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CONTROL OF A TWO-ROTOR VIBRATION UNIT WITH INCOMPLETE MEASUREMENT OF THE STATE VECTOR

The previously proposed algorithms for controlling the synchronization of rotors of vibrating installations, developed on the basis of the velocity gradient method, require the measurement of the full vector of the system state to be implemented. This article analyzes the possibilities of forming control moments for unbalanced rotors with incomplete measurement of the state vector of a two-rotor vibration unit oscillating in a vertical plane.

Keywords: vibration unit, coordinate synchronization, control algorithms, unbalanced rotors, sensorless control.

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