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**The authors:** Oleh Pihnastyi, Georgii Kozhevnikov, Svitlana Cherniavska  
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**Abstract:** The article presents an algorithm for optimal regulation of the step speed using the energy management methodology. Methods of reducing the cost of transport costs for conveyor systems are considered. The perspectives of using the energy management methodology as a tool to reduce the cost of energy are shown. Comparative analysis of energy management tariffs has been carried out. The problem of synthesizing stepwise speed regulation is formulated taking into account the tariffs for energy management. The criterion of quality for an estimate of the effectiveness of the transition to the TOU-tariff, differential links and restrictions on control is written. The Hamilton function for the transport system was determined, on the basis of which the synthesis of an algorithm for step regulation of the conveyor belt speed was performed. To construct differential relations an analytical PDE - model of the conveyor section was used, taking into account the transport delay of the material. The efficiency of the transition was assessed and qualitative comparative analysis of TOU-tariffs was carried out based on the speed regulation algorithm. It is shown that for the effective use of the energy management methodology, a combined control system for the flow parameters of the transport conveyor is required.

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