

ACTION OF RANDOM VIBRATION ON NON-LINEAR DRY FRICTION DAMPING SYSTEM

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Dry friction systems (plate, rope, wire vibration isolators) are used widely for vibration protection. To calculate a random vibration loading on these systems an iteration process is proposed. This process takes into account a non-linearity of stiffness and damping of dry friction system, and allows to calculate maximal displacement and maximal acceleration of protected object.

Dry friction system, random vibration, non-linearity, vibration protection

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