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Energy Conservation at Toll Plaza

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Abstract: Now a days the Consumption of power has been increased tremendously. In order to meet the demand of Power by various units various setups has been introduced for effective power generation. In this Project electrical power is being generated as non-conventional method by simply passing vehicles on to the specially designed Roller Setup. This method of Electrical power generation needs no input power. This Project is implemented by using simple drive mechanism such as Roller, some interfaced Electrical components and chain drive Mechanism. The basic principle is simple energy conversion form mechanical to electrical energy by using the vehicles weight (potential energy) & motion (kinetic energy). Here the process of Electric Power Generation comes under the Mechanism of Electro-Kinetic power Generator. The electro-kinetic power generator is a method of generating electricity by harnessing the kinetic energy of automobiles that drives over the track. The track operates by virtue of a number of specially designed rollers placed on it. When the vehicles pass on the rollers, pressure is exerted on them, which develops the mechanical energy and by means of a specially designed mechanism, a generator is driven, which is capable of producing AC/DC current.

In this Project we are generating electrical power as non-conventional method by simply passing vehicles on to the specially designed Roller Setup. This method of Electrical power generation needs no input power. This Project is implemented by using simple drive mechanism such as Roller, some interfaced Electrical components and chain drive Mechanism. The basic principle is simple energy conversion form mechanical to electrical energy by using the vehicles weight (potential energy) & motion (kinetic energy).

Keywords: Kinetic energy, Speed rollers, Electro-mechanical unit, Non-Conventional Energy

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