

Annotation

In this thesis project developed a system of parametric eddy current testing. A control object acts as a sheet of aluminum with non-conductive coating or without it, as this system has the ability to control the presence of defects, and gap, which can be paint coating.

To move the eddy current probe is used the actuator is in the form of ball-screw transmission, which drives the stepping motor through the reducer.

Control of eddy currents can be performed without direct mechanical contact of the transducers with the object that allows you to control the relative movement between the transducer and the object at high speed.

The entry for this lack of action will allow to identify at early stages the crack in the controlled objects, which, if detected early can lead to undesirable consequences. If, for example, take a large passenger plane, a small crack can cause it to fall and this can lead to very unfortunate consequences and even death of many people. I think the development of this project is quite relevant today