

POWER GENERATION THROUGH SPEED BREAKER

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

Degree of

Bachelor of Technology

In

Mechanical Engineering

SUBMITTED BY

A.RAJESH	(17815A0302)
A.MEGHANA	(17815A0301)
B.KRISHNA	(17815A0330)
Y.V.PRUDHVI	(16811A0393)

Under the Guidance of

Sri D.TRINADH M-Tech.

Associate Professor



DEPARTMENT OF MECHANICAL ENGINEERING

AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY

(Permanently affiliated to JNTU-Kakinada, accredited by NBA & NAAC (A),
approved by AICTE, recognized by UGC 12f & 2b)

TAMARAM (V), MAKAVARAPALEM (M),

VISAKHAPATNAM DISTRICT – 531113

2016-2020

AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(APPROVED BY AICTE AFFLICTED TO JNTU-KAKINADA)

(AN NAAC & NBA ACCREDITED INSTITUTION)

TAMARAM, MAKAVARAPALEM, VISAKHAPATNAM-531113

DEPARTMENT OF MECHANICAL ENGINEERING



CERTIFICATE

This is certify that the project work entitled “POWER GENERATION THROUGH SPEED BREAKER” is a Bonafide record of work done by A.RAJESH (17815A0302),A.MEGHANA(17815A0301),B.KRISHNA(17815A0330),Y.V.PRUD HVI(16811A0393) in partial fulfillment of the requirement for the award of Bachelor of technology in MECHANICAL ENGINEERING by Jawaharlal Nehru technology university, Kakinada. During the year 2016-2020

D.B

Sri D.TRINADH M.Tech

PROJECT GUIDE

A handwritten signature in blue ink, appearing to be 'V. Hari Kiran'.

Sri V.HARI KIRAN M.Tech (Ph.D.)

HEAD OF THE DEPARTMENT

EXTERNAL EXAMINER

ABSTRACT

Man in his lifetime, uses energy one form or the other. In fact whatever happens nature, results, out of the conversion energy in one form or the other. The blowing of the wind, the formation of clouds and flow water are a few examples that stand testimony to this fact. The extensive usage of energy has resulted in an crisis, and there is a need to develop methods of optimal utilization, which will not only ease the crisis but also preserve the environment. Energy conservation is the cheapest new source of energy. This project attempts to show how energy can be tapped and used at a commonly used system, the generation of electricity through speed breaker mechanism.

Generation of electricity through the speed breaker mechanism is one of the most recent power generation concepts. This device converts the kinetic energy of vehicles into electric energy by installing movable speed breaker on the road, it takes stroke motion of the vehicles and converts it to the rotary motion by rack and pinion mechanism and it generates the electricity.

This project also explains clearly, the working principle of the designed system, its practical implementation, and advantages. Design of each component has been carried out using standard procedures, and the components have been fabricated and assembled. A similar model of the system has been modeled using AutoCAD 2007. Practical testing of the system has been done with different loads at different speeds. The utilization of energy is an indication the growth a nation. One might conclude that to be materially rich and prosperous, a human being needs to consume more and energy. And this project is best source of energy that we get in day to life.