

## **Abstract**

Rangefinders have always been closely associated with non-destructive testing, as they helped to determine the distance to hard-to-reach OKs or those whose control is possible only at a distance.

The diploma project described the existing modern rangefinders, their types of action, analyzed the following rangefinders: ultrasonic, laser, optical and filament. A comparison of these rangefinders was performed, during which the main advantages and disadvantages of the skin were revealed.

Purpose: development of a laser phase rangefinder. Problems were set regarding the device, which, while studying the existing methods of its implementation, made it possible to identify the best way in which the disadvantages will be insignificant in comparison with the advantage. So according to the block diagram of the main method It was turning components for the construction of functional and electrical schematics, as well as performed drawings of the body and optical system of the rangefinder.

The diploma project consists of an explanatory note of 60 pages, includes 13 illustrations, 1 table, 16 drawings and more than 60 formulas.