## **ABSTRACT**

The diploma project contains an introduction, three sections, conclusions and a list of references. The diploma includes 64 pages, including 14 figures, a list of references.

The goal of the diploma project is the development of a contact measuring head for a coordinate measuring machine.

To achieve the goal, the following tasks were performed: the geometric parameters of the products and their control are examined in detail, the analysis of the common types of CVM and on which sensors they work; the method of operation of various types of sensors was analyzed.

Projected drawings of dipstick, spring, sensor. Calculations of the strength of the probe, calculation of the spring were carried out. Development and analysis of the structural diagram of the automatic transformation of a linear or angular parameter.

Keywords: coordinate measuring machine, sensor, geometric parameters, measuring head.