Elaboration of calculation model for dynamic simulation of a vertical axis wind turbine rotor

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This paper describes the steps of elaboration of calculation model for dynamic simulation of a small vertical axis wind turbine rotor. The calculation model is based on the finite element analysis ANSYS CFX software. The CFD model is used to determine the performance of the wind turbine rotor for deferent settings. The verification of the proposed model is done by calculation of the rotor performance using QBlade software.