

## **Annotation**

The theme of diploma project: «Ultrasonic system for testing of concrete».

Diploma project contents 71 pages, it contains 32 illustrations, 2 tables, 9 references 16 applications.

Keywords: concrete, strength, ultrasonic method, system, piezoelectric effect.

The object of study of the diploma project is an ultrasonic system for testing of concrete constructions - subject of studying – structural, functional, basic electric schemes, acoustic and electroacoustic tracts of the system, ultrasonic transducer.

Diploma project consists of introduction, five chapters and conclusions.

In the introduction of the diploma project bringing the scope and relevance of the control of concrete products. The first section discusses the classification and description of methods of testing of concrete, factors affecting properties of concrete, methodic of control. The second section contains theoretical calculation parameters necessary for the development of system selection and components. The third section describes the design of ultrasonic transducer and method of its manufacture. The fourth section describes the design of the system. The fifth section is devoted to calculation errors electronic components of the system.

The conclusions contain the results of the work and the relevance of the development.