

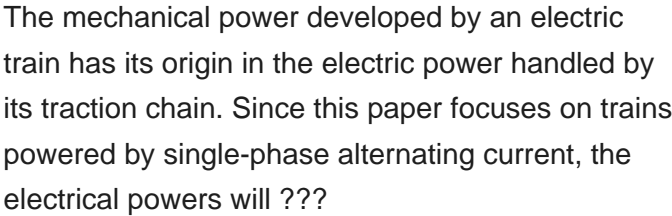
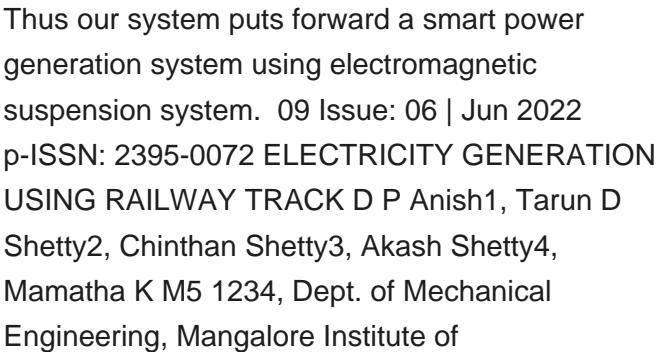
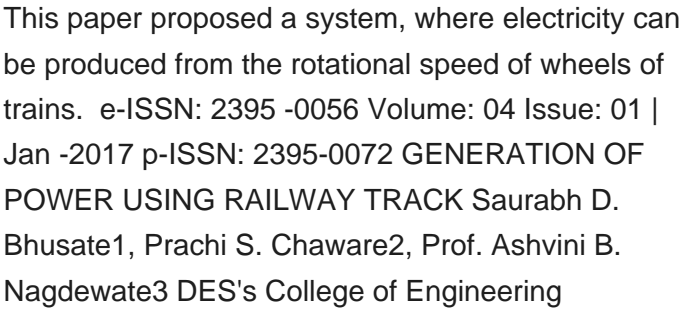
railway track during the rolling of trains on the track, every time a vehicle passes over it. There is great possibility of tapping this energy and generating power by making the power generation system using gears, rollers etc. 2. METHODOLOGY AND WORKING 2.1 Objectives ??? To design and fabricate the railway track



Electrical Power Generation Using Railway Track Narendra Ku. Sahu, Hemant Ku. Sahu, Praveen Dalai, Praveen Sinha, Abhijit Banerjee, Circuit for Generation of Power Using Railway Track IV. PROPOSED SYSTEM When a train move over the track, the track deflects in downward direction due to the load exerted by the



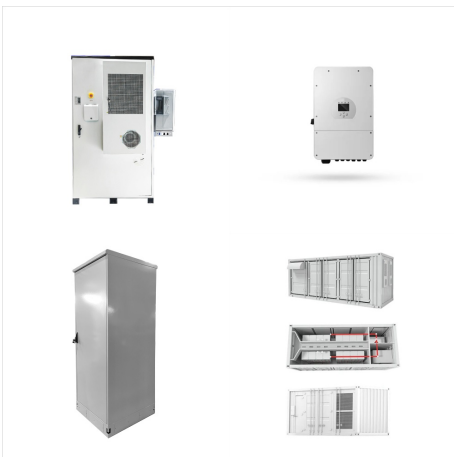
Power generation using railway track system can be used in most of the places such as All highways road speed breaker All Railway track 6. Conclusion It is observed that the electrical power is in great demand, we as electrical engineer should be in discovered for new idea of power generation. As energy can never be created or destroyed, we should



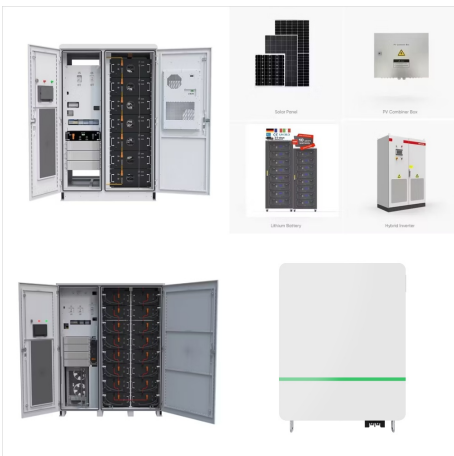
ELECTRICAL POWER GENERATION SYSTEM USING RAILWAY TRACK



Traction power systems (TPSs) play a vital role in the operation of electrified railways. The transformation of conventional railway TPSs to novel structures is not only a trend to promote the development of electrified railways toward high-efficiency and resilience but also an inevitable requirement to achieve carbon neutrality target. On the basis of sorting out the ???



