Turnkey Vision Systems for Flexible Thin Film Solar Modules based on Roll-to-Roll Processes

Easy Way to Detect Defects!
Optical inspection systems play an important part when it comes to the optimization of the production process to improve yield and maximize the output quality.

The SolarInspect RollToRoll from Dr. Schenk has been designed to fulfill the special requirements throughout the production of flexible thin film solar modules. These turnkey vision systems offer reliable quality control throughout the running production process. In addition, continuous monitoring of the production process allows timely corrective action to be taken when process deviations appear.

Fully integrated after relevant production steps, the SolarInspect RollToRoll systems detect, pinpoint and accurately classify defects or irregularities on the surfaces of incoming flexible base materials through to the finished flexible solar module. The user-friendly graphical interface provides clear diagrams and analyzing tools, displaying detailed defect information together with high-resolution images.

Reliable Inspection of
- Incoming flexible base materials
- Layer deposition
- Structuring / Laser scribing (P1, P2, P3)

Detection of
- Defects on roll-to-roll base material
- Layer defects
- Layer homogeneity
- Layer thickness
- Structure discontinuity
- Underscribe
- Overscribe

SolarInspect RollToRoll – Outstanding Features
- Innovative and modular optical setup – low cost of ownership
- Turnkey vision systems optimized for specific process step needs
- Customized solution for all types and sizes of flexible solar modules
- Repeatable detection and classification
- User-friendly quality and analyzing tools
- Easy integration into new and existing lines
- Industry-proven design

Software Features
- Defect Images
- Real-time defect map
- Real-time statistical defect analysis
- Roll history
- Easy data access and export
Dr. Schenk GmbH, established in 1985, is an innovation high-tech company based in Munich, Germany. For the third decade now, the range of products and services offered by Dr. Schenk comprises comprehensive solutions for automated quality assurance and production process monitoring to the solar, flat glass, film and foil, converting, paper, optical media and semiconductor industries. In these areas Dr. Schenk continues to set new standards for the inspection of surfaces through the utilization of the latest technical advances in optics and electronics.

The company’s primary objective is to achieve complete satisfaction of our customers on a long-term basis. This vision is realized by a perfect synergy between innovative solutions and practical ideas. Global sales and service facilities ensure local support, technical service, training and consulting at any phase of a project. From modular standard units to complex and highly customized systems – Dr. Schenk’s high performance test and inspection products have precision in focus!

For more information and contact: www.drschenk.com