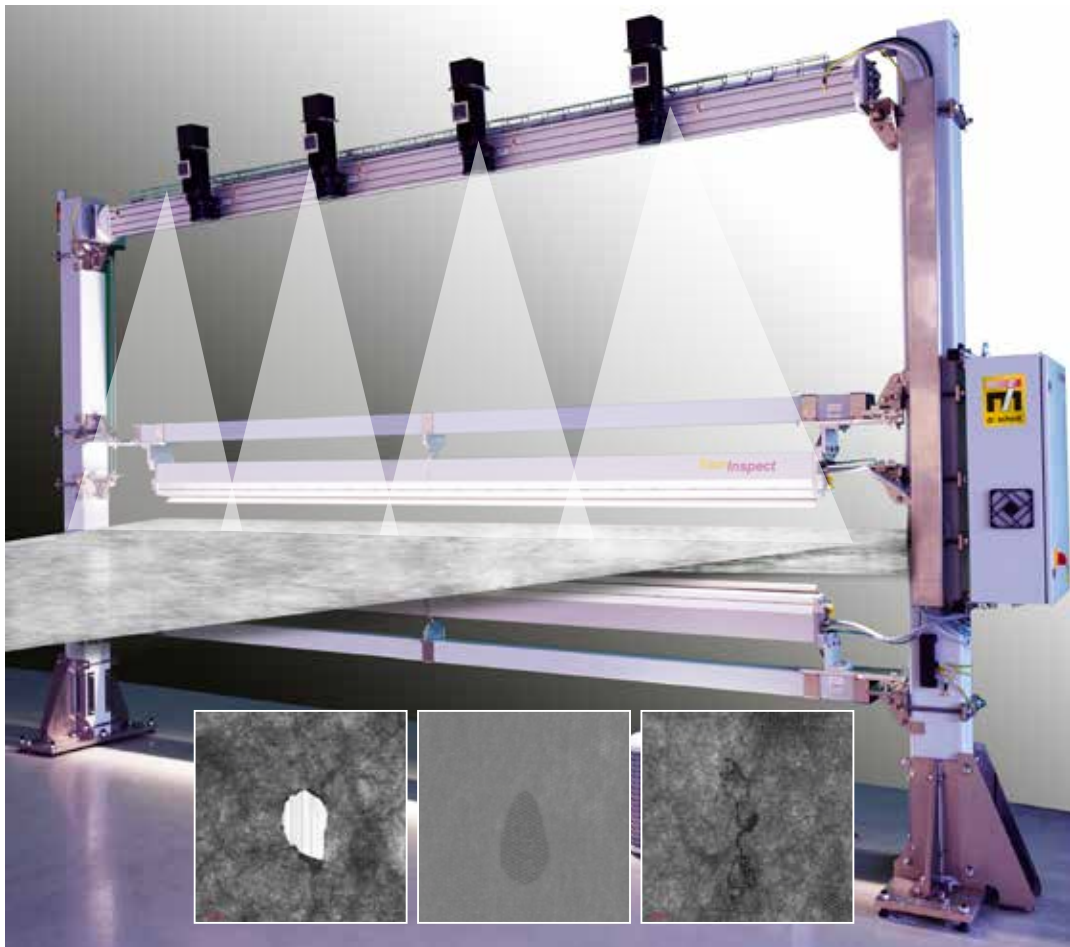


# EasyInspect & EasyMeasure



## The Complete Inspection Solution



Nonwovens

### Automatic Process & Quality Control for Nonwoven Material Rolls



# EasyInspect & EasyMeasure

## BENEFITS

### Nonwoven expert configuration

- From basic transmission configuration to unique optical configuration with ABI and Virtual X-Ray (developed by Dr. Schenk)
- Reliable detection of defects and deviations with MIDA (Multiple Image Defect Analysis)
- Easy integration: small footprint requirements
- Inspection speed: up to 2,500 m/min with ultra-high-speed, dual-line camera
- Can be easily upgraded for new market requirements

### High-quality data

- MIDA: multiple high-resolution views
- AI-supported image analysis with MIDA X
- Highly accurate classification using machine-learning algorithms

### 100 % EasyMeasure product monitoring

- Add EasyMeasure for full web monitoring, such as base weight, using the same hardware

### Data management and connectivity

- Open SQL database stores defect information and monitoring data
- Interfacing for communication with MES, SCADA, OPC UA, etc.



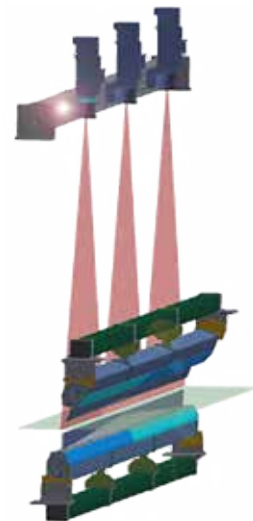
## Expert inspection technology for nonwovens

### Adaptive Background Illumination (ABI)

ABI is a Dr. Schenk solution tailored to the specific demands of nonwoven inspection: finding contaminations of lowest contrast and smallest sizes, undetectable by conventional methods. ABI can be adapted to entire product ranges, for example high and low grammage and different colors.

### Virtual X-Ray

Virtual X-Ray is the Dr. Schenk solution for finding smallest inclusions and foreign particles, undetectable by conventional methods. By using ultra-high-power LEDs, Virtual X-Ray is able to find even the smallest particles in a product, independent from their location: on the top side, inside it or on the material's bottom side.



