

# Study and Development of Perendev Magnetic Motor

Ketkar Chinmay<sup>1</sup> , Kankekar Sail<sup>1</sup> , More Sushant<sup>1</sup> , More Vinayak<sup>1</sup> , Priyanka Shelar U<sup>2</sup>

U.G. Student, Department of Electrical Engineering, B.R. Harne Engineering College, Vangani (W), Thane ,  
Maharashtra India<sup>1</sup>

Professor, Department of Electrical Engineering, B.R. Harne Engineering College, Vangani (W), Thane ,  
Maharashtra, India<sup>2</sup>

**ABSTRACT:** This project aims to build a power-plant without any fuel sources in generating electricity. This approach is based on Perendev concept known as Perendev Magnetic Motor. This Perendev Magnetic Motor is placed between prime-mover and generator which acts as a flywheel to store the rotational energy. This motor uses magnetic force to rotate the rotor which at the same time rotates the shaft of the generator. The main objective of this magnetic motor is to extend the discontinuous power by any prime-mover (ex: wind turbine, tidal energy etc.). This can be achieved by arranging the magnets in a special configuration.

**KEYWORDS:** Magnetic motor; Generator; Rotational energy; Magnetic repulsion, perendev magnetic motor

## I. INTRODUCTION

So far, many have tried building a free energy producing magnetic motor. But we learned that energy is not free, perpetual motion machines do not exist, and all the energy is taken from somewhere and put elsewhere. Free energy from permanent magnets respects the same rule. Currently, known are different technical solutions for electric motors that use magnetic and electromagnetic fields. The magnetic motor works only on the basis of repulsion of permanent magnets. Originally, already in 1905, designed Nikola Tesla have been several permanent magnet motors-generators, i.e. magnet motors where the power comes from the permanent magnets, not an external supply of electricity. Most people think that the magnetic motor will never become a reality. But many ideas that have previously been regarded as unrealistic are commonly used today. Presently, development of technology has such a rapid pace, that what today cannot be made, in the future will become a possibility, and will commonly use.

Energy is essential to our society to ensure our quality of life and to underpin all other elements of our economy. The escalation in cost and environmental concerns involving conventional electrical energy. Sources have increased interest in renewable energy sources. Many societies across the world in which we live have developed a large appetite for electrical energy. This appetite has been stimulated by the relative ease with which electricity can be generated, distributed, and utilized, and by the great variety of its applications.

Perendev is a device that use magnets for continuous motion of prime-mover. The device has 3 slides of magnet for rotor and 3 slides of magnets for stator. The magnets will be arranged in special configuration, in which the magnets are placed in 60. Initially the motor stores the energy and gradually gives the energy to the generator. This motor works on the repulsion principle.

## II. PROBLEM STATEMENT

The excessive use of fuel such as coal, diesel and gas contribute to pollution that leads to global warming. So, we can make use of renewable sources of energy such as wind energy, but the main problem arises when the power is not continuous and thus efficiency is not up to the mark. By using **Perendev Magnetic Motor** we can extend the power thus making the plant efficient.

## III. OBJECTIVE

- To design the model of Perendev device.
- To model the design into hardware and make sure it continuously rotates and have good enough force to rotate the mini dynamo

#### IV.METHODOLOGY

Following figure 1. Shows the overall steps of project and analysis of flow chart

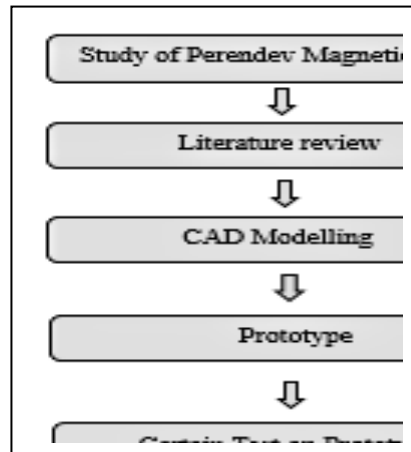


Figure No.1 Flow Chart Of Methodology

#### Construction of magnetic motor

In the world today there are also many technical solutions of the magnetic motor that uses only permanent magnets and repulsive and attractive forces between magnets. Many patents and applications for industrial designs are filed. I will mention only a several of the best known of published solutions. Probably the best known is the Perendev Motor. About this motor its inventor says it works by using the power of permanent magnets (neodymium magnets) to propel itself. The 3D model of Perendev motor is presented in fig :2.

