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OPTIMIZATION OF LEAF SPRING USING COMPOSITE MATERIAL

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ABSTRACT:-In recent year automobile industry shows increasing result of replacing steel with composite material. Glass-fiber reinforced composite leaf spring shows similar mechanical and geometric properties as that of steel leaf spring. In this project, we study the comparison between performance of GFRP and steel leaf spring. Main objective is to analyze the experimental result of Glass-fiber reinforced polymer leaf spring for low weight vehicle. model was created in SOLID-WORKS 2012 and analysis is done in ABAQUS 6.10.

Keywords— composite material; leaf spring; glass-fibre reinforced; ABAQUS6.1



DESIGN OF PRESSURE VESSEL

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ABSTRACT:-This technical paper gives the information about design of hemispherical pressure vessel. All the pressure has to withstand high pressure during its operation so that it works safely. A pressure vessel is a closed container which is design to hold the pressurized liquids and gases at a temperature higher than ambient temperature. The end caps fitted at the end of cylindrical body are called as heads. This paper is focusing on safety of hemispherical pressure vessel in design by using ASME Code section VIII. The CAD model of pressure vessel is done by using CAD softwares such as Solid Edge, Solid works etc.

Keywords- Hemispherical pressure vessel , ASME Code section VIII