ABSTRACT

The master's dissertation contains 114 pages, 32 figures, 46 sources according to the list of references.

The purpose of the work is to improve the energy performance of the electromechanical system for multi-engine conveyors.

The object of the research is the processes of automatic control of tape-cutter installations.

The methods of the theory of electric drive, automatic control, the theory of mechanisms and machines and the design of electric drives are used in this work. System research was conducted through digital mathematical modeling using the MATLAB Simulink software. The developed model of the electromechanical system of the conveyor allows to conduct research of energy-efficient operating modes.

RING CONVEYOR, CONVEYOR CONTROL SYSTEM, ASYNCHRONOUS ENGINE, AUTOMATION, START, FREQUENCY TRANSMITTER, ELECTROMECHANICAL SYSTEM