ANALYTICAL APPROACH IN ANALYSIS OF NON-STATIONARY VIBRATIONS OF VIBRATOR FOR SURFACE COMPACTION OF CONCRETE MIXES

Yu. V. Chovnyuk, V. T. Kravchuk, I. M. Sivak

Abstract. *The analytical approach for the analysis of non-stationary vibrations vibrator designed for sealing concrete mixtures. Take into account the types of viscous and dry friction and a linear law of change of frequency of the perturbing forces over time. Vibrators for surface compaction of concrete mixes are vibrosystems dynamic nonlinearity, i.e. a nonlinearity such that only manifest themselves when driving. Generally speaking, vibrosystems dynamic nonlinearity are oscillatory system of most machines vibrating action used in construction, which forces inelastic resistance (damping) change the disproportion of the velocity of movement in the first degree.*

In the process of vibrators, there are various by their nature inelastic resistance. All these resistance differently changed depending on the displacement of the elements of the oscillating system vibromachine. Each of them affects the shape and atmosphere fluctuations, as well as on energy consumption. Resumelayout all inelastic resistances fibrositis can be represented as multi-component resistance consisting of the sum of concurrent single-label resistances.

Key words: *analytical approach, analysis, nomstafiomary, oscillations vibration, surfaces sealing*