

Improving the Efficiency of Pelton Wheel and Cross-Flow Micro Hydro Power Plants

Authors : Loice K. Gudukeya, Charles Mbohwa

Abstract : The research investigates hydropower plant efficiency with a view to improving the power output while keeping the overall project cost per kilowatt produced within an acceptable range. It reviews the commonly used Pelton and Cross-flow turbines which are employed in the region for micro-hydro power plants. Turbine parameters such as surface texture, material used and fabrication processes are dealt with the intention of increasing the efficiency by 20 to 25 percent for the micro hydro-power plants.

Keywords : hydro, power plant, efficiency, manufacture

Conference Title : ICBB 2014 : International Conference on Bioinformatics and Biomedicine

Conference Location : Istanbul, Türkiye

Conference Dates : May 22-23, 2014