Calculation of strain-stress state of flywheel in potential field

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Abstract

© 2015 D.V. Berezhnoi et al. This paper focuses on strain-stress state of the flywheel in the kinetic energy storage. The flywheel kinetic storage is based on the flywheel-housing scheme in potential field, at the quasistatic increase of rotor velocity. It is particularly noteworthy that a potential field in flywheel-housing system allows to increase specific energy capacity of energy storage.

Keywords

Flywheel-housing system, Kinetic energy, Specific energy capacity