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MODELS OF WAVE PROCESSES IN OBJECTS OF LIMITED FORM AND THEIR USE FOR DIAGNOSTICS OF ELECTROTECHNICAL EQUIPMENT

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Abstract

In this article considered the problem of constructing mathematical models of wave processes that are excited in solid objects of limited form by shock influence. Probabilistic models of vibrational wave processes propagating in charged magnetic pipelines of electric machines, have been developed, based on results of which the diagnostic features for determining the degree of compression of these magnetic conductors have been substantiated. Carried out simulated simulation of shock wave propagation on the investigated object. Based on the results of the modeling, parameters and characteristics describing the process of propagation of shock wave in the charged magnetic circuit and in the pile structures of seismic-resistant foundations for electrical equipment are substantiated. References 12, figures 10.

Key words: models of wave processes, shock vibration diagnosis, charged magnetic lead, power equipment.

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