

ANNOTATION

Diploma project is performed on the topic "Electric drive of a tower crane".

The paper examines the most widely used electric machine and valve controlled converters of DC voltage and AC frequency and the corresponding EP systems. The calculation is made and the performance characteristics are built.

In the "economic part", we calculated the energy indicators of the electric drive. We created a diagram of the engine load. The load diagram was used to calculate engine heating and overload. Also, integral energy indicators of the electric drive were calculated for the working cycle. Calculations were made to select a cost-effective option. Cash investments are provided for the projected transformer. These are: the cost of the transformer, the cost of the transformer windings, the power loss of the transformer. Depreciation of the main Fund has also been accrued.

In the section "life Safety" during the sanitary and hygienic analysis of the workplace of the tower crane operator, dangerous and harmful production factors were identified. Deviations in working conditions at the driver's workplace consist of the following factors: microclimate, noise, vibration, working place in a narrow state, which can not be changed.