

SUCCESS STORY

Achieving optimum pulp quality at Century Pulp & Paper, India



AUTOMATION INSIGHTS INTO PULP QUALITY

OPTIMIZATION AND COST-EFFECTIVE
PULP PRODUCTION WITH PULPVISION

ANDRITZ

ENGINEERED SUCCESS

The challenge

Improve dirt and stickies detection without major operational changes

Century Pulp & Paper (CPP) is one of India's leading manufacturers of high-quality writing printing paper, tissue, board, and rayon-grade pulp. The raw material they use is comprised of 70% hardwood and 30% inexpensive veneers.

As raw material, veneer is economical, but has a high amount of dirt and stickies. This was a problem for CPP. Lab tests for dirt and stickies were taking up to two hours to produce results and were further being hampered by inconsistent lab measurements. The inability to detect dirt and stickies earlier on in the production process was heavily impacting CPP's product quality and costs. Pitch/dirt

and stickies were getting into the pulp. To improve their product without changing their existing set-up, they needed to be able to detect dirt and stickies earlier.

ANDRITZ pitched the use of its state-of-the-art PulpVision technology and provided a one-month feasibility study and offline PulpVision demo that tested PulpVision's detection abilities on various pulp samples with differing brightness. The demo, combined with ANDRITZ's flexible commercial approach, professional services, continuous remote monitoring support, and reputation as a pulp and paper pioneer won CPP's confidence.

Our solution

Use PulpVision to enhance online measurement and classification of dirt and stickies

ANDRITZ installed PulpVision, the best solution for online detection of dirt and stickies on the market, and worked closely with CPP's technical and management teams to illustrate the benefits and reliability of the system and of local service support. The total scope of the project included:

- The feasibility study and offline demo
- Installation and commissioning of PulpVision
- An orientation program for operators
- Remote monitoring
- Post-sales support

PulpVision is a simple and dependable system. A small flow of pulp is diverted to the unit. A high-definition camera in the unit takes pictures at 24 frames per second with a resolution of up to 100 microns. The most advanced

and robust software algorithms count the dirt and stickies and analyze them for size and size distribution. The results are displayed on the operator screen and updated every 10 seconds on average. Results can also be displayed as simple graphics on DCS screens through OPC.

Using PulpVision's real-time online measurement of dirt and stickies, CPP was able to detect these much earlier in the production process. In addition, PulpVision's ability to classify dirt and stickies based on size further enabled CPP to improve their product quality.



Results

Increased production quality and decreased production costs

Online measurement with PulpVision allowed CPP to operate their production process at the highest allowable quality limits with respect to dirt/stickies. Armed with instantaneous information, operators were able to create a cost-effective mixture from different raw material qualities and increase the percentage of low-cost raw material in order to realize cost savings. PulpVision's online and consistent measurement also enabled operators to respond more quickly and avoid quality downgrades and production issues.



BENEFITS

- Instantaneous results help operators to respond quickly
- Improved pulp quality
- Cost-effective pulp production



WHY WORK WITH ANDRITZ

For over 20 years we've been providing simulation and automation services to clients across a variety of industry verticals, offering our clients proven solutions that enable them to achieve their project startup and operational objectives. As a vendor-neutral control system integrator, we can provide automation for a wide range of vendor equipment. Similarly, our simulation capabilities connect with any third-party control system vendor.

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