## ABSTRACT

The master's dissertation consists of an introduction, two chapters, conclusions and a list of references. Also, this diploma contains 78 pages, including 54 figures, 23 tables, and 25 sources.

**Topicality.** Most of the technological processes that take place in modern factories are impossible without the use of flow meters. Designing is an important stage of the flow meter development life cycle.

The complexity of measuring devices is often not comparable to outdated design tools. The need to optimize the existing methods of developing flowmeters has come.

**The purpose** of this work is to create software for automated design of flow meters. To create software, the following tasks must be solved:

1) conduct an analysis of existing software tools for the automated development of flowmeters;

2) conduct an overview of flow measurement methods;

3) review mathematical models of flow meters;

4) based on preliminary reviews, develop software for automated design of flow meters.

**The object of research** of the master's thesis is the automated development of flow meters.

The subject of research is software for the automated development of flowmeters.

Key words: automation, design, flow meter, software complex