

DESIGN AND DEVELOPMENT OF COFFEE POWDER FILLING INTO STANDING POUCH BASED ON ARDUINO NANO

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ABSTRACT

Coffee is a drink favored by the majority of the Indonesian population as an encouragement and dish during leisure time. The activity of consuming coffee can eliminate the saturated mind due to daily activities. Therefore, coffee is very beneficial for society, especially coffee lovers. Today's coffee is no longer a commodity product, but rather as a high-quality product and has a distinctive taste, therefore in every filling of coffee powder into the packaging requires hygiene and sterility so that the value of coffee taste does not decrease. In particular, for the home industry and MSME players who process coffee grounds, we can find a lot and in the processing process, the home industry players and MSMEs do not have to do it manually. However, it can be done automatically by using a tool designed to fill coffee grounds and close the Arduino Nano-based plastic standing pouch, for effective and efficient