Dr. Schenk inspection solutions for solid wood and wood laminate

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The Inspection Expert

1. Fully automated inspection solution for all process steps

Dr. Schenk EasyInspect for inspection of solid wood and wood laminate does not only detect defects but provides a complete solution for product quality assignment.

Multiple tasks with a single system

EasyInspect is a true all-in-one inspection solution that examines 100% of the material surface and can be used for all inspection tasks in the production process range: from gluing, laminating and joining to profiling, milling and polishing to painting, staining, impregnation and finishing.
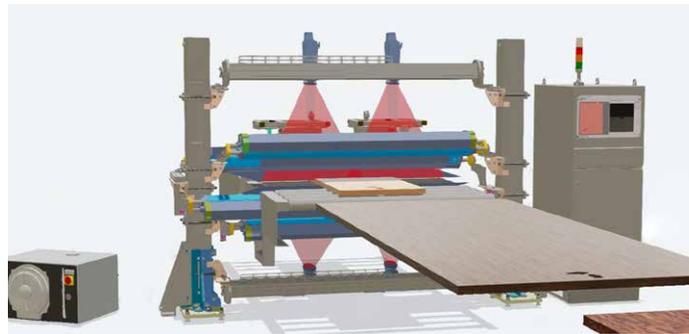
Your benefits from the Dr. Schenk automatic all-in-one inspection compared to manual inspection:

- Improved accuracy & consistency for your inspection
- Increased throughput
- Dimensional measuring tasks
- Double-sided inspection and edge inspection
- Faster inspection with a single, powerful system – no extra tools needed

2. Committed to your satisfaction: Dr. Schenk lifecycle support options

Purchasing an inspection solution is only the beginning. Our customizable lifecycle support options ensure the right amount of support whenever and wherever necessary.

ENHANCED SERVICES
- Hassle-free Inspection Process Support
- Next-gen hardware upgrades
- Powerful software enhancements

SUPPORT SERVICES
- Unmatched 10-year camera warranty
- Cutting-edge annual software upgrades

INSPECTION ACADEMY
- Engaging group trainings
- Personalized one-on-one trainings
- Expert face-to-face & hands-on trainings

With over 50 service engineers in more than 10 locations around the world, we offer comprehensive on-site and remote service and support.

3. MIDA – Multiple Image Defect Analysis for every defect

EasyInspect for solid wood and wood laminate inspection uses Dr. Schenk's unique MIDA (Multiple Image Defect Analysis) Technology.

This allows simultaneous:

- Detection of smallest defects
- Multi-angle illuminations for optimum view
- Multiple views of the same defect in real-time

The result: comprehensive inspection of wood surfaces with optimal perspectives for each defect at all times.
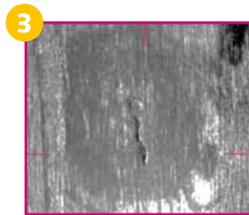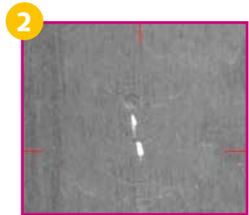
Dr. Schenk MIDA: same defect, multiple views:

"Cracked knot" defect as detected with Dr. Schenk MIDA channels 1, 2 and 3

4. Dr. Schenk Artificial Intelligence (AI) solutions: optimal results for every task

Every surface tells a different story – and Dr. Schenk AI listens to them all.

Depending on the specific situation and detection task, Dr. Schenk has a variety of cutting-edge AI tools available. These complimentary add-ons to our standard feature extraction method ensure complete and accurate determination of every detected defect's characteristics for optimal classification results; they also minimize effort and simplify your worklife.

## AI for detection and classification

EasyInspect uses AI to detect and classify all defects typically encountered on solid wood and wood laminate. Defect classes are assigned to these defects, allowing customers to focus on assigning severities to the defect classes.

Multi-step classification

If desired, pre- or post-AI-classification rules can be added, combining human experience and artificial intelligence for optimal results.

Some typical wood defects EasyInspect detects, are:

- Pressure Mark
- Surface Crack and Split
- Cracked Knot
- Scratch
- Exfoliation Crack
- Burn Mark
- Bubble and Blister
- …

- Wrinkle
- Dent
- Overpainted Particle
- Uneven Brushing
- Broken Foil
- Tear-Out
- Staining
- Open Joint
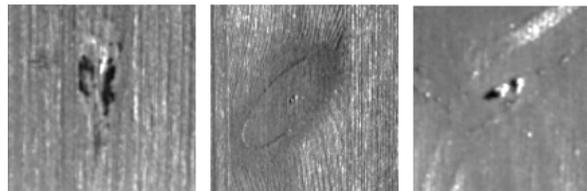
Dr. Schenk AIMI (artificial intelligence material inspection)

AIMI excels at detecting defects hidden in patterned materials, which defy conventional inspection approaches – ideal for solid wood or wood laminate surface structures. Working in the camera during inspection, AIMI is a simple yet powerful way to identify irregularities at high speeds.

AIMI can increase your inspection performance by doing an initial examination of the material: only areas AIMI marks as "Irregularity" need further examination.

Your benefits from Dr. Schenk's AI solutions are:

- Use your expertise to modify and improve the AI training model
- Add human expert rules before and/or after AI classification: our flexible model allows this
- Combine the best of AI and human capabilities for optimal inspection results