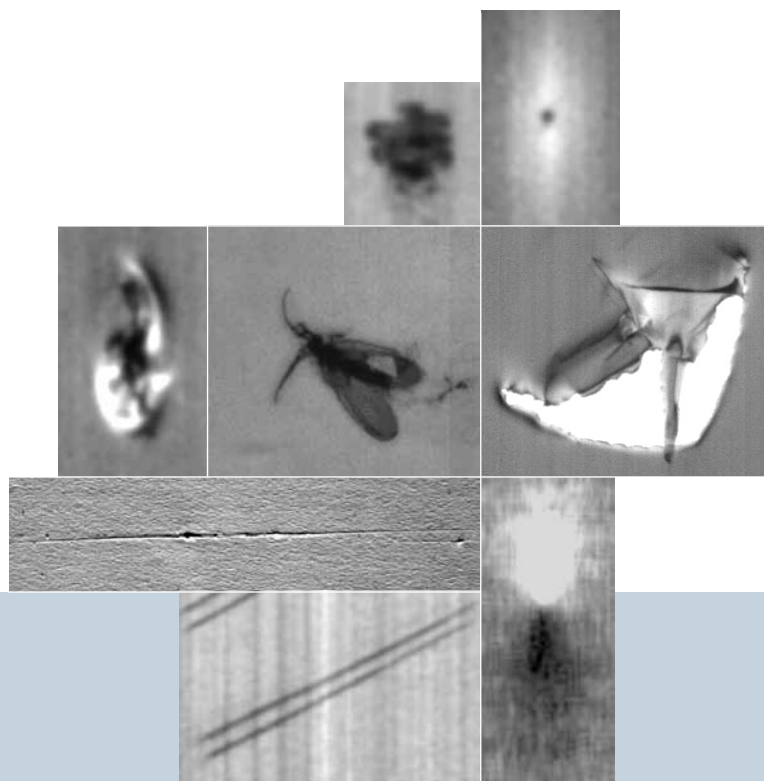
**VITRONIC**  
machine vision people

Technical Information

INDUSTRY

## **100 Percent Quality Inspection of Continuous Web Material Plastic, Metal, Paper and Textiles**

- **Defect classification for satisfied customers**
- **Optimization of production processes**
- **Reduced costs**



## 100 Percent Quality Inspection of Web Material

### VINSPEC<sup>web</sup> optimizes quality and manufacture

The vital factor in the production and processing of continuous web material is uniform and faultless quality, and the key to success here is fully automated optical quality inspection. With VITRONIC technology, material can be classified in continuous production to achieve satisfied customers: defects are recognized, and this obviates the need for customer returns. The clear and detailed quality inspection of the web also allows the production process to be optimized and reduce production costs.

Your expectations of an inspection system are that it will meet your individual requirements and needs, be simple to operate and be easily integrated into your existing production line.

VINSPEC<sup>web</sup> is the solution: flexibly adapted to individual requirements it recognizes all relevant defects. The standard system inspects webs fully automatically and with 100-percent coverage. VINSPEC<sup>web</sup> is equipped with the fastest line-scan camera and can be integrated easily into existing production machines, even those operating with high product speeds. Our customers receive turn-key systems from a single source, including both hardware and software.

#### Frequent types of defects

- Holes
- Fisheyes
- Scratches
- Cracks
- Grooves
- Dents
- Imprints
- Thin spots
- Changes in transparency



## Inspection system classifies all types of defects

VINSPEC<sup>web</sup> recognizes all relevant defect types from a size of 10 µm upwards. It assesses every individual defect against more than 60 criteria and places it in a defect category. Individual training enables flexible adaptation of the defect categories. You will thus find it easy to separate genuine defects from pseudo-defects. The integrated defect database will further help you to optimize your production process.

## Inspection report for customers

VINSPEC<sup>web</sup> supplies all the relevant information in real time, characterizes and exactly describes the position of each defect. With the aid of the accumulated data you can provide each of your customers with an individual defect report. You can select the defect categories that are relevant and are to appear in the report. The obtained results are stored securely. Identified defect locations can be optionally marked on the web.

## Defect statistics: basis for process control

Your production can be monitored and optimized with the aid of easily readable displays and report layouts. VINSPEC<sup>web</sup> reports defects immediately and enables you to swiftly intervene in the process. Statistics are continually updated with new data and form the basis for systematically improving product quality.

## Interface

VINSPEC<sup>web</sup> can be interfaced to various subsequent production equipment, for instance to lengthways or crossways cutting equipment or marking systems. If the product speed is altered for production reasons, the inspection system automatically adjusts its line-scan camera to ensure synchronization with the process.

## Realization

VINSPEC<sup>web</sup> inspects either one or both sides of the web. The system is adaptable to transparent or opaque material. We select the type of lighting and its arrangement relative to the sensor in such a manner that defects are contrasted. For this we use high-power LED line illumination or cold light sources with cross section converters. We adapt the standard VINSPEC<sup>web</sup> system to meet your individual needs. Special housings are available for rugged environments.

### Quality inspection and web speeds

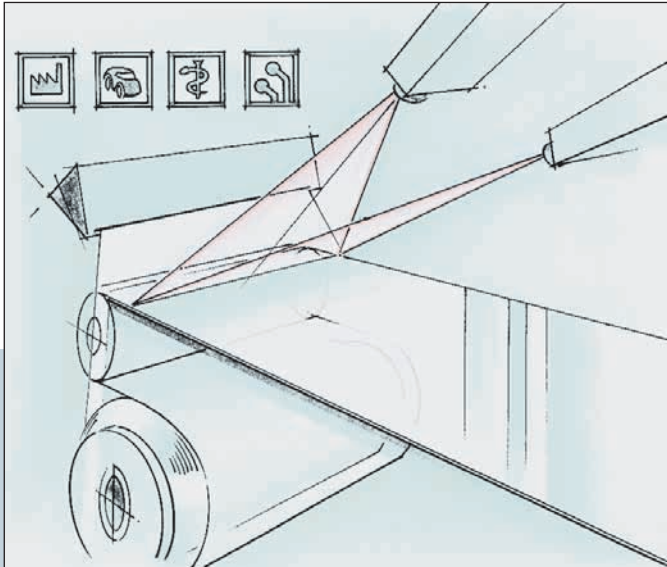
plastic: > 200 m/min  
metal: > 600 m/min  
paper: > 1000 m/min  
textiles: > 100 m/min

### Industries

Packaging  
Pharmaceuticals  
Medical equipment  
Food  
Automotive  
Electronics



**VITRONIC**  
machine vision people



## **VINSPEC<sup>web</sup> at a glance**

- 100-percent quality analysis
- Adapted illumination for optimized defect detection
- 160 MPixels/second image throughput
- Four parallel tracks
- Web widths of up to 6 meters
- Trainable classification
- Defect images and statistics
- Individually preselected customer reports
- Remote maintenance

### **VITRONIC**

Dr.-Ing. Stein  
Bildverarbeitungssysteme GmbH  
Hasengartenstr. 14  
D-65189 Wiesbaden  
Fon +49 (0) 611-7152 - 0  
Fax +49 (0) 611-7152 - 133  
[www.vitronic.com](http://www.vitronic.com)  
[sales@vitronic.com](mailto:sales@vitronic.com)