

ARCHIMEDES SCREW GENERATOR

Prepared by: Leslie Chong Sheng Xiang, Ong Wei Giap, Ruben a/l Sukumaran

ABSTRACT

The purpose of this project is to provide a hydropower turbine for the beneficial of the nearby surrounding residents and to investigate the effect of putting and setting up the turbine there. Therefore, it is necessary that the machine is set up at the right place where it will benefit the people. It provides water supply to the residents and surplus of electricity for the hotel use nearby. It is important that the hydropower turbine which is the Archimedes screw generator will be useful for the generation of electricity and water. Hydro electricity will be at the forefront of renewable technologies, leading the global green energy growth. According to a new report, over the next quarter of a century, hydro power will account for 55% of all renewable energy added worldwide.

It is one of the oldest hydraulic machines. Today, it is used for pumping water as well as operating in reversed directions as an energy supply. Moreover, it has a conversion role as well. It is an idealized screw where the turning of the blades will suck up water and the the geometry of the screw is found to maximized the efficiency produced.