Veneer Visual and Moisture Analyzer R5 - Drying

VISUAL AND MOISTURE ANALYSIS IN ONE COMPACT SYSTEM

Compact analyzer for random and core veneer grading

This analyzer with integrated visual and moisture analysis is an affordable solution for lower capacity lines. It is best suited for grading core veneer and random size sheets. Accurate machine vision detects the dimensions and different types of defects on the veneer sheet. At the same time, the analyzer grades the sheets to different grades according to the moisture content.

Veneer Visual and Moisture Analyzer R5 offers different detection technologies to match your needs. You can select the imaging method of the two available models: open or dark. Moisture is measured by the contacting brushes and the moisture analysis defines peak and average moisture on the veneer sheets.

Key benefits

EASY AND FAST INSTALLATION AND START-UP

SMALL SPACE REQUIREMENT

IMPROVE PRODUCTION EFFICIENCY

IMPROVE VENEER QUALITY

References

Guangxi Guoxu Spring Woodbased Panel Co., Ltd.

Raute has delivered modern, high technology veneer production lines with high-quality analyzers to Guoxu Spring Woodbased Panel Co., Ltd in South China.

Read more

Images and videos

Technical specifications

	Dark	Open
Veneer thickness (mm)	0.5 – 4.2	0.5 – 4.2
Available sizes (ft)	4 - 8	4 - 8
Grading accuracy	>95%	>95%
Moisture Sensors (pcs)	8 - 16	8 - 16
Moisture Range (mc)	5% - 20%	5% - 20%
Moisture Accuracy (mc)	±3%	±3%
Open defects (e.g. Hole, Fishtail)	●	●
Dark defects (e.g. Dark wane, Dark knot)	●	○

Analyzers for Veneer Drying

Grade the sheets accurately for the following process phases

At the veneer drying line, accurate grading is essential to keep material flowing efficiently toward the next process phases. The best way to secure consistent, unbiased decisions is to let intelligent analyzers perform the grading for you. In addition to classifying sheets, analyzers collect valuable process data that helps you optimize dryer performance, improve veneer quality, and boost overall profitability.

Modern analyzers grade sheets based on visual properties, moisture content, strength, and density. These capabilities can be delivered through individual systems or through integrated solutions that combine the features of two or even three analyzers into one compact unit, saving floor space, reducing investment costs, and most importantly, improving grading accuracy.

AI takes dry grading to a new level. Conventional vision systems often struggle to distinguish between sound knots, dark knots, loose knots, bark defects, and variations caused by heartwood or grain patterns. These limitations can lead to misgrading, unnecessary patching, and costly panel downgrading.

With AI-enhanced visual grading, these challenging distinctions can now be made reliably. At the drying line, AI accurately separates defects that need patching or composing from those that can be routed further downstream, such as to the panel repairing line. When combined with process simulation features, each veneer sheet can be directed to its most suitable next phase individually.

For example, face-quality sheets that require no patching can be identified directly at the dryer and sent straight to the lay-up line instead of the patching line, streamlining sheet flow and improving end-product quality.

Raute's AI analyzers can be retrofitted to any dry grading line. AI-enabled visual detection can also be combined with moisture grading, strength analysis, and surface property assessment such as waviness and roughness, providing you with better decision-making tools to maximize raw-material value across your mill.

Discover how AI-enhanced dry veneer grading can improve quality, accuracy, and flow in your production.