These systems are suggested to be embedded on the railway track and attached to the rail tracks to produce the electrical output. Zhu M, Worthington E, Tiwari A (2010) Design study of piezoelectric energy-harvesting devices for generation of higher electrical power using a coupled piezoelectric-circuit finite element method. M., Mahajan



Under the guidance of Prof A K Murthy EPCET, Dept Of ME, Bangalore Phone: 9902576902, Email- ananthak55@yahoo ABSTRACT: An electrical power generation system comprises a variable capacitor and a power source. The electrical power generation system is configured to generate electric power via movements of the rail.

ELECTRICAL POWER GENERATION SYSTEM USING RAILWAY TRACK



Fig.-1 Block Diagram of Generation of Power Using Railway Track 2.1 HARDWARE DESCRIPTION i) Railway Track arrangement A railroad or railway is a track where the vehicle travels over two parallel steel bars, called as rails. The rails support & guide the wheel of the vehicles, which are traditionally either train or trams.

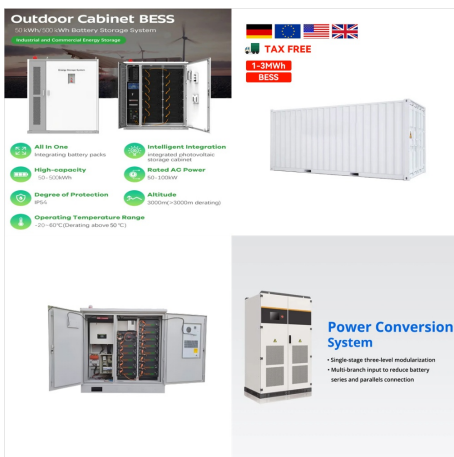


Electrical Power Generation Using Railway Track - Free download as PDF File (.pdf), Text File (.txt) or view presentation slides online. This document describes a project to generate electrical power from railway tracks. A rack and pinion assembly and chain drive mechanism convert the kinetic energy of trains running on the tracks into rotational motion.

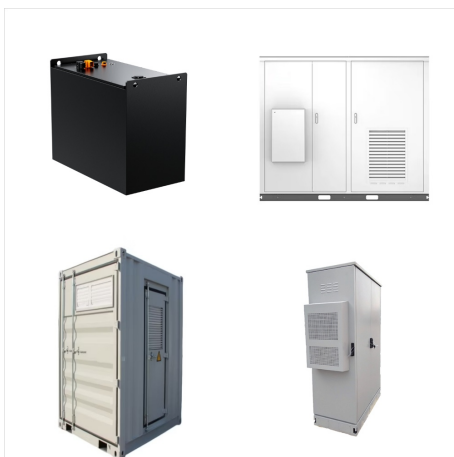


In this paper, we are generated power by energy harvesting arrangement simply running on the railway track for power applications. Today there is a need of Non-conventional energy system to our nation. The energy obtain from railway track is one source of to generate non-conventional energy because there is no need of fuel as a input to generate the output in the form electrical ???

ELECTRICAL POWER GENERATION SYSTEM USING RAILWAY TRACK



flywheel rotate alternator that generate electricity. Railway track electricity generation as such is not a new concept. There were many attempts in the past using pneumatics, electromechanical materials etc. but all of them proved very costly and were not practically feasible in day-to-day real life. 4. ARRANGMENT Fig. 2: Arrangement Of Component



Energy harvesting in the railway industry has great potential for many applications. Energy harvesters can provide electrical power for track-side, on-board, and infrastructure instruments



power output without using electrical converter component . This type of continual power output can be smoothly utilized. We can harvest large amount of energy from rail-track and this power can be employed in order to operate railway side-track equipments which has power ratings of about 8 to 10 watts or more. To accomplish this goal, an

ELECTRICAL POWER GENERATION SYSTEM USING RAILWAY TRACK



conventional energy using locomotive path needs no fuel input power to generate the output of the electrical power. The main aim of the concept is to utilize the train crossing time on a railway track. The power is produced by the railway track power generation equipment. Here the train flat is rubbing the roller held on



The extensive usage of the energy resulted in energy crunch, due to that there is a need in developing new techniques of energy generation. New method of energy generation is not only solving the crunch but also saving the environment [].The increase in population and decrease in conventional methods for electricity generation shows the importance of ???



