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Centrifugal Pump as Turbine: Experimental Report

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Abstract:In order to satisfy the needs of power demand, a suitable and attractive alternative of using centrifugal pump as turbine. Pump-as-turbine (PAT) is one of the most excellent alternatives for satisfying the energy demands and providing the electrical energy in isolated and rural areas. Financial growth through renewable energy and sustainable energy sector create more employment, which leads to communal improvement of the nation. One of the reasons for the micro hydro left immature is because of financial constraints. Although the running cost for micro hydro scale are very low, the initial capital cost are high particularly the turbines cost. Using pump-as-turbine (PAT) is an attractive and significant alternative. Currently, applications of PAT have been developed in villages, farms, irrigation systems and as small pump storage power stations.

Keywords :Centrifugal Pump, Pump as turbine, Hydropower schemes.

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