

Automatic Process & Quality Control for Coated Door Production



Dr. Schenk's EasyInspect system for sheet material is the perfect automatic surface inspection solution for all types of industrially produced, coated doors. A wide variety of door sizes, colors and shapes can be inspected fast and reliably for all types of quality defects.

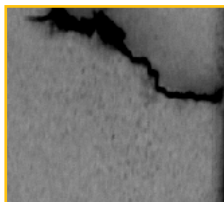
EasyInspect and EasyMeasure are the only fully production-integrated, automatic inspection system for coated doors worldwide, giving their customer a unique competitive advantage over other manufacturers.

KEY BENEFITS

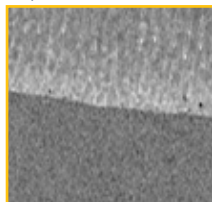
- Better quality:
 - Reduced waste and higher quality of final products
 - Increased customer satisfaction through fewer returns
- Better cost efficiency:
 - Money savings by replacing manual quality control
 - Increased productivity by early detection of process problems
- Better profit:
 - Enables a fully automated production and packaging line
 - Increased throughput on the production
 - Faster time-to-market for new products by immediate process feedback
- Better risk management through documented product quality



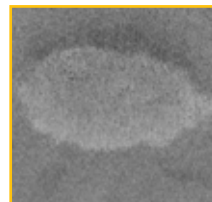
Crack in Base Material



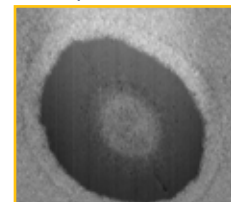
Extremely Thick Layer



Glossy Spot



Dull Spot



High-Quality inspection for coated doors

EasyInspect and EasyMeasure are easily integrated into existing coating lines. They can automatically inspect finished door leaves for all critical quality defects, such as:

- Unpainted / uncoated areas and spots
- Glossy spots / Dull spots
- Scratches
- Pollution spots
- Base material irregularities
- and more...

The flexible system allows inspection of doors with all types of openings like cutouts and frames for glass insets, door handles or ventilation slits. If your production changes, the system will adapt to it.

Both sides of the door can be inspected in consecutive steps or simultaneously, depending on your production setup.



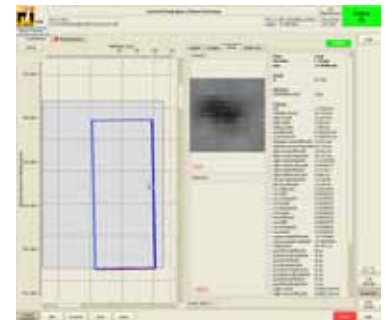
Complete quality and process control

Quality defects in the coating are detected during inspection and displayed in a defect map (see right). They are classified according to customer-specific defect types, offering valuable information about specific problem areas in the production line.

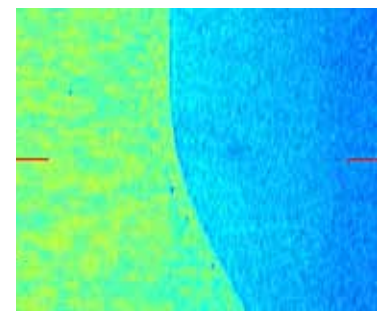
Customer-defined quality criteria based on the class and severity of found defects are applied automatically to determine whether the door is still within the acceptable quality range. Doors that do not meet these criteria can be moved to a different production area to be repaired or discarded. This ensures that only top-grade products are delivered to the customer.

The system alerts the operator to starting process problems before the defect limit is reached. This allows him to fix the production before waste is produced, and thereby saves production resources and post-processing effort.

The inspection data is stored in an SQL database and can be archived on a customer server. This reduces the risk of indemnification, as the production process is documented seamlessly on the manufacturer's side.



Local defects displayed in defect map



Homogeneity map displaying coating properties

Monitoring of the coating process

Dr. Schenk's EasyMeasure measures the homogeneity properties of the inspected door. The resulting data is displayed in an operator-friendly visualization and real time 2D map in cross and machine direction.

About Dr. Schenk

Dr. Schenk GmbH, established in 1985, is a globally active, innovative high-tech company based in Munich, Germany. For the third decade now Dr. Schenk offers comprehensive solutions for automated quality assurance and production process monitoring for the solar, flat glass, film and foil, converting, optical media and semiconductor industries.

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