

- Название: Kelvin-Voigt Model of Dynamic Stress in the Conveyor Belt
Другие названия:
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Ключевые слова: Transport Conveyor, Belt Stress, Distributed Transport System
Date of Conference: 29-30 October 2020
Издатель: Springer, Cham
Electronic ISBN: 978-3-030-66717-7
Print ISBN: 978-3-030-66717-7
- Библиографическое описание: Pihnastyi O., Kozhevnikov G. (2021) Kelvin-Voigt Model of Dynamic Stress in the Conveyors' Belt. In: Nechyporuk M., Pavlikov V., Kritskiy D. (eds) Integrated Computer Technologies in Mechanical Engineering - 2020. ICTM 2020. Lecture Notes in Networks and Systems, vol 188. Springer, Cham , DOI: 10.1007/978-3-030-66717-7_30
DOI: 10.1007/978-3-030-66717-7_30
- Реферат: This article is devoted to designing an information management system for the conveyor line of mining enterprises. The analytical design method for the transient mode of the stepped speed control system of the conveyor line was developed. The partial differential equation was used in constructing the conveyor line model. The description of the production system is fulfilled in the single step approximation. A decision was obtained which determines the state of the parameters of the production line for a technological position specified as a function of time. Has been determined the length of the transition period during which the initial condition for the distribution of labor objects along the conveyor affects the parameters of the state of the conveyor line. The method for calculating the current parameters of a conveyor line with the use of partial differential equations allows the design of control systems for production lines of conveyor type for transient modes. The originality of the results obtained is to improve the PDE-models of the conveyor-type production systems used to design highly efficient production control systems operating in transient modes.
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Location: Kyiv, Ukraine

Published in: Conference on Integrated Computer Technologies in Mechanical Engineering– Synergetic Engineering ICTM 2020: Integrated Computer Technologies in Mechanical Engineering - 2020
<https://www.springer.com/gp/book/9783030667160>