*Inspection configuration from  
The Inspection Expert:  
multiple optical channels for different  
views and comprehensive information  
about defects*



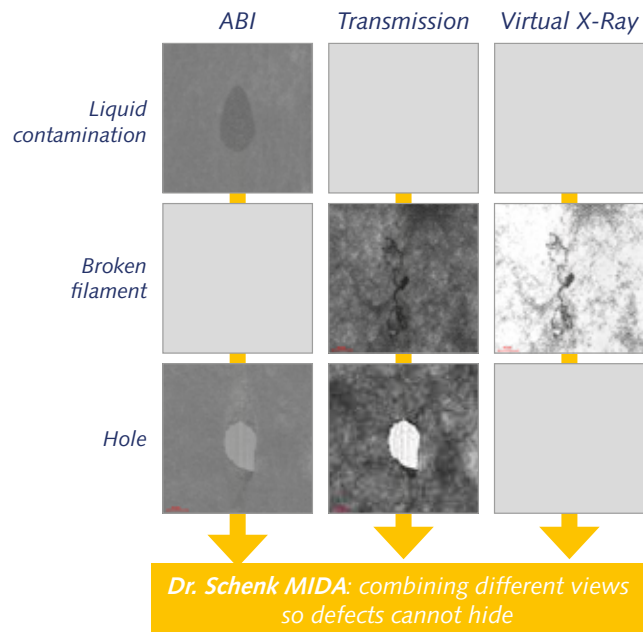
# Ensures Quality, Improves Your Process

## Multiple Image Defect Analysis (MIDA) ensures high-quality data

MIDA technology – developed by Dr. Schenk – multiplexes between different illuminations (ABI, Virtual X-Ray, transmission) at ultra-high speed and with highest production performance. It generates multiple high-resolution views of a product, ensuring that every defect in the product is found.

Dr. Schenk's unique MIDA Technology identifies every defect reliably while intelligent Dr. Schenk algorithms optimize their classification.

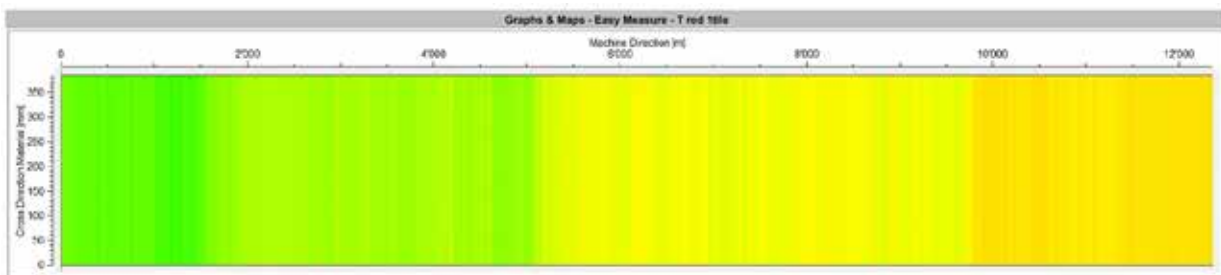
To learn more about intelligent image analysis with MIDA X using deep-learning, machine-learning and intelligent classification, contact the Dr. Schenk sales team today!



## EasyMeasure monitoring

Grammage and formation are the key properties for a nonwoven product. EasyMeasure monitors these properties for the complete web surface. Using more than 65.000 gray levels of resolution, it indicates variations easily and with high dynamic range.

Any variation from target values is called to attention by a user defined action, for example display, alert, reporting, or others.



Grammage monitoring: EasyMeasure false color grammage maps offer immediate visual representation of the product quality during production

## Data management & connectivity

Dr. Schenk provides a large variety of interfaces for connecting to SCADA, MES and other units in the production process. Users can make the acquired process data available by merging the data from the Dr. Schenk open SQL database for further evaluation or simply using the archiving function for data backup and long term storage.

Your Reliable Partner



*Dr. Schenk's production site*

Dr. Schenk GmbH, established in 1985, is an innovative high-tech company based near Munich, Germany. Dr. Schenk develops, produces and markets optical inspection and measurement solutions for automated quality assurance and production process monitoring. This includes high-quality, customizable handling solutions. The systems are a key success factor in the making and converting of many materials, e.g. plastics, nonwovens, textile materials, paper, metal, or glass, or a multitude of markets like display glass, automotive, packaging, medical, renewable energy, and many more.

Throughout the world more than 300 Dr. Schenk employees continue to set new standards for inspection. Over 18,000 m<sup>2</sup> of modern, cleanroom-capable production and testing facilities are available to research, development and production to apply cutting-edge optics and electronics to customer applications.

Dr. Schenk offers extensive from-lab-to-fab knowledge. Customers benefit from the expertise in the translation of lab applications to large scale productions. Sophisticated handling solutions complete the one-stop-shopping experience.

The company's objective is complete customer satisfaction. This is achieved through innovative and practical solutions that can be implemented into new and existing production lines. Local sales and service facilities around the world ensure fast support, technical service, training and consulting at any phase of a project.

From modular standard units to highly customized systems – Dr. Schenk's solutions have your material in focus!

For more information: [www.dr.schenk.com](http://www.dr.schenk.com)

## **YOUR MATERIAL IN FOCUS**

*Advanced Machine Vision  
Solutions for Quality Control*



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