

DESIGN AND FABRICATION OF PEDAL OPERATED ELECTRICITY AND CUTTING FORCE GENERATOR

A project report submitted in partial fulfillment of the requirements for award of

Degree of

BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING

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CERTIFICATE

This is to certify that the mini project report isentitled"**DESIGN AND FABRICATION OF PEDAL OPERATED ELECTRICITY AND CUTTING FORCE GENERATOR**"was carried out by **K.CHANDRA MOULI (16815A0316) , E.VENKATESH (16815A0308) , N.VAIKUNTHA RAO (16815A0330) , V. SAI KUMAR (15811A03D6)** in partial fulfillment of the requirements for the award of the " Degree of Bachelor of Technology in**MECHANICAL ENGINEERING** " To JNTUK University at AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY, Narsipatnam during the academic year 2018-2019.


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PROJECT GUIDE


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EXTERNAL EXAMINER

Abstract

Bicycle is the main mode of transportation for many Indian villagers. Most of these villages are un-electrified. Power generated by pedaling can be converted from mechanical to electrical energy by using either dynamo or alternator. Small powered lighting devices can be charged using dynamo and can be used in the night by students for study purposes. This principle can be extended to power mobiles, iPods, laptops etc. Power can be also generated from the rotation of the wheels of alternator vehicles like bikes and cars, where there is a possibility of generating more power. The generated power can be either used in the same vehicle or can be stored in a battery for powering some other devices. With the power generation we are also producing cutting force with the use of hacksaw arrangement . Riding bicycle helps in maintaining a good physic and along with it power can be also generated. This paper presents methods in generating electricity by pedaling a bicycle. It also explains in detail the method using bottle dynamo to generate power. A detailed analysis of using pedal power is also presented.

Key words ; Electricity , pedal power , cutting force , slider crank mechanism.