

DESIGN AND FABRICATION OF VERTICAL AXIS WIND TURBINE

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ABSTRACT

Wind turbines are considered to be only 59% efficient (Ref.: Bets ,law) ,and more over with large rotor a large area wake formations means that spacing between two turbines has to be kept very large. Hence the conventional method of wind power generation has to be concluded again with the innovative approach. The VAWT with vertex turbine is one such concept that uses the principle of generating an added vortex using a two vortex generators, in order to improve the performance of the turbine this work will contain the design and development of a vortex chamber using Modeling Software and scaled the working model which will demonstrate the electricity generation and testing will be done on the same to determine the effect of wind speed, turbine speed, voltage, current and power generated by the Prototype model.