

DYNAMIC ANALYSIS OF THE STEERING SYSTEMS HYDRAULIC LINES USING FINITE ELEMENT METHOD

Authors

Cătălin NEACȘU¹, Ionel VIERU², Ștefan TABACU², Dănuț Gabriel MARINESCU², Nicolae – Doru Stănescu²

¹Automobile Dacia Pitesti,

²University of Pitesti, Romania,

Abstract

This paper presents an analysis done in dynamic regime to identify the problematic areas, for steering system hydraulic lines. Using the modal analysis, there were determined the self frequencies of vibrations and then compared with the values imposed by the specification notes of the product. The CAD model was done using CATIA V5 and the calculus using FEM by MSC/NASTRAN.

Keywords

Steering hydraulic lines, dynamic analyses, FEM, stress, vibration mode.