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Design and Implementation of Power Generation Mechanism Using Speed Breaker

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Abstract : In the current scenario demand of power is increasing day by day with increasing population. It is needed to sort out this problem with a technique which will not only overcome this energy crisis but also should be environment friendly. This project emphasizes on idea which shows that power could be generated by specially designed speed breaker. This project shows clearly how power can be generated by using Cam Mechanism where basically linear motion is converted into rotatory motion that can be used to generate electricity. When vehicle passes over the speed breaker, presses the cam with the help of connecting rod which rotate main shaft attached with large pulley. A flywheel is coupled with the shaft whose purpose is to normalize the oscillation in the energy and to make the energy unvarying. So, the shafts will spin with firm rpm. These shafts are coupled from end to end with a belt drive. The results show that power generated from this mechanism is 12 watts. The generated electricity does not required any fuel consumption it only generates power which can be used for the street light as well as for the traffic signals.

Keywords : revolution per minute, RPM, cam, speed breaker, rotatory motion
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