Veneer Visual, Moisture and Strength Analyzer R7 - Peeling

UNIQUE THREE-IN-ONE ANALYZER FOR MAXIMIZED VENEER RECOVERY

Optimized clipping and grading with combined data

This first in industry analyzer combines visual, moisture, and strength analysis in one compact system. It improves the efficiency of the entire production process from block to plywood or LVL. Analyzer optimizes clipping decisions based on veneer dimensions and defects, moisture analysis, and drying shrinkage estimation. The combined data leads to maximized recovery and veneer quality.

Veneer Visual, Moisture and Strength Analyzer R7 (formerly known as Mecano VCO+MVA-G+XDA) offers different technologies for visual detection to match your needs. You can select the imaging method of the three available models: color, micro, or surface. Moisture analysis utilizes microwave technology which detects moisture through the veneer.

Key benefits

MAXIMIZE VENEER RECOVERY

PRODUCE MORE FULL-SIZE VENEER SHEETS

IMPROVE DRYING CAPACITY

MAXIMIZE VENEER QUALITY

MINIMIZE DRY VENEER WIDTH DEVIATION

References

Stora Enso Oyj, Varkaus Mill

Stora Enso’s LVL mill in Varkaus, Finland, needed to increase production capacity.

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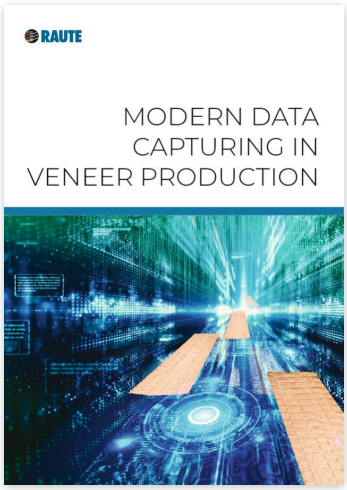

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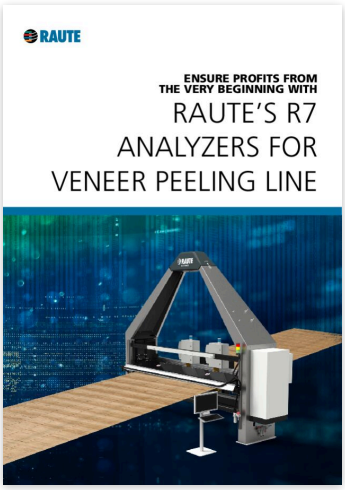

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Technical specifications

	Surface	Micro	Color
Veneer thickness (mm)	0.5 – 4.2	0.5 – 4.2	0.5 – 4.2
Available sizes (ft)	5 - 10	5 - 10	5 - 10
Grading accuracy	>95%	>95%	>95%
Color defects (e.g. Knot, wane)	●	●	●
Micro defects (e.g. Crack, pin hole)	●	●	○
Surface defects (e.g. Roughness, overlap)	●	○	○
Moisture Sensors (pcs)	6 - 10	6 - 10	6 - 10
Moisture Range (mc)	50% - 150%	50% - 150%	50% - 150%
Moisture Accuracy (mc)	±15%	±15%	±15%
Density range (kg/m³), fiber and water	300 - 2000	300 - 2000	300 - 2000
Density accuracy (kg/m³), fiber and water	±5%	±5%	±5%
Density Sensors (pcs)	2	2	2

Analyzers for Veneer Peeling

Analyzers make the most of your raw material starting at the peeling line

Veneer peeling is the first and one of the most influential phases in veneer production. The decisions made here define the efficiency, recovery, and quality of all downstream processes. That's why optimizing the peeling line begins with understanding the raw material and its features with the highest possible accuracy.

Intelligent analyzers measure multiple parameters to enhance peeling performance. Visual analyzers detect the best clipping point based on defects and veneer dimensions, moisture analyzers sort sheets into the correct moisture grades to maximize drying capacity, and centering analyzers optimize block alignment for the highest recovery. Some integrated solutions combine all these capabilities, even strength analysis, into a single compact system.

AI takes this optimization further. At the veneer peeling line, AI accurately detects challenging round-up defects such as bark, as well as defects suitable for patching. With extremely precise clipping and grading, AI helps improve raw material utilization and raise overall quality recovery before the sheets even reach the stacker. Instead of removing low-recovery veneer later at the core composer, mills can start making smarter decisions already at the first process step.

To support even more informed decisions, Raute analyzers also offer built-in patching, composing, and drying simulations. These tools let you evaluate how veneer will behave in later phases and ensure that only material suited for your production needs moves forward. For example, core composing simulations at the peeling line help you manage future recovery levels and control veneer inventory, improving mill-wide efficiency.

Take a look at our integrated analyzer solutions, which combine the features of two or even three analyzers, now including AI-enhanced defect detection and grading, into one compact system.