DETERMINATION OF DYNAMIC CHARACTERISTIC OF HELICAL GEAR USING FINITE ELEMENT ANALYSIS AND MODAL TESTING

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ABSTRACT

Nowadays, gears are use to help human to make their life easier especially in industry. Gears are a geometric shape that has teeth uniformly spaced around the circumference. In addition, some art must be added to product a gears in a good shape. The main objective for this project is to determine the gear reaction in term mode shape and frequency when we apply the force. The design process was started with a sketch of the gears and designs it back using the Computer Aided Design software, CATIA V5. After the design is finish, the simulation and analysis was done by using the software, NASTRAN. Then, the experimental modal analysis will be done. In laboratory before we compare the results between this two method.

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