

VIBRATION ANALYSIS AND FAULT IDENTIFICATIONS OF ROLLING ELEMENT BEARINGS - A REVIEW

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ABSTRACT

The rolling element bearings are the integral components of the rotor shaft system. The failure of bearing can lead to catastrophic consequences. To reduce the chances of failure in bearing, researchers have studied the dynamic and transient behavior of the mating bodies for the structural and vibration analysis. Various techniques were implemented and enough literature is available for the different conditions. In this review, various bearing rotor frameworks with different loading and fault condition were summarized. Moreover, different methods and techniques have increased the early prediction of the fault. Techniques like F. E. A proves to be promising tools to carry out the systematic dynamic behavior of the rotor-shaft system.

KEYWORDS: F.E.A, Structural, Vibration, Rolling Element Bearing & Rotor-Shaft System

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