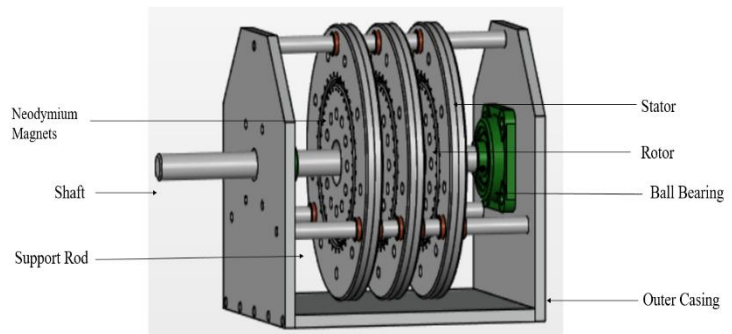


Fig.2: Construction Diagram Of Perendev Motor

#### I) Main Components for PERENDEV Generator

##### a) Neodymium Magnets

It is a metal which is a ferromagnetic in nature. They are having a large magnetic dipole moment. It is having 7 unpaired electrons so they spin in same direction which generates the magnetic field. They are having high saturation magnetization so maximum energy density & as a result having a large potential to store large magnetic energy .

- (i) Remanence :- It measures the strength of magnetic field
- (ii) Coercivity :- It is property of materials resistance to become demagnetized
- (iii) Curie Temperature :- It is temperature at which the material loses its magnetism

Following table shows the properties of neodymium magnets .



Figure 3. Neodymium Magnets

Table1:Properties Of Magnets.

Property	Value
Remanence (T)	1-1.3
Coercivity (MA/m)	0.875-1.99
Relative permeability	1.05
Temperature coefficient of Remanence (%K)	-0.12
Temperature coefficient of coercivity (%K)	-0.55 to 0.65
Curie temperature (c)	320
Density (gm/cm <sup>3</sup> )	7.3-7.5

**b) Magnetic Wheel/ Rim**

It is basic & most important part of generator. It consists of the Neodymium magnets specifically arranged in such a manner that their relative position will cause a continuous motion. It is made of non-ferrous material. The whole assembly is mounted on an aluminum shaft.

**c) Aluminum Shaft**

It is used to hold the rotor assembly. It allows the inner wheel to move in the direction parallel to the axis of the shaft. It holds the magnetic wheel, flywheel & gear. As torque carriers, drive shafts are subjected to torsion & shear stress they must be strong enough to bear the stress, whilst avoiding too much additional weight in turn increase their inertia.

**d) Dynamo**

Is an electrical generator that produces direct current with use of commutator. It uses rotating coils of wire & magnetic fields to convert mechanical rotation in a pulsating DC current through Faradays law of electromagnetic induction. It consists of stator which provides a constant magnetic field & set of rotating windings called armature.

**Basic Principle of Operation of perendev motor**

The outer rim of the wheel is stationary and is fixed and supported by the brake assembly mounted on the base. The arrangement of the magnets as mentioned in the construction is made in such a way that the similar faces of magnets in the outer rim and the inner rim should face each other to cause repulsion. When the magnet in the inner rim comes in the strong magnetic field of the outer rim magnet, a force of repulsion acts on both the rims .The dual mass flywheel is made with an arrangement of spring and weight, which on rotation helps to increase the angular speed hence it increases the rpm of shaft.

