

INFLUENCE OF MICROPOLAR PROPERTIES OF OILS ON DYNAMICS OF COMPLEX-LOADED JOURNAL BEARINGS

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The design procedure of hydromechanical characteristics (HMC) of bush bearings under combined load greased by micropolar fluids is considered. The theory of current of micropolar fluids by Eringen is put in a basis. The effective temperature of a lubricant film of the bearing of final length is calculated from the equation of thermal balance. Are solved test problems and influence of parameters of micropolar oils on HMC bearings of a crankshaft of an internal combustion engine is estimated.

Bush bearings under combined load, micropolar fluids, Reynolds's equation

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