

Dynamic Structural Analysis of Four Stroke Petrol Engine Piston

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Abstract: *Dynamic-structural-analysis is the study of free vibration analysis of the structure, which involves determination of mode -shape, natural-frequencies, transient dynamic response and random dynamic-stress. This paper explains the importance of the structural- dynamic-analysis during designing stage of any structure component. The aim of this paper is to discuss structural-dynamic-analysis by two methods i.e. modal-analysis -method and finite-element-analysis method. Further they are coordinated into an effective diagnostic procedure and it is demonstrated on air cooling petrol engine piston. The modal-analysis is carried on FFT analyzer and FEM is carried on ANSYS software.*

Keywords: Design, Finite element, FFT analyzer Frequency, Structural

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