

Abstract

This thesis consists of 54 pages, 37 illustrations, 22 formulas, 16 references.

Key words: sorting, Arduino, automation, robotics.

In the graduate work was development and design of a device for sorting objects by their color.

Software was created that drives the device. Debugging was performed, which allowed the machine to properly sort objects by their color.

As a result, a fully automated device was created to solve the problem of sorting large numbers of items by their color.

The **purpose of the work** is to determine the optimal method of sorting a large number of objects. Creating a prototype device that would perform this task properly and not be too expensive to manufacture.

Subject of research - methods of sorting objects by their color, the problem of sorting a large number of objects.

Scientific novelty - solving the problem of color sorting, creating a simple and effective prototype device.