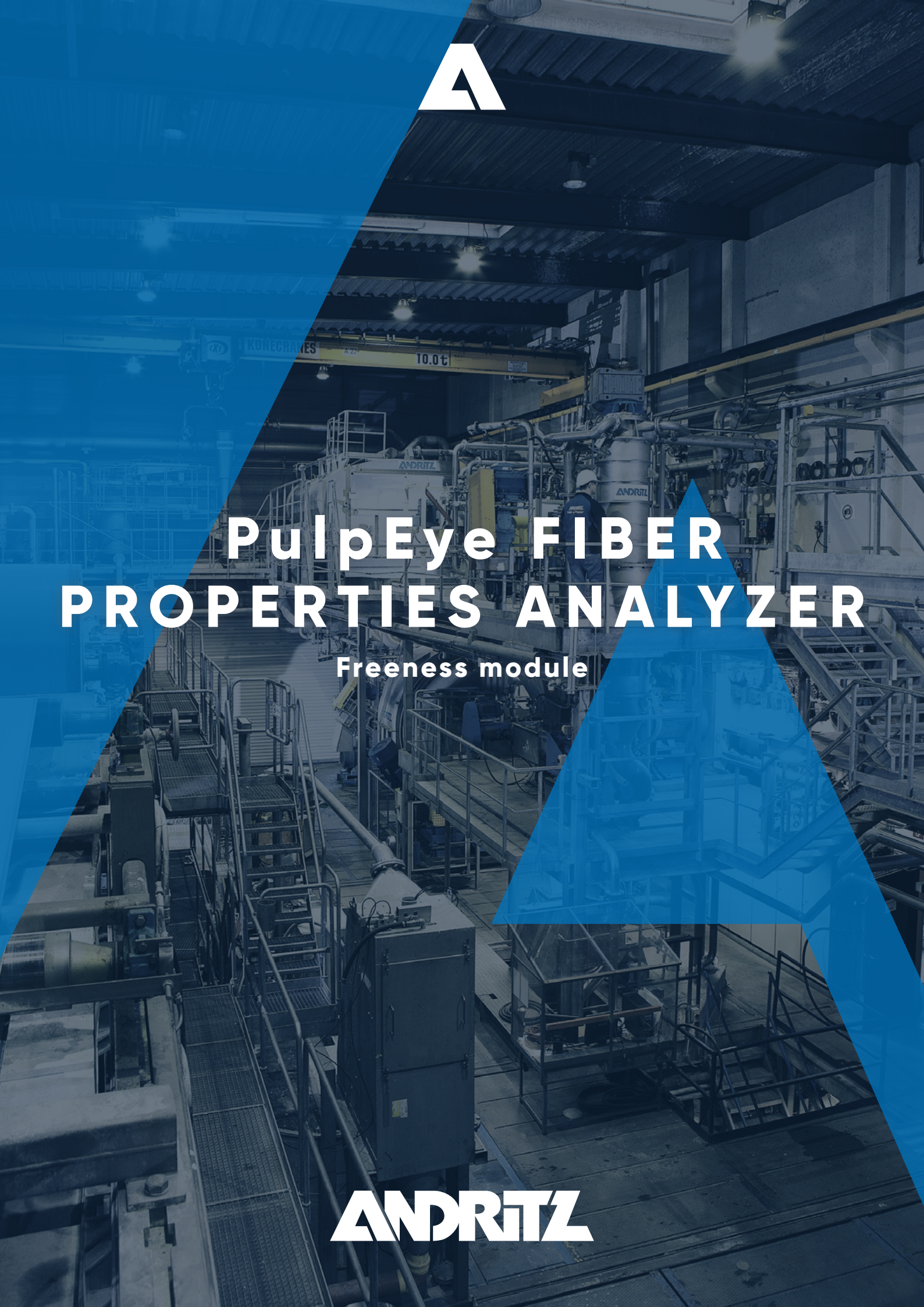

PulpEye FIBER PROPERTIES ANALYZER

Freeness module

Freeness module for frequent and reliable drainage data

The freeness module is a drainage classification module working according to TAPPI/ISO standards.

The demands on pulp and paper quality have increased over the years. With the varying quality of wood supply in today's mills, monitoring drainage has become increasingly important. Drainage has a significant impact on the final product, and needs to be monitored to maintain even quality. Frequent and reliable quality inspections enable pulp manufacturers to control and optimize pulp quality.

The freeness module is designed for online operation with very few moving parts that can cause downtime. Data from the freeness module can be used for quality inspection, fault detection, product development, and quality assurance for customers.

REPLACING TIME CONSUMING LAB TESTING

With a frequency of up to once every three minutes, the freeness module provides frequent and reliable results.

RAPID SAMPLE PROCESSING

The freeness module will perform a freeness test, cleaning, and a water reference test in less than 2 minutes, giving accurate and detailed information about the drainage.

MARKET PULP PRODUCERS

Continuous monitoring of the final pulp drainage before being transferred to the pulp dryer minimizes the risk of pulp degradation.

EARLY DETECTION BEFORE TRANSFER TO THE PAPER MACHINE

Problems with varying drainage properties can be detected as early as the pulp mill and resolved before reaching the paper or board machine. This allows many quality issues to be fixed or eliminated more quickly, including web breaks.

The freeness module is integrated in the PulpEye Fiber Properties Analyzer cabinet.

FREENESS MODULE

Data from the freeness module can be used separately or combined with data from other PulpEye Fiber Properties Analyzer modules like the fiber/shive module to classify pulp quality accurately and frequently.

OPERATION

The freeness module is integrated into the PulpEye Fiber Properties Analyzer as a separate module. The module can easily be controlled from the PulpEye Fiber Properties Analyzer user interface.

FUNCTIONS AND FEATURES

The freeness module measures freeness according to TAPPI standards in less than 2 minutes, giving accurate and rapid results. After each test, a water reference test is carried out to monitor module performance.

The EWD (EntWässerungsDauer; engl. Dewatering) measurement can be used for low-freeness pulp. This method is specifically developed for pulps with a freeness less than 100 ml. The dewatering measurement gives higher resolution than the traditional CSF and SR results.

OUTPUT

- Freeness, CSF (ml)
- Shopper Riegler, SR (°)
- Modified Shopper Riegler, MSR (°)
- EWD (EntWässerungsDauer) (sec) - optional

PARTS

- The measuring chamber is made from lexan glass, stainless steel screen plate, ultrasonic transmitter, temperature sensor
- Electronics box
- All parts are mounted into the PulpEye Fiber Properties Analyzer base unit

The freeness module is using an ultrasonic sensor for volume measurement.

GET AN OVERVIEW
PulpEye Fiber
Properties Analyzer

CONTACT US FOR MORE INFORMATION

Advancing autonomous operations is our vision and is becoming an integral part of industrial processes. ANDRITZ is at the forefront of this transformation, leveraging digital innovations along with deep operational and technical expertise to improve process efficiency, quality management, and production reliability and availability.

We focus on developing autonomous pulp mills and process optimization, to support efficient and sustainable operations by combining automation, electrification, intelligent instrumentation, and digitalization to create measurable value throughout the full life cycle and the entire value stream.

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