Annotation

On the diploma project of the fourth-year student of group PK-61 Maliarov Artem on the topic: "Portable eddy current flaw detector".

In this diploma project, a portable multi-frequency eddy current flaw detector for the control of rolled sheet metal was developed.

In the first section the general theoretical data of eddy current control were presented. Theoretical information on the classification of eddy current converters is also given.

The second section of this dissertation presented theoretical information about wireless communication systems. The types and types of wireless communication, as well as their advantages and disadvantages.

The calculation part of the project presents the calculations of the eddy current converter, namely: transformer overhead converter. Calculations were performed for a multi-frequency eddy current flaw detector to control objects of different thickness. Also selected microcontroller, ADC, calculated gain and error.

The last section describes the hardware of the device. The structural scheme and the description of its work are resulted. The components of the device are described and their description and general appearance are given.