

A small vertical axis wind turbine

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The main objectives of this project were to design and construct the compact Savonius vertical axis wind turbine having cut-in speed of 3 m/s. This Savonius wind turbine was made of 4 S-shaped blades steel coating with Zinc with diameter of 1 m. Power of wind was transferred to generator by using O-ring at pulley ratio of 1:25. The results showed that at wind speed of 3.0 m/s the power efficiency of wind turbine was about of 55.95% whilst the efficiency of wind turbine was related to wind speed.

Primary author: Mr CHANPRATEEP, Singkarn (Department of Physics, Faculty of Science, Prince of Songkla University, Songkhla, THAILAND 90110)

Presenter: Mr CHANPRATEEP, Singkarn (Department of Physics, Faculty of Science, Prince of Songkla University, Songkhla, THAILAND 90110)

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