



As easy as 1–2–3: master all quality tasks with a single system

Defects

- Pin holes, wrinkles, cracks, contaminations
- Coating issues, e.g. thin spots, droplets, agglomerations, drying defects and particles
- ... and many more

Measurements

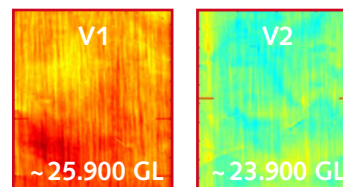
- Alignments
- Dimensions
- ... and many more

Material Properties

- Porosity
- Coating thickness
- ... and many more

Dr. Schenk pushes the boundaries of what is technically feasible: reliable detection of coating thickness variations in the sub-micrometer range and inspection of up to 10 m web width at full production speed of up to 800 m/min.

+3.2 μm coating +4.1 μm coating



Data management, Connectivity

Dr. Schenk EasyInspect collects any and all defect data. This allows for early correction of deviations during production and prevents components that do not meet your quality requirements. Extensive statistics tools are available for process optimization.

We provide a large variety of interfaces for connecting to SCADA, MES and other units in the production process. Acquired process data can be further analyzed by merging the data from the Dr. Schenk open SQL database or stored using the archiving function for data backup and long term storage.

78.535	78.538	78.553
78.595	78.576	78.394
78.347	78.406	78.361
72.146	71.933	72.092
73.128	73.119	73.360
72.774	72.933	-0.499

For more information go to drschenk.com/products/new-energy-solutions/fuel-cell-inspection.html



Technical specifications subject to change without notice. © Dr. Schenk GmbH, 2024/08

Surface inspection for hydrogen fuel cells and water electrolysis

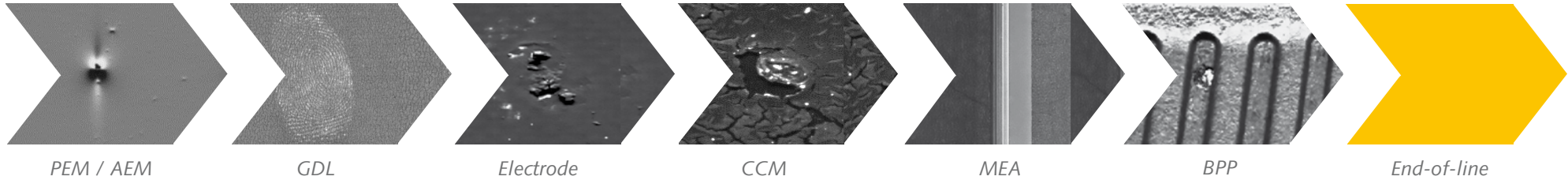
Dr. Schenk GmbH Industriemesstechnik
Bussardstrasse 2
82166 Graefelfing
Germany

www.drschenk.com

The Inspection Expert

EasyInspect

Control your entire production workflow with a single system.

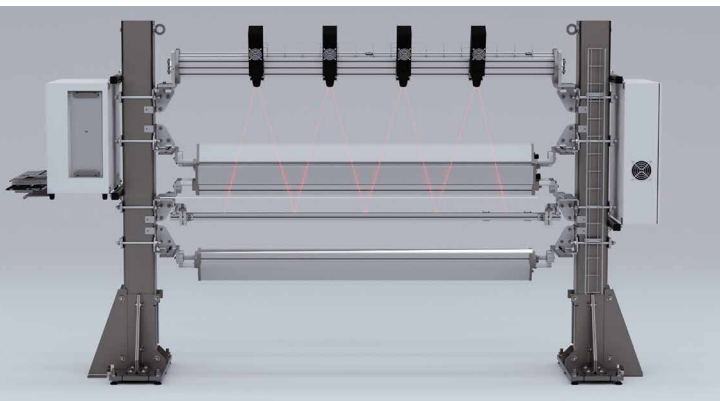


Safety through quality

Efficiency, service life, safety and function of hydrogen and fuel cells depend on their quality. FCEVs, UAVs, commercial, industrial and residential power generation demand defect-free materials for safe operation.

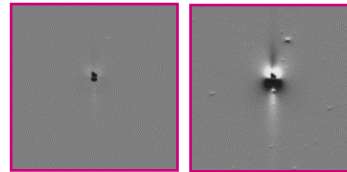
EasyInspect is your reliable in-line inspection solution for the complete production process. For example, it inspects:

- Polymer Electrolyte Membrane Components (PEM)
 - Gas diffusion layers (GDL)
 - Electrodes and catalyst-coated membranes (CCM)
 - Membrane electrode assemblies (MEA)
 - Bipolar plates (BPP: metal, graphite, composite)
- ... and many more!



MIDA: see more with multiple views

- Reliable detection of smallest defects and deviations with MIDA (Multiple Image Defect Analysis)
- Detailed defect information via multiple views
- Dependable product qualification to maximize profit



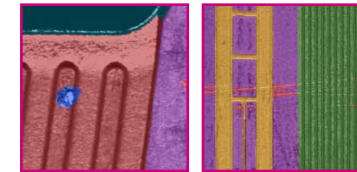
Same defect in PEM, different perspective: MIDA (right) reveals the true size of the defect

Your advantages:

- Safety through quality: from the very beginning to the very end of your production
- Automatic optical in-line inspection before, during and after component assembly
- Defect-free production reduces costs and improves product quality

AI Processing for high-quality results

- Multi-step AI processing
- Real-time for up to 800 m/min with AI pre-processing inside the camera
- Minimal effort for best detection and classification



Dr. Schenk AI solutions such as AIMI make bipolar defects visible – even in structured surfaces.

Your advantages:

- Easy integration: small footprint required
- Stay ahead of the competition
- Local lifecycle support, worldwide
- Future-proof solution, adapts to your demands