

Valmet Retention Measurement

Valmet RM3 – Total and True Ash Consistency Measurement, Ideal for Wet End Monitoring and Control



The Valmet RM3 wet end sensor measures online the total and true ash consistency. It is based on 20 years' experience in optical consistency measurements and represents the third generation of industry-standard Valmet technology. It is the only optical measurement on the market capable of measuring both total and true ash consistency from a process sample.

The Valmet RM3 is a versatile, reliable, continuous window into the wet end.

Specifications

Valmet RM3 utilizes the continuous sample flow when measuring the following

- Total consistency 0–2.0 %; (0–20 g/l)
- Ash consistency 0–1.0 %; (0–10 g/l)
- Flocculation index
- Total retention 0–100 %

- Ash retention 0–100 %
- Thick stock ash content 0–50 %

Suitable for all pulp types.

Versatile user interfaces:

TCU • FieldCare™ based PC connection • DCS connection via analog outputs

Typical installations:

- Headbox • White water • Dilution water
- Thick stock • Furnish components • DIP

Valmet RM3 measurement: Key features

- Proven basic construction
- continuous on-line measurement
- optional modules available
- Two LED light sources
- Flat sapphire glass is used in measurement cell
- extremely strong
- optimum optical properties
- New design of the optical module prevents condensation
- Easy calibration
- Accuracy
- best available measurement accuracy
- high availability

Applications

Process monitoring

- continuous measurement sees process changes very quickly
- supports operational decision making
- problems can be identified and localized and the right solutions found
- on-line response to all test runs
- more process information with less laboratory work

Controls

- 1. White water consistency control** keeps white water consistency stable by automatically adjusting the retention aid flow. More stable wet end, better runnability and quality.
- 2. Breaktime control of headbox ash** keeps the headbox ash consistency stable during breaks by automatically adjusting the filler flow. Faster recovery from web breaks.
- 3. Thick stock ash content control** smoothes out variations in machine stock ash content by automatically changing the filler flow to thick stock, typically to the blend chest. This way process becomes more robust against disturbances.
- 4. Multivariable control**
Seamless part of Valmet IQ MD Controls, true multivariable controller for MD weight, moisture, paper ash and white water consistency.



Valmet RM3 modules

Basic delivery (without stand):



Valmet RM3

TCU

Lab sample module

Optional modules:



Pump with stand, control box



Thick Stock Sampler



Fixed and adjustable sampling valves



Deaeration module

External connection box, Vortex, air purge, water- and air regulator etc.

For more information, contact your local Valmet office. www.valmet.com

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