

Pengaruh Rasio Overlap Sudu Pada Prototype Turbin Savonius Poros Vertikal Dalam Saluran Air Horizontal, (*The Effect of blade overlap on Savonius Turbine Prototype Of Vertical Shees Water Horizontal*)Meilana Siswanto, ST.M.Sc.(as Chief counselor).

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ABSTRACT

Electrical Energy is something that cannot be separated in the activities of human life. Energy consumption in Indonesia still relies on fossil energy that cannot be renewed, so the development of new renewable energy is needed. Waste water in high rise buildings has the potential to be used as pico scale power plants. Savonius Turbine is one type of turbine that is suitable to be used to exploit the available potential. However, this turbine has a low efficiency, so to follow up on this it is necessary to conduct research to improve the efficiency. This experiment aims to find the highest round of various variations of Savonius overlap. The overlaps tested were 0, 0.3, and 0.6. Each overlap variation is tested using 3 different discharge variations, so that it can be known the performance of each overlap variation on each discharge. The experimental results show that in the 0.3 overlap it can produce the highest Savonius turbine rotation. The amount of turbine rotation is 610. rpm

Keywords: Savonius, Overlap, RPM