

INFORMATION SYSTEM FOR PREDICTION OF FLOW PARAMETERS OF THE CONVEYOR WITH THE USE OF THE NEURAL NETWORK

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This work is devoted to the current problem of modeling a branched multi-section transport system. There are problems of increasing the reliability of conveyor transport at various types of enterprises, improving production efficiency, forecasting and monitoring of all work processes and equipment, prevention of dangerous modes of operation of equipment, automatic alarms, regulation, control, etc.

Modeling of conveyor systems is necessary for engineering analysis and further approval of a more efficient engineering solution. For example, one of the experiments. Predicting the values of the output flow parameters for sections 1, 2, 4, 5 is presented in Fig. 1.

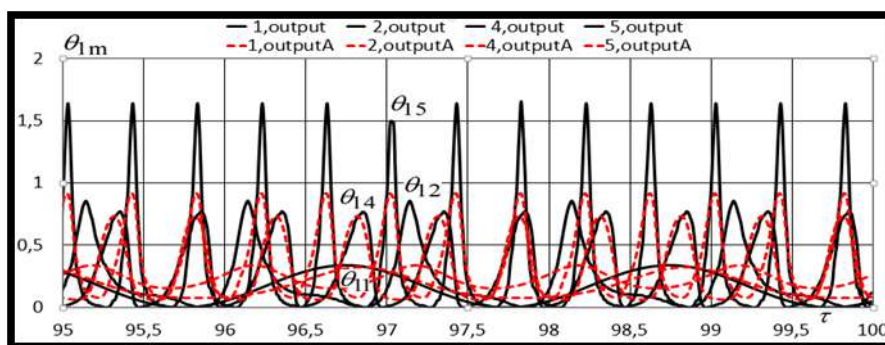


Fig. 1 - Calculation of the output stream of material $\theta_{1m}(\tau, \xi_m)$ m - th using a neural network

The results of the analysis of the neural network model show that the neural network is a good tool for predicting the state of the output flow parameters of a branched transport system, consisting of a large number of individual sections. This paper presents a method for predicting parameters for multi-section transport systems.

References:

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