

## Modeling and Simulation of Multi-cylinder Paper Drying Processes

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A dynamic model describing the behavior of a multi-cylinder paper drying processes was developed based on the mass and heat balances around drying cylinders. The multi-cylinder model is an extension of single cylinder model coupled with the behavior of the paper web and the felt. The balance equations consist of sets of differential equations describing heat and mass transfer around the canvas, the web and the drying cylinders. Values of cylinder temperatures and moisture contents were estimated and compared with operation data. In order to obtain further information for energy consumption generation of entropy at each drying cylinder was investigated based on the model developed.