PROPOSAL OF LOGIC TO ESTIMATE INFLUENCE OF ALL MACHINE ELEMENTS OF A SHAFT ON VIBRATION RESPONSE OF BEARINGS INCLUDING FORMULATION OF AN APPROXIMATE GENERALIZED FIELD DATA BASED MODEL FOR VIBRATION RESPONSE OF DRAGLINE

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Abstract

Through this paper logic is proposed to decide the influence on vibrations of all machine elements on all bearings of the shaft of a mechanical power transmission system. This logic is subsequently applied to justify observed vibrations of bearing shells of a countershaft of the drag system of a dragline. A field data based approximate generalized model for vibration response of all bearings is also formulated.