

Abstract Submitted
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On the flow around a hydrofoil close to a permeable wall MATS
NIGAM, Noss — In the pulp and paper-making industry, pressurized screens are
used to purify the pulp and to protect the wires on the paper machine. The ap-
ertures (slots or holes) on the screen are kept clean from fibers and shives by foils
rotating close to the permeable surface. The leading-order theory of a “wing in
extreme ground effect” has been modified to take into account the permeability
of the screen-plate. Methods for predicting flow separation and for modifying the
potential-flow solution due to the same are discussed, and numerical simulations are
presented for comparison.

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