

of the TSR shows the similar that of Ideal Efficiency of Propeller-type turbine.

- (2) Through the experiments on the angle of attack change, the fundamental information for the automatic yawing system design may be provided. In the lower wind speed condition similar with local wind condition for urban such as between 3 ~ 6 m/s, the highest output power and power coefficient can be observed in the case of 0° wind condition than angle of attack change. From this sense, to provide the highest efficiency to the household user, the automatic yawing system for the Archimedes wind turbine with easily facing to the approaching wind direction seems to be most effective. In the lower wind condition similar with urban normal wind condition, the angle of attack can be relatively estimated an important parameter for the Archimedes spiral wind turbine employed in this study.

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