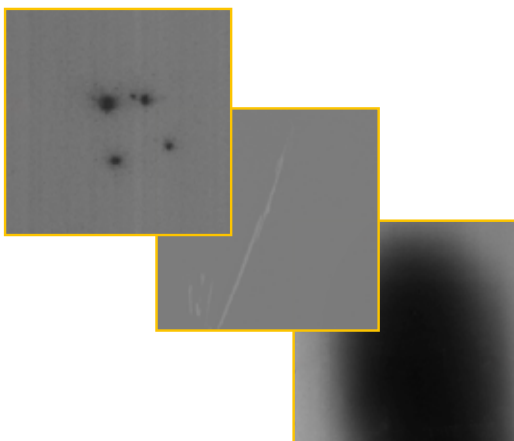


Glass Inspect



High-Resolution Automatic Inspection for Low-E and Sunstop Glass

Low-E and Sunstop Glass



**The Number 1 in
Glass Inspection**

Glass Inspect & Glass Measure

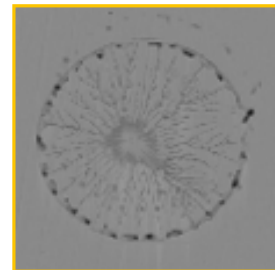
KEY BENEFITS

- Multiple Image Defect Analysis (MIDA) for improved detection and classification
- Super-fast camera allows 4 channels in one camera line without decrease of resolution
- Reduced waste and higher quality of final products
- Cost savings by improving manual quality control
- Increased productivity through early detection of process problems
- Faster time-to-market for new products through immediate process feedback
- Easy and fast integration into existing product lines

Crazing/Arcing defect



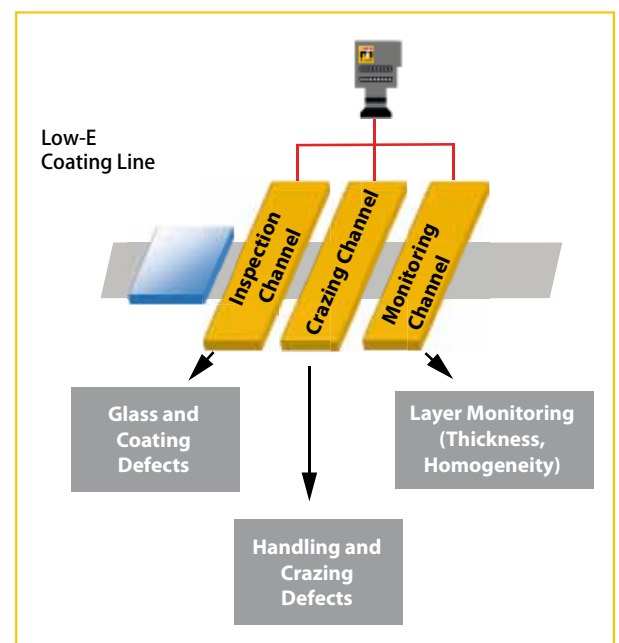
Coating stain



Complete MIDA solution for low-e and sunstop glass production

Dr. Schenk offers GlassInspect and GlassMeasure, the market-leading inspection system for modern low-e and sunstop glass. Color variation monitoring for 100% of the glass area in combination with effective, reliable and reproducible local defect detection improve the results of manual inspection and give our system and our customers the leading edge over the competition.

Dr. Schenk's MIDA (Multiple Image Defect Analysis) technology allows unique defect detection for the requirements of low-e and sunstop glass production. By switching between different optical channels, a single camera line can inspect each glass defect from multiple perspectives at the same time, enabling the system to perform the best classification for each defect. Furthermore, dedicated channels for specific defect types like stains, cathode defects, crazing, and layer stack properties offer inspection of the complete low-e and sunstop glass production workflow on one camera line.



The No. 1 in Glass Inspection

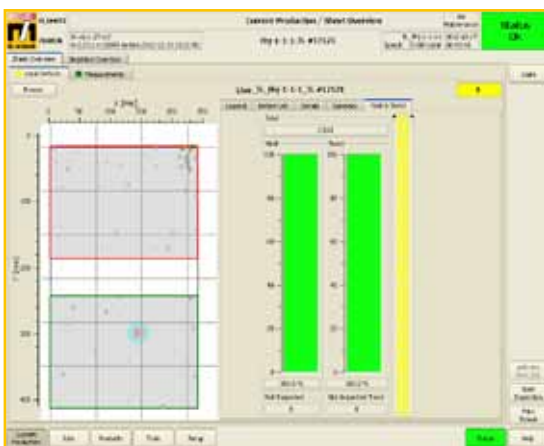
Advanced inspection and monitoring of silver layer coatings

Modern low-e and sunstop glass has double or triple silver layers with various other layers in between. Even smallest inhomogeneities can cause a visible color shift, and create a substandard architectural appearance. Dr. Schenk's color monitoring uses GlassMeasure to ensure a homogeneous coloring.

The ability to inspect freeform glass shapes and the support of PLF/Jumbo and DLF/LES adds another reason to chose GlassInspect and GlassMeasure for advanced low-e and sunstop glass inspection.



High-quality architectural glass for residential building



Defect map with yield and trend statistics

Powerful visualization for process control

The visualization software displays defects in real-time on screen, differentiated by defect classes, severities, and clusters. Statistical evaluations like defect summaries, yield and trend statistics are available during the production run.

An easy change of the inspection setting recipes allows quick switching between production runs. Inspection results from finished sheets can be written into an SQL database and used for further reporting and analyzing tasks.



Low-e glass production with Dr. Schenk inspection

Successful installations worldwide

Market-leading glass manufacturers in Europe, Japan, China and the USA are using the advanced illumination techniques and multi-channel setup of MIDA to produce pristine high-quality low-e and sunstop glass for all applications.

The complete inspection solution

GlassInspect and GlassMeasure are the only fully production-integrated, automatic optical inspection solution for low-e and sunstop glass that combines all inspection channels in one camera line. It is the best investment to save time, money and resources.

Inspection and Handling Systems



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 surface inspection and measurement solutions for automated quality assurance and production process monitoring. This includes high-quality, customizable handling solutions. Our products are a key success factor in the making and converting of many materials, e.g. plastics, textile materials, nonwovens, paper, metal, or glass, for 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 the inspection of surfaces. Over 12,000 m² 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 our expertise in the translation of lab applications to large scale productions. Our 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 precision in focus!

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