

The road power generator is a concept that revolutionises the concept of speed breakers. It implements the concept of electric power generation from the principle of electromagnetism. The set up consists of a speed breaker hump, which is connected to a pinion through a rack (rack and pinion arrangement) below the hump. A shaft S1 is connected to the pinion which has a sprocket connected to one of its ends, another shaft S2 is placed parallel to this shaft. S2 has a sprocket with lower diameter as compared to the sprocket on S1. Shaft S2 is driven by chain drive. Due to a lower gear ratio, the speed on S2 is multiplied. The other end of S2 is connected to a generator which generates electrical power every time the shaft S2 rotates. A flywheel on S2 helps to increase moment of inertia of the shaft, rotational speed of S2 is further multiplied using a gear arrangement having low gear ratio before being connected to the shaft of the generator. The energy can be stored in a capacitor or a battery and can be used to light street lights and traffic signals.



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PROJECT

ROAD POWER GENERATOR

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