

SUMMARY

The diploma project comprises: 85 pages, 46 figures, 4 appendix, and the graphical part on 3 pages A1.

In this diploma project, a study of the control system of multifaceted electromechanical objects was carried out and a comparative analysis of different control systems at the speed of two-mass electromechanical objects was performed.

The synthesis of the system of subordinated regulation with the speed of a two-mass electromechanical object with an additional feedback for the difference in speed and modal control system is performed.

It is proposed to use systems with a modal regulator of the complete order in order to avoid the oscillation of a two-mass mechanical part and to improve the quality of transients.

Transient processes are obtained through mathematical modeling for systems of subordinate and modal regulation. It is shown that in systems with a modal regulator, the best indicators of the quality of transients.

MULTI-MASS ELECTROMECHANICAL OBJECTS, SPEED
REGULATION, QUALITY IMPROVEMENT, ELECTRIC DRIVE,
OPTIMIZATION OF ENERGY EFFICIENCY, SYNTHESIS,
CHARACTERISTICS, RESEARCH.

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| | Letter | № of doc. | Sign. | Date | Research of control systems with multi-mass electromechanical objects <i>Summary</i> | L. | Page | Pages |
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