

## Summary

In this work, a vortex current thickness gauge was designed to control turbine blades. In conducting substantiates the relevance and necessity of development.

The first section provided an analytical review, which considered: turbine blades and conditions for their operation, materials used for manufacturing. Protective coverings of the shoulder blades were also considered. From the offered variants the thermal cover was chosen.

In the second section the analysis of methods and means of magnetic control of the thickness of non-conductive coatings on the conductive basis was carried out. There were some models of thickness gauges with their characteristics.

In the third section, the calculation of the eddy current thickness gauge of the protective thermal protection of the blades of turbines was carried out. In particular, the system of the GSP of the object of control has been calculated. The functional scheme, structural and electrical principle are developed.

The conclusion gives the main results obtained during the completion of the diploma project.

The pages of main text 56, used sources 16, the graphic part consists of seven drawings. The circuit is electric principle - A1, functional diagram - A2, structural scheme - A2, assembly drawing - A2, details: Coil body - A3, Cover - A4, Case - A4.