

Abstract

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A Review on Micro Hydro Gravitational Vortex Power and Turbine Systems

Electrical power is essential in commercial and social investments like lighting, heating, communications, computers, industrial equipment, transport etc. Therefore hyower energy is one of the most suitable and efficient source of renewable energy which depends on more than century of experience for this issue. The power capacity and facility are two criteria required for the classification of hyower plant. The first one consists of five technologies: dammed reservoir, run of river, pumped storage, in stream technology and new technology gravitational vortex. The other one is classified according to power scale is Large, Small, Micro and Pico Hyower. This paper is focusing on micro hyower especially gravitational vortex power which increases the sustainability and health of the water as a whole. It presents an overview from both flow and power points of view by discussing the free surface vortex (FSV) and the suitable turbine systems which are used in micro hyower.