

PROTOTYPE DESIGN COLLECTION

SERIES 1



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CHAPTER 1

Fabrication of Mini Hydroelectric Generator

Muhammad Firdaus Bin Rashidy and Zeno Michael

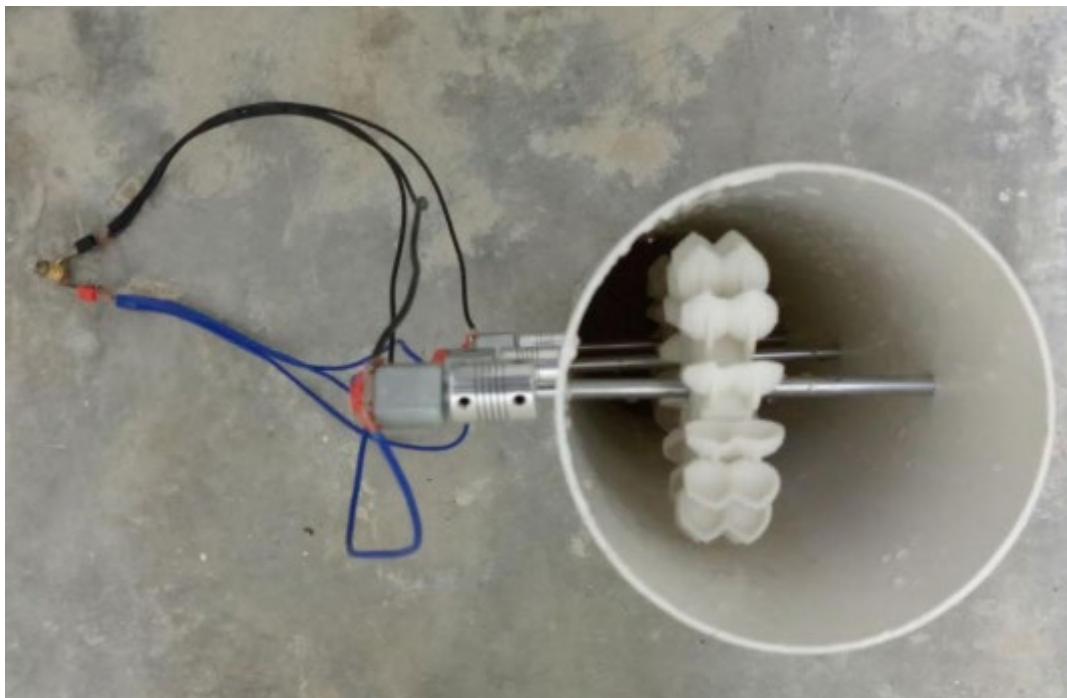
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PROJECT DESCRIPTION

The project is to fabricate a mini hydroelectric generator. Hydroelectric is a renewable energy that converts the kinetic energy of flowing water into electricity. A mini hydroelectric generator may utilise green energy and it can create awareness about how simple it is to use hydro energy. Therefore, the objective of this project is to design and analyse a mini power generator that reduces the cost and size to make it more versatile and easier to use by anyone. The methodologies used are by designing the final selected design product using Solidworks and fabricating it step-by-step starting from the body, turbine, shaft, and assembling them. There are measuring processes, cutting processes, and drilling processes. In addition, the relevance of my project is that it is lightweight and portable, uses renewable energy, is simple to install and reinstall, and is inexpensive. Unfortunately, the project failed to generate electricity. This is probably due to the speed is not enough to generate electricity. Hence, the result suggests that the product should add a reservoir and use a smaller generator to increase its speed.

Keywords: *Fan, Cooling Air, Standing Fan*

PROTOTYPE



DESIGN PARAMETER

