Abstract for TAPPI Papermakers Program
PaperCon 2011
Northern Kentucky Convention Center
Covington, KY
May 1-4, 2011

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# Consistency Measurement and Control in a Tissue Mill – The Often Neglected Parameter

Consistency is the foundation of the papermaking process. Without good consistency control it is difficult to optimize the rest of the process. In the tissue making process, basic consistency control transmitters have been the norm. To further compound the problem of basic consistency control, these transmitters are often found to not be properly installed, maintained and calibrated to provide the best measuring and control results. Furthermore, in older mills, the transmitters have not been updated to the latest technology to take advantage of reductions in basis weight variation and fiber blending optimization producing significant cost savings.

Repeatable and accurate consistency measurement and control are essential for many important control parameters including chemical dosage, refining, screening/cleaning, basis weight control and furnish blending. Good consistency control is fundamental to the tissue papermaking process and is the backbone of minimizing sheet property variability, particularly being delivered to the Yankee.

This paper will review the fundamentals of consistency control and measurement in the tissue making process. The following questions will be addressed in this paper: What are the benefits of good consistency control? How do we know if our consistency program is where it should be? What are the generic measurement and control differences between various consistency technologies? How do we justify and implement a sound consistency program? How do we insure that the benefits of a sound consistency control program are recognized year after year?

The answers to these questions are based on the results of several consistency audits conducted in North American tissue mills where reductions in process variability have been identified and the economic impacts quantified and verified.