Solutions for Sustainable Tissue Production

Stock preparation and wet end measurement solutions from Valmet are providing tissue makers with new tools that can improve quality, runnability and efficiency. As fiber is the single most important cost in tissue, proper pulp preparation and treatment can contribute to significant savings in raw material and chemicals while improving process efficiency and machine productivity as well as quality.

Superior furnish control

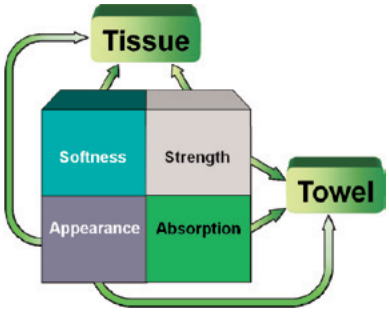
It is important to supply the tissue machine with uniform fiber quality in order to deliver uniform product quality, and for most tissue producers there is considerable potential in the optimization of stock preparation and refining. Valmet's online and offline fiber furnish measurements provide the window to pulp characteristics to gain the most advantage from the pulp quality available to gain better sheet runnability, higher machine efficiency and lower furnish costs. Online freeness control of refining not only offers significant energy savings but also delivers superior fiber properties for better strength and bulk.

More knowledge

Valmet technology can totally replace time consuming laboratory analyses with more frequent and accurate information for process control as well as improving the blending of furnishes to meet strength, softness and absorption targets.

Wet end chemistry

Today, more and more chemicals are used in the tissue production process. Valmet's advanced technology allows the online measurement of wet end chemistry and retention to control the complex chemical environment. The benefits of active wet end Management are numerous; up to 40% chemical savings by avoiding wet strength agent overdosing, better formation and drainage, higher runnabilty and productivity with reduced deposits leading to fewer felt and wire washings, improved Yankee and creping operation with higher machine speeds, and superior overall tissue quality properties.



Stable consistency

The basic premise for any paper making process is good consistency control and tissue is no exception. Reliable and accurate consistency control contributes a great deal to the process stability required for optimum productivity, energy efficiency and product quality with the possibility to safely fine tune control setpoints for further raw material savings. Valmet offers a wide range of technologies from stationary and rotating blade shear force to microwave and optical measurements to provide the right solution for every application.

Proven results

- Stabilized wet end and retention
- Higher machine efficiency
- Reduced wet strength agent dosage
- Improved refiner control
- Saves energy & raw materials
- Better runnability and reduced fiber losses
- Quality management
- Frequent and more accurate quality information
- Possibility for furnish control and blending
- Increased efficiency
- Less deposits, fewer felt and wire washings, less down time
- Fewer blade changes
- Reduced off-grade pulp, less broke
- Valmet consistency portfolio
- Always the right solution for each application

– no compromise in quality or performance

Valmet

Valmet measurement and analyzer technology for tissue

Helping tissue makers to achieve high speed process operation and the much sought after stability required for optimum productivity, energy efficiency and product quality.

Managing furnish blending, refining, screening and incoming pulp quality
Valmet Pulp Analyzer provides tissue makers with fast and precise online updates of key fiber and papermaking furnish properties. It represents the state of the art in online fiber analysis, building upon continuous advancements by Valmet over the past thirty years.

Wet end chemistry, charge and retention
Valmet Wet End Analyzer combines all the relevant wet end variables for the total solution of wet end management. Measured variables include charge, chemistry (pH, temperature, conductivity and redox), total and ash consistency, total and ash retention, ash content and turbidity, all in one analyzer.

Wet end consistency and retention
For applications where a continuous, single line measurement of total and true ash consistencies is adequate, Valmet Retention Measurement is capable of measuring both total and true ash consistency from a process sample. When filler is no issue, Valmet Optical Low Consistency Transmitter measuring fiber consistency is good choice.

Leading consistency solutions
Valmet Rotating Consistency Transmitter with direct torque measurement, industry's most reliable consistency response. Cost efficient fiber consistency with Valmet Blade Consistency Transmitter. Valmet Optical Consistency Transmitter is ideal for virgin fiber applications when consistency is from 0.5 %–7 %. Valmet Microwave Consistency Transmitter uses patented microwave technology to measure total consistency independent of the fiber length, freeness, wood species or blend.

Automated fiber measurements
Valmet Fiber Image Analyzer, designed for routine pulp and paper mill laboratory use as well as laboratory research, offers a comprehensive set of automated fiber measurements and the possibility to make the information easily available and useful.

The next generation automatic pulp laboratory
Valmet Pulp Expert features a new design and latest technology especially created to meet the ever-increasing requirements of both measurement precision and low maintenance. Pulp Expert can test both automatically and manually taken pulp samples in about 15 minutes with the capability to report up to 5000 individual measurement results per day.

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