

Annotation

The diploma project is dedicated to the topic "Automatic electric drive of trolley bridge crane." This project consists of the following parts: main part, life safety and economical part. In the main part of the project was considered the mechanism of lifting overhead crane and its principle of operation including: lifting machinery, a brief description of the bridge crane, overhead crane device, general information about the frequency converters. Also the mathematical description of the structure and the electric circuit of electric drive was considered with help of MATHLAB software .

The Life Safety Section carries out the calculation of the protective grounding device and natural lighting in working premises, considered the organizational and technical measures in the provisioning of electrical safety.

In the economic part of the diploma project were calculated prices of materials relatively to the overhead crane and salary of employees who work on this crane, also was considered the economic efficiency of the installation of a bridge crane.