

# NET-EFFICIENCY SURVILANCE IN A NON-LINEAR PAPER MAKING PROCESS METHODOLOGY APPROACH IN WATER CIRCULATION SYSTEMS

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## **Abstract**

Most of the papermaking processes intensively looking for a better solution to improve their net-efficiency score at its wet-end and overall profit in the end product on reel. Papermakers have been trying to bring new technologies in control systems and mechanical arrangements including process chemicals to avoid sucking up in between; and have been successful too in certain extent; but to do more! Paper engineers are looking principally on their "home-made-solutions". They consult on very popular issues; with machine builders or academic sources; to ensure their thinking are on the right direction or not. However, when a new thing appears in the market; they try to avoid due to "so-called proto-users". This conspiracy is a long-lasting effort for centuries; and would remain generation to generation at the mill site.

In this presentation; I would present a methodology that might lend a hand in understanding a well-known savvy; on to control the water input and its circulation phenomenon. Fundamental issues are; control nonlinear activities before the headbox inlet approach flow systems; and mirror the water-chemicals-fiber supra-molecular actives; complimentary effects and redirect them; into self-regulating channels; not to the pit; but take-away them into separate channels. Clean them "on-line" and put them back to process; save energy and input chemicals.

This approach would; let you improve the net-efficiency, runnabilty of the paper or board machine; less breaks and chemicals; cheaper investment prospective and all-in-all better profit at the reel than before. A segment; where one could focus though needs for effective engineering skills to adapt.