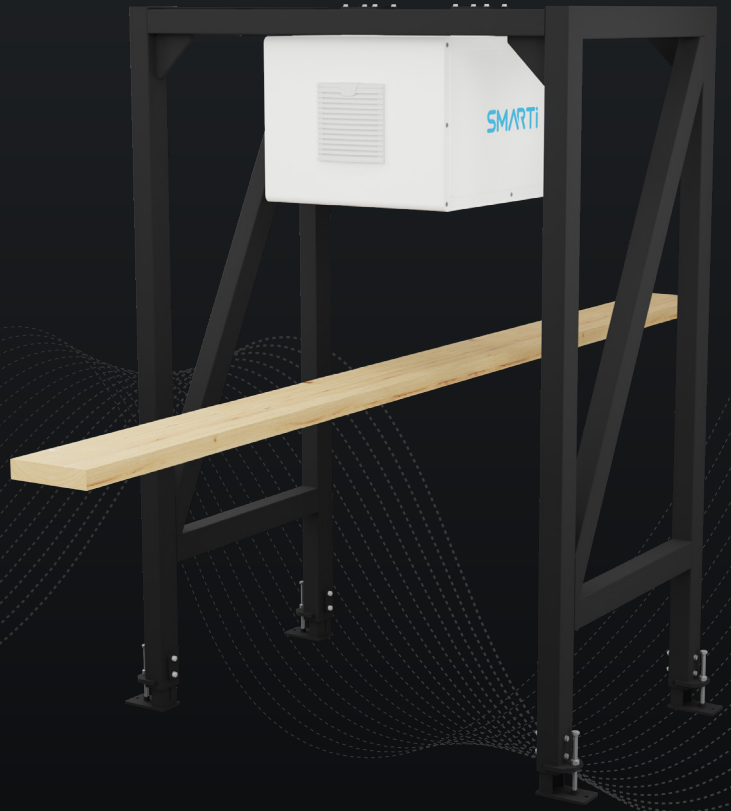


SMARTi

iOne

One Side Board Inspection

iOne scanner is an advanced inspection machine for 1 side 3D and color board scanning. System can be used either for cutting or sorting applications. In-house developed AI technology coupled with high performance proprietary machine vision algorithms deliver accurate defect detection. High speed board transport and accurate defect detection provide for high yield production. Operators can set up custom rules for cutting and sorting or the machine can work in accordance with standards. Scanner can be used for a wide variety of use cases and end products.



AI is the Solution

All the defects on one board surface are detected and classified with the use of advanced AI technology and machine vision algorithms. 3D measurements contribute to the machine usability and performance.

- » AI powered defect detection
- » Speed more than 500 m/min
- » <0.1 mm scanning accuracy
- » Variety of possible board dimensions



Specifications

Use Cases

- » Board sorting and line control
- » Cutting optimization and cutting machinery control

Capabilities

- » <0.1 mm scanning accuracy
- » Cutting, sorting
- » Speed more than 500 m/min
- » Variety of possible board dimensions
- » Machinery control and communication

Detection

- » Measurement

Length
Width
Thickness
Volume

- » Defect detection (visual)

Knots	Cracks and splits
• Sound knot round	Lack of material
• Sound knot splay	Discolorations
• Sound knot spike	• Blue stain
• Dead knot round	• Brown stain
• Dead knot splay	• Red stain
• Dead knot spike	• Yellow stain
• Knot hole	Mold
Pith	Machine burning
Bark pocket	Planning errors
Resin pocket	Saw step
Resin streak	Dirt
Rot	Fiber fracture
Resin	Compression wood
Wane	Fiber deviation
Bark beetle	Custom defect options
Lineautus	

» Grain orientation

Radial
Semi-radial
Tangential

Technology

» AI technology

» Color

» 3D laser triangulation

Software

» User friendly UI

» Real-time display of boards

» Custom rules for sorting and cutting

» Database of scanned boards

» AI training tool

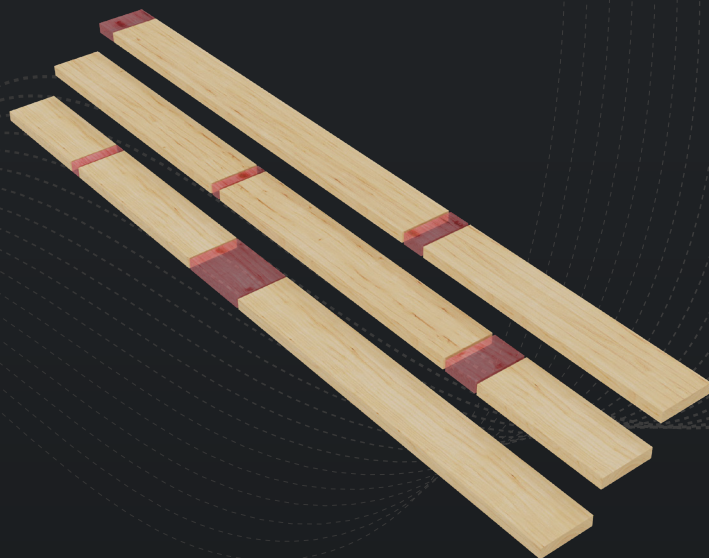
» Statistics

» Simulations

» User rights for protection

Board Optimization

Board optimization software for cutting is included as standard. Based on standards or predefined rules, the scanner will automatically optimize cutting patterns for maximum yield outputs. Autonomous cross or rip cutting, based on detected defects and desired classifications, ensures optimal results. Communication and control of cutting machinery allow for high-speed operations.



Multiple Scanning Channels

Utilizing 3D laser triangulation and color scanning technology. Surface defects are accurately detected. With optional x-ray technology internal inspection and strength grading are supported.

- » Color
- » 3D laser triangulation

Empowering Wood Industry

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