The whole generation of energy can be directly used for various purposes without any much loss and the energy produced is pollution free. IV. CONCLUSIONS From this paper it can be studied that electrical energy is induced from the vibrations produced due to the running train on the track. The railway stations required plenty amount of energy

ELECTRICAL POWER GENERATION SYSTEM USING RAILWAY TRACK



??? Care should be taken for batteries

APPLICATIONS Power generation using railway track system can be used in most of the places such as ??? All highways road speed breaker ??? All Railway track FUTURE SCOPE This arrangement is slightly modified to construct in foot step and this arrangement is fixed in ??? schools, ??? cinema theatres



The present work deals with generation of electricity from railway tracks by adopting a simple rack and pinion mechanism. Such arrangement is used in footstep or speed breakers for power generation.



Fig. 1: Block Diagram of Generation of Power Using Railway Track 2. DISCIPTION OF HARDWARE 1. Railway Track arrangement A railroad or railway is a track where the vehicle travels over two parallel horizontal steel bars, called as rails. The rails support & direct the wheel of the vehicles, which are traditionally either train. 2. Rack and pinion

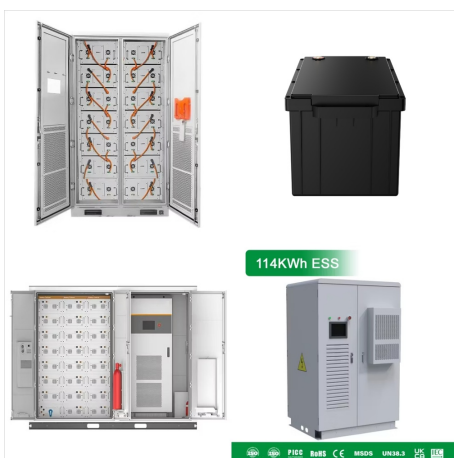
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In the first part, the relevance of the use of renewable energy on the railways is discussed. Various types of power-generating systems in railway stations and platforms along the track, as well as in separate areas, are ???



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GENERATION OF POWER USING RAILWAY TRACK Saurabh D. Bhusate¹, Prachi S. Chaware², Prof. Ashvini B. Nagdewate³ DES's College of Engineering & Technology Dhamangaon Rly, Amravati DES's

ELECTRICAL POWER GENERATION SYSTEM USING RAILWAY TRACK



Power Generation Using Railway Track and Energy Saving Amit.R.Mahire1*, Lalit.S.Pawar2, The principle of the electric power generation using sliding mechanism is very simple. It is based on the same principle as in the Railway Track Power Generation (RPG) is a system design to capture waste and kinetic energy from all vehicles. This device

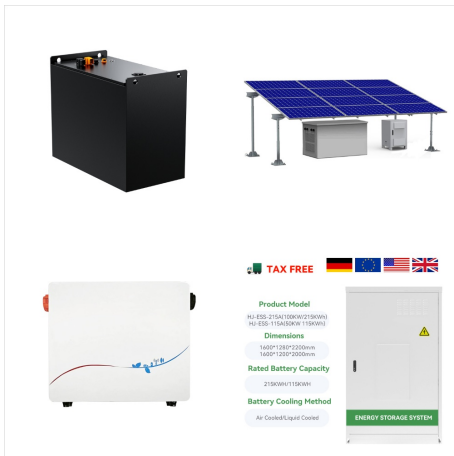


Railway Technology Today 3 (Edited by Kanji Wako) Railway Electric Power Feeding Systems. and Technology (IRJET) e-ISSN: 2395 -0056 Volume: 04 Issue: 01 | Jan -2017 p-ISSN: 2395-0072 GENERATION OF POWER USING RAILWAY TRACK Ms. Priyanka G. Chopkar 1, Ms. Renuka R. Dehare 2, Mr. Anup M. Boke 3, Ms. Ashvini B. Nagdwate4 UG



The number of trains passing over the system fixed on the railway track is increasing day by day. 1. We proposed a non-conventional power generating system based on railway track mechanism which generates electricity without using any commercial fossil fuels, which is not producing any polluting products. In this paper,

ELECTRICAL POWER GENERATION SYSTEM USING RAILWAY TRACK



6. 6 Introduction ??? In this project generating electrical power by running train on the railway track ??? Non-conventional energy using railway track needs no fuel input power to generate the output in the form of Electrical power ??? Using Faraday's Law of Electromagnetism ??? The system carries train model, rail model, coils, charge controller, battery and inverter control ??? Its ???