

The Effects of a Thin Liquid Layer on the Hydrodynamic Machine Rotor

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Abstract : A mathematical model of the additional effects of the liquid in the hydrodynamic gap is presented in the paper. An in-compressible viscous fluid is considered. Based on computational modeling are determined the matrices of mass, stiffness and damping. The mathematical model is experimentally verified.

Keywords : computational modeling, mathematical model, hydrodynamic gap, matrices of mass, stiffness and damping

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