

Phenomenological Model of Vortex Generators - DTU Orbit (08/11/2017)

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For some time attempts have been made to improve the power curve of stall regulated wind turbines by using devices like vortex generators VG and Gurney flaps. The vortex produces an additional mixing of the boundary layer and the free stream and thereby increasing the momentum close to the wall, which again delays separation in adverse pressure gradient regions. A model is needed to include the effect of vortex generators in numerical computations of the viscous flow past rotors. In this paper a simple model is proposed.

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