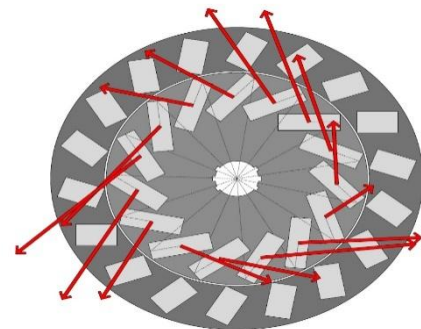


Fig 4.Magnets Arrangement On Rotor And Stator

**BLOCK DIAGRAM Of Prototype**

Following fig.5 shows the block diagram of prototype



Fig.5 Block Diagram Of Prototype

i. Prime mover

In engineering, a prime mover is an engine that converts fuel to useful work. An initial source of motive power. Here in our project wind turbine acts as a prime mover. Which drives the motor through gear box

ii. Gear box

A transmission is a machine in a power transmission system ,which provides controlled application of the power. Often the term transmission refers simply to the gearbox that uses gears to provide speed and torque conversions from a rotating power source to another device.

iii. Perendev magnetic motor

Energy stored in the magnetic motor and this energy given to the generator when the turbine stops rotating.

iv. Generator

The generator is device which convert the mechanical energy into electrical energy. The mechanical energy which is obtained from the prime mover and Magnetic motor is converted to electrical energy. There are two types of generator ac generator and dc generators.

### WORKING

this system on two modes as follows.

mode 1

A physical parameter is converted to rotational energy by prime-mover. The gear box is placed before the magnetic motor. The gear box produces sufficient torque and speed as per the requirement of the generator. Perendev Magnetic Motor requires jerk for starting, this jerk is being produced by prime-mover through gear box. As prime-mover rotates, the motor starts storing the rotational energy. The generator is coupled to gear box and magnetic motor by same shaft. The rotation of shaft results in rotation of generator and hence energy is produced.

Mode 2

In this mode, prime-mover stops but the motor is still rotating continuously because of rotational magnetic repulsion force and moment of inertia. The energy which is accumulated in the motor is rotate the generator shaft. Then the generator start generating the electrical energy

### V. APPLICATIONS

- (a) It can be used as a separate power house in homes which helps in reducing electricity bills.
- (b) It can be used as a source of power in remote areas, where electric lines aren't working
- (c) It can be used in space as an alternate source of power while sending satellites for distinct operations.
- (d) It can be used in unnamed aerial vehicles operated on electric power, which will increase the flight time of the aircraft
- (e) It can be used in automobile vehicles to power the electrical system, which will eliminate the need of replacing or charging the battery again & again.
- (f) Free energy can be used to charge small Li-Ion batteries of high voltage & low current which are used for other applications.
- (g) Free energy can be used to power up small led & bulb on vehicles.

### VI. CONCLUSION

A brief review on free energy generation which runs on small input & gives a valuable amount of electrical energy which can be used for multipurpose use. It is achieved by integrating a generator with a motor. Also reviews on the main components of Perendev magnetic motor were discussed. Also advantages & applications of Perendev magnetic generator are also discussed.

### REFERENCES

- [1] Bharat M. Jibhakate, JayantP. Karemore, Jitendra D. Jaiswal, Kapil V.Kalambe, "Review of Free Energy Generator Using Fly –Wheel", International Journal of Engineering & Technology, Volume4, Issue2, Page no. 2021-2023, February2017



[2] Mayank Grover, B. Lohith Kumar, Isaac Ramalla, “The Free Energy Generator”, International Journal of Scientific and Research Publications, Volume4, Issue 12, Page no. 1- 3, December 2014

[3]P.Rajeswari, S. Sakthi, K. Bharathi, M. Sasikumar, “Zero Point Energy Conversion for Self-Sustained Generation”, JREAS, Volume10, Issue 10, Page no. 4326-4333, June2015

[4] Gourav Bhure, Suraj Ambulkar, “A Conceptual Research on Free Energy Magnetic Generator”, JREAS, Volume1, Issue 3, Page no. 124-128, July2016