

Method of the steel aluminum wires protection of air transmission lines from fast vibration damage at the output from the support clamp

Sabitov L., Kashapov N., Strelkov Y., Kuznetsov I.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© Published under licence by IOP Publishing Ltd. Conducted theoretical research of the stress-strain state of flexible mechanical connections, the varieties of which are wires of overhead transmission lines, cable cable mounting structures, strings frequency sensors of force and small displacements at the nodes of a rigid fixing. Chosen form of nodules, a flexible mechanical connection at the nodes of the rigid fixing of the conditions of increasing resource durability, and also reduce the maximum total stresses from stretching and bending at the nodes of a rigid fixing.

<http://dx.doi.org/10.1088/1757-899X/240/1/012059>

References

- [1] Novatsky P V, Knorring V G and Gutnikov V S 1970 Digital devices with frequency sensors (L.: Energy) 424
- [2] Osadchenko E P 1979 Designing sensors for measuring mechanical quantities (M.: Mechanical Engineering) 480
- [3] Kolosov V G and Ryzhov S V 2005 Increase of the resource resistance of overhead lines during vibration by installing spiral projectors in the boats of the supporting clamps *Electro* 45-51