

Modifikasi Kincir *Vertical Moving Blades Water Wheel* Untuk Meningkatkan Pemanfaatan Hidroelektrik Di Aliran Sungai Tersier (*Modification of Vertical Moving Blade Water Wheel To Increase Utilization of Hydroelectric On Tertiary Watershed*)

Adha Mubarok

Program Studi Teknik Energi Terbarukan
Jurusan Teknik

Abstract

Hydroelectric system development with prime movers water wheel still encountered problems including the electrical power system is weak, it is necessary to design development engineering micro hydro power plant with prime movers vertical moving blades water wheel for streams that do not have the elevation. Vertical moving blades water wheel are more efficient than vertical wheel with a static blade, the efficiency of moving blades vertical water wheel which is equal to 74% and the efficiency of vertical wheel with a static blade which amounted to 15%. With the provision of water flow and the steering gear ratio is right then the wheel will be greater efficiency.

Kata Kunci : *Hydroelectric, Vertical Moving Blades, Elevation, Efficiency*