

A Review on Analysis and Optimization of Two Wheeler EV Chassis

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Abstract: *Today due to global warming issues across the world the technology in automobile is started to migrate from conventional energy sources to renewable for minimize the emission. The role of electrical vehicle is part of them. The main purpose of this project is to study, analyze and optimize the two wheeler electric vehicle chassis for improving the driving performance with stability; vehicle efficiency also improves the by selecting appropriate location of battery in EV.*

This paper describes the design methodology of the frame. The design of vehicle in such a manner that it satisfies the maximum loading conditions, the safety and comfort of the driver. The EV frame designed in CAD software while the total structural analysis has been made by ANSYS simulation software in which maximum bending stress and deformation has been analyzed. The outcome results from the simulation will help for modification of frame to minimize stress and deformation developed during steady and running condition of electric vehicle as well help for suggestive location of EV battery position for smooth operation.

Keywords: EV vehicle, Frame, Structural analysis, Simulation software

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