ABSTRACT

Mixing duco paint colors manually often produces results that are not as expected because it has not been stirred evenly, the composition of the ingredients is not balanced and the ability of the person who mixes is not thorough. In its development, technology is needed that can help the work process at the Tasik Oto Prima Body Repair & Painting workshop, Jl. Paseh No 32-34 Tasikmalaya for mixing red, green and blue base paint colors into light blue (cyan), light purple (magenta), and yellow (yellow) variants. This Arduino Mega-based automatic paint mixing system is used to facilitate color mixing, which is operated automatically by the Arduino Mega2560, the TCS3200 color sensor which detects the results of mixed colors and the flowmeter sensor which detects the amount of paint flow. Mixing is done by the conversion method from color reading values to percentages and from percentages to milliliter values. Based on the results of the system testing carried out, the error values obtained for each color mixture variation are R=89,64%, G=9.05%, B=6.27% for cyan, R=4.23%, G=165,17% , B=6.82% for magenta, R=4.35%, G=4.70%, B=96,78% for yellow.

***Keywords** : Color mixing,* Arduino Mega2560, TCS3200 *Color Sensor, Flowmeter Sensor.*