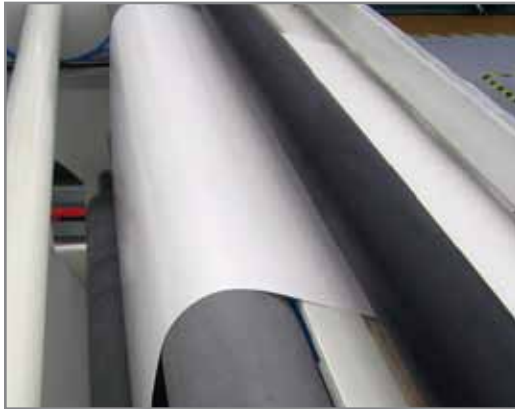


Formation Monitoring for Web Material

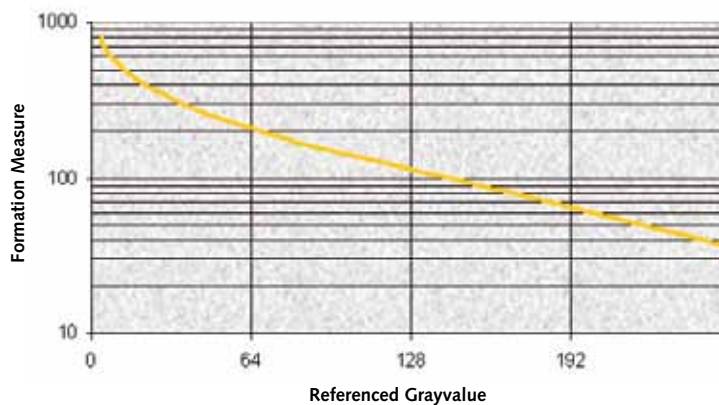


Innovative Option for:

- Quality Control
- Data Collection
- Web Marking
- Process Control

Formation Monitoring

Formation describes the short term variations of fiber dispersion in paper or non-woven products. It is the range of variation from each point that is measured on the product. Uniformity is a similar term used in the plastic industry to describe this same measurement. For example, a standard paper bag will have more blotchiness than a piece of fine stationery paper and thus will have a poorer formation.



Typical formation calibration curve

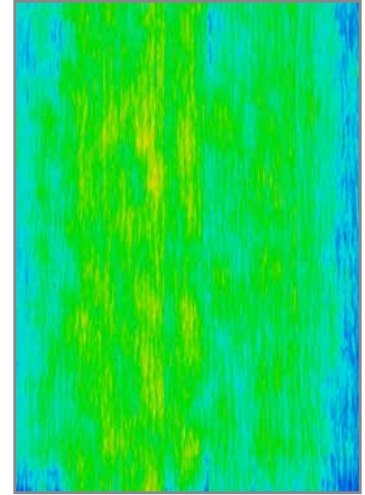
This point to point variable is one of the most critical measurements in the manufacturing process. Historically it has been impossible for a sensor based system to provide this data in-line, so it has become an inferred calculation derived from many off-line tests performed by the quality control department. Tensile, moisture barrier, porosity etc. are all laboratory tests that attempt to measure the quality of a product's formation.

Dr. Schenk's EasyMeasure software option automatically calculates the product's short term variability as well as the more traditional long term and profile variations. The machine operator now has the luxury of using in-line measurements to run the process and must no longer rely on the measurement approximations of off-line tests.

Features of EasyMeasure Software at a Glance

Software from Dr. Schenk systems provides graphical visualization of the web material's quality. By analyzing the entire material width along the running production line EasyMeasure enables short and long term optimization of the manufacturing process, which results in higher yield. Each roll produced has its own identity and quality grade, thus, eliminating shipping mistakes.

- Roll maps (Pass/Fail or false color representation)
- Recipe driven set-up
- Long term trends and short term trends
- Cross-web profiles
- Short term variations
- Real-time variation quality grade
- Quality reports with total variation calculations used for shipping decisions
- Automatic width measurement (optional)
- Roll defect markings matched to roll map (optional)



Different color values signal inhomogeneities in the material formation



EasyMeasure visualization

Benefits of EasyMeasure Options

- Continuous full width monitoring
- No mechanical scanners or devices
- Non-radioactive
- Full width short term variation analysis
- All process control features in one system
- Shared hardware with EasyInspect- reduce costs
- Very low long-term maintenance costs
- Highest ROI in the industry

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