

A Project Report

On

**“ELECTRICAL POWER GENERATION USING
RAILWAY TRACK”**

Submitted in Partial fulfilment of requirement for
the Bachelor of Engineering

in

MECHANICAL ENGINEERING

By

AJAY REDDY N 3VC17ME001

C ESHWAR 3VC17ME006

DEEPAK PATIL S R 3VC17ME007

SUMIT S KORLAHALLI 3VC17ME074



UNDER THE GUIDANCE OF:

B BASAVA PRAKASH MTECH

DEPARTMENT OF MECHANICAL ENGINEERING

RAO BAHADUR Y MAHABALESWARAPPA ENGINEERING COLLEGE

ACCREDITED BY NAAC WITH B++

CANTONMENT, BALLARI-583104, KARNATAKA 2020- 2021

VISVESVARAYA TECHNOLOGICAL UNIVERSITY BELAGAVI



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RAO BAHADUR Y MAHABALESHWARAPPA ENGINEERING
COLLEGE

(AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM
& APPROVED BY AICTE, NEW DELHI)

BALLARI - 583104, KARNATAKA

DEPARTMENT OF MECHANICAL ENGINEERING



CERTIFICATE

This is to certify that project work entitled "ELECTRICAL POWER GENERATION" is bonafide Work carried out by AJAY REDDY N (3VC17ME001), C ESHWAR(3VC17ME006) ,DEEPAK PATIL S R (3VC17ME007) and SUMIT S KORLAHALLI(3VC17ME074) of 8thSemester in Partial fulfilment for the award of degree of Bachelor of Engineering in Mechanical Engineering of the Visvesvaraya Technological University, Belgaum during the year 2020-2021. It is certified that all corrections/suggestions indicated for internal Assessment have been incorporated in the Report deposited in the departmental library. The project report has been approved as it satisfies the academic requirement in respect of project work prescribed for the Bachelor of Engineering Degree.

B Basava Prakash 9/8/21
Signature of Guide

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Assistant Professor,

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- 1) *Ajay Reddy* 9/8/2021
- 2) *Basava Prakash* 9/8/21

Signature with Date

ELECTRICAL POWER GENERATION USING RAILWAY TRACK

ABSTRACT

In this project we are generating electrical power as non-conventional method by simply running on the train in the railway track. Non-conventional energy system is very essential at this time to our nation. **Non-conventional energy using railway track** needs no fuel input power to generate the output of the electrical power. This project using simple drive mechanism such as rack and pinion assemble and chain drive mechanism.

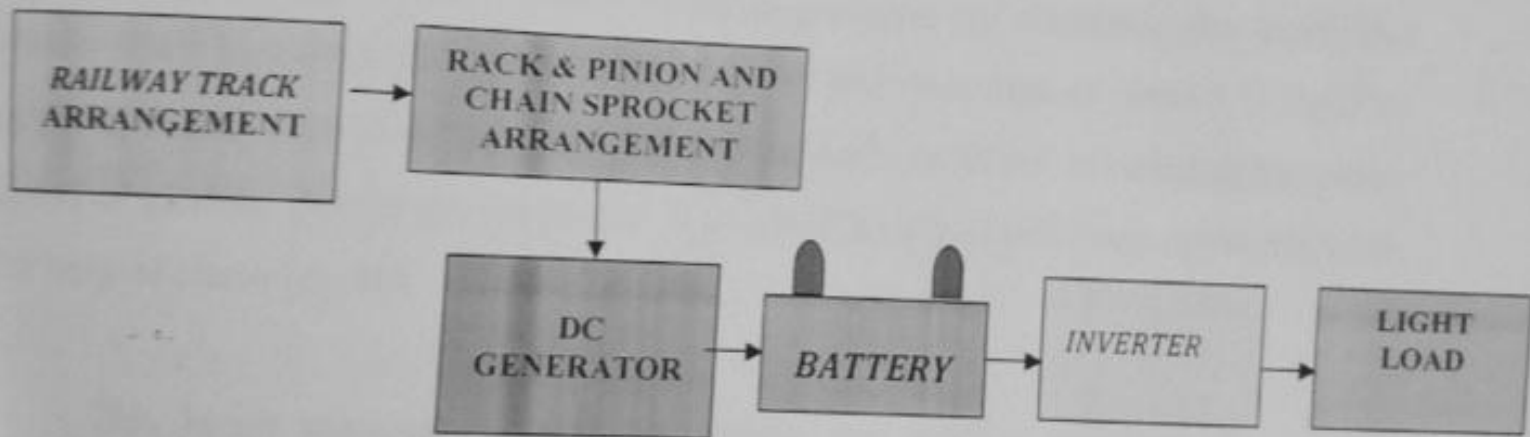
For this project the conversion of the force energy in to electrical energy. The control mechanism carries the rack & pinion, D.C generator, battery and inverter control. We have discussed the various applications and further extension also. So this project is implemented to all railway track, the power generation is very high. The initial cost of this arrangement is high.

ELECTRICAL POWER GENERATION USING RAILWAY TRACK

Chapter-4

BLOCK DIAGRAM

BLOCK DIAGRAM



ELECTRICAL POWER GENERATION USING RAILWAY TRACK

CONCLUSION

We can say our project can be a success considering that will be effective in providing mobility for persons who have disabilities. One of the major lessons we have learned is that designing an appropriate technology is a huge challenge.

While concluding this part, We Feel quite contented in having completing the project assignment the project assignment well on time. The selection of choice of raw materials helped us in machining of the various components to very close tolerances , We believe that we have system that will be effective in providing accurate detecting and marking with one of the major lesson we have learned is that designing an appropriate technology is a huge challenge appropriate is more than just availability for replication it considers reliability and efficiency

In concluding the words of our project, since the railway track power generation get its energy requirements from the Non-renewable source of energy. There is no need of power from the mains and there is less pollution in this source of energy. This concept can be adapted in various places like college, railway station, shopping complex and etc.



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Academic Year 2020-21
 DEPARTMENT OF MECHANICAL ENGINEERING

UG PROJECT PHASE - 1
EVALUATION SHEET
 (17MEP78 / 15MEP78)

Date: 22/01/2021

1. TITLE OF THE PROJECT:

Generation of Power using Railway track

2. NAME OF THE PROJECT GUIDE:

B Basava Prakash

3. DETAILS OF PROJECT ASSOCIATES:

Batch #	Name of the Student	USN	Phone #	E-Mail ID
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4. EVALUATION:

Sl#	Name of the Student	USN	Project Phase - 1 Marks (Refer rubrics on next page)						Total Marks Obtained (For 100)
			1	2	3	4	5	6	
1	Sumit S Korlahalli	3VC17ME074	9	10	9	10	9	49	96
2	Ajay Reddy. N	3VC17ME001	10	10	10	10	10	48	98
3	C. Eshwar	3VC17ME006	9	10	9	9	10	48	95
4	DEEPAK PATIL	3VC17ME007	10	9	10	10	10	48	97

5. Viva-Voce (C. I. E.) Committee Members:

Sl#	Name of the Faculty	Signature
1	Lakshmana Naik TB	
2	G. Manjunath	
3	Mallikarjuna Y	

6. SIGNATURE OF THE GUIDE:

B Basava Prakash

7. SIGNATURE OF H. O. D: