THE SUMMARY

The final qualifying paper of the bachelor's degree contains 61 pages, 15 figures, 4 tables, 18 sources of information, 4 sheets of graphic part.

The object of the survey is electric drive of the bridge magnetic graphene crane carrying capacity of 2 tons.

The purpose of the work is to design an asynchronous frequency regulator electric drive mechanism for moving the bridge magnetic graphene crane in accordance with the requirements of the technical task and study of its work MATLAB simulation method.
In the course of work was developed electric drive, which meets the conditions technical task.

The thesis is executed in the text editor Microsoft Word 2010 on white paper of A4 format, using MathCAD 14 programs, MATLAB 7.1 Simulink 6.3, Splan.

Keywords: bridge crane, displacement mechanism, asynchronous motor, frequency converter, asynchronous frequency regulated electric drive, frequency converter, automatic control system, static and dynamic characteristics.