# ABSTRACT

*In the industrial, especially in the production process, the separation of goods on the conveyor is still done manually, so it takes a long time and less accurate when choosing the goods. However, if the production process is done automatically will be more profitable for the company as well as for the workers themselves. In addition to the barcode system used at the moment, sorting objects can also be done by distinguishing the color and size of objects. In the color sorting is divided into several colors namely the basic colors red, green, blue, black, and white. Each company should continually improve its quality by always striving to minimize nonconformities and improve the efficiency of their entire process, so that the process can be controlled in order to minimize products that do not match the colors. Therefore, automatic sorting tools use TCS3200 color sensors which are useful for detecting RGB(Red, Green, and Blue) and BW(Black and White) color values, servo motors as automatic sorting mechanics and DC motors as conveyors to drive goods to the TCS3200 color sensor and servo motors, arduino as microcontroller programming. By applying the characteristics of the color sensor in reading the RGB and BW values of color in a goods conveyor sorting system, the thing done is to sort by using TCS 3200 color sensor to identify the color of the object.*

***Keywords**: Automatic sorting tool, TCS3200 Color Sensor, Servo Motor, DC Motor, Arduino.*