

**POWER GENERATION BY FOOT STEPS USING RACK AND
PINION ARRANGEMENT**

A Project Report submitted in partial fulfillment of requirements for the
award of the degree of

**BACHELOR OF TECHNOLOGY
IN
MECHANICAL ENGINEERING**

SK. MOHAMMAD NAZAR	(14811A0389)
R. AVINASH	(14811A03A1)
N. HARSHA SRI PRAVEEN CHANDRA	(14811A0379)
P. JAGADEESWARA MANGA SRINIVAS	(14811A0395)

Under the Esteemed Guidance of
MISS. K. ANURADHA M. Tech.
Assistant Professor



**DEPARTMENT OF MECHANICAL ENGINEERING
AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY**

Permanently Affiliated to JNTU Kakinada, (NBA ACCREDITED)

Tamaram, Makavarapalem, Visakhapatnam (Dt). ANDHRA PRADESH-531113.

2014-2018

AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(AN NBA ACCREDITED COLLEGE)

Makavarapalem, Narsipatnam, Visakhapatnam-531113

DEPARTMENT OF MECHANICAL ENGINEERING



CERTIFICATE

This is to certify that this project work entitled "POWER GENERATION BY FOOT STEPS USING RACK AND PINION ARRANGEMENT" that is being submitted by SK.MOHAMMAD NAZAR(14811A03B5), R. AVINASH (14811A03A1), N. HARSHA SRI PRAVEEN CHANDRA(14811A0379), P. JAGADEESWARA MANGA SRINIVAS(14811A0395) to AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, Makavarapalem, Visakhapatnam in partial fulfillment of the requirements for the award of degree of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING is a bonafide work carried out by them under my guidance and supervision during the year 2017-2018.

The result embodied in this have not been submitted to any other College or University for the award any other degree.

K. Anuradha
Project Guide

M. L. K. 05.04.18
External Examiner

Atul
Head of the Department

HEAD OF THE DEPARTMENT
MECHANICAL ENGINEERING
Avanthi Institute of Engg. & Tech
Makavarapalem, Visakhapatnam-531113

ABSTRACT

Now a day's energy and power are the one of the basic necessities regarding this modern world. In this project we are generating electrical power as non-conventional method by walking on the footsteps. Non-conventional energy system is very essential at this time to developing nations like India, China etc. Non-conventional energy using footsteps needs no fuel input power to generate the output. In this project the conversion of mechanical energy into electrical energy is done by using simple drive mechanisms such as rack and pinion assembly and chain drive mechanism.

The present pattern of power generation is a uni directional power generation where the pinion obeys the support of rack in a single axis and connected to a free flywheel axial connected constantly to a dynamo.

The pattern of design make easy for power generation with individual way of working link where the flow of work is constant in an direction or in an half cycle time of process.

Key Words:

- Footsteps
- Conventional Energy
- Non-conventional energy