**Design And Analysis Of Automotive Shackle**

**Abstract**

Shackle as a part of suspension system, this help to enhance the leaf spring flexibility. The arrangement tends to tensile, bending, shear and proof loads. This will cause the failure of suspensions system. Finite element analysis (FEA) is carried out at static condition of the shackle, so that stress distribution can be observed for analysis of high stress zones. Solid works model is carried out in the analysis. The analysis is to compare the various loading condition and the overall stress distribution zones have been studied.

Keywords- EN 45 materials, Finite element method, Stress analysis