

# Constrained Model Predictive Control For Cross Directional Applications-Some Practical Examples

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The implementation of constrained Model Predictive Control to paper machine cross directional (CD) processes presents numerous technical challenges. The ability to optimize all the CD actuators to produce the most uniform CD profiles provides the economic incentive to implement these schemes. This paper will review some of the technical challenges, but will focus on the recent implementation of Cross-Directional MPC on several paper machines and off-machine supercalenders. Of specific interest will be outlining the improvements seen relative to what could be achieved using optimized “conventional” control schemes.