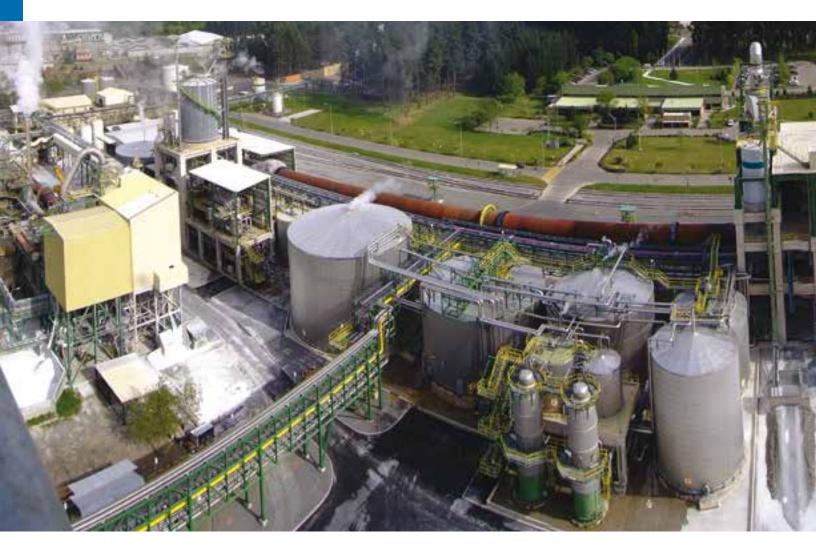


PulpVision To measure, control, and improve operations





The challenge: To detect stickies in pulp before they contaminate key process areas

The solution: PulpVision real time stickies detection

The PulpVision online stickies and dirt analyzer gives mills a superior tool for detecting stickies, dirt, ink, and shives in a pulp flow.

With PulpVision, the operator is constantly informed about particle count, particle size, total particle area, and trend curves. Stickies and dirt specks are automatically classified using TAPPI size standards or other international standards.

The online PulpVision system inspects more than 20 liters (6 gallons) of pulp per minute. This rate is hundreds of times higher than is possible through manual methods.

PulpVision can easily detect particles as small as 25 microns—or one thousandth of an inch—nearly invisible to the human eye. PulpVision delivers precision, speed, and reliability in stickies and dirt analysis. Most importantly, it delivers peace of mind.

Principle of operation

The PulpVision system includes one or more

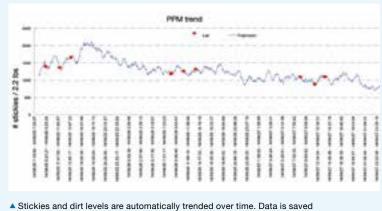


online sensors and a powerful computer workstation. Pulp flows through an observation cell where up to 25 images per second are recorded by a high speed video camera synchronized with a strobe light.

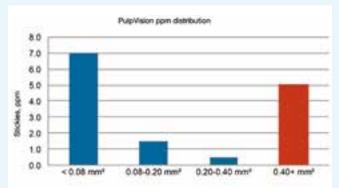
The video images are transferred to the workstation for real-time analysis. PulpVision can detect and analyze any contrasted particles, including ink, dirt, shives, and stickies.

Applications

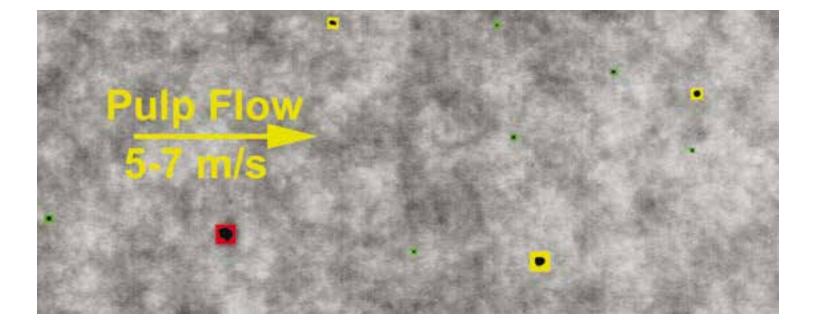
PulpVision can be installed for recyled, unbleached, and bleached pulp. It monitors pulp quality before reaching the paper machine and ensures the cleanliness of market pulp. It will also measure cleaning/deinking efficiency. It optimizes post-consumer fiber blends and will help in the troubleshooting of screens and cleaners.



Stickles and dirt levels are automatically trended over time. Data is saved to disk for later retrieval and analysis.



Particle size distribution is displayed as a histogram. Particle size classes can be customized by user.



Features

PulpVision has a wide range of features to help operators collect the best information, including:

- Real time online detection
- Continuous measurement
- No operator bias
- Response time of less than one second
- Proprietary "flow-through" design
- Proprietary "adaptive thresholding"
- DCS connection via OPC
- Available in three resolutions
- Analyzes largest quantity of pulp
- Insensitivity to flocculation
- Insensitivity to air bubbles



Benefits

- Protect machinery, storage tank, and stock preparation circuits against stickies and dirt contamination
- Detect spikes in stickies and dirt contamination in real time
- Automate stickies detection
- Replace tedious and subjective manual detection with automated tracking of contamination levels
- Troubleshoot operation by measuring stickies, dirt levels, and size distribution



Automation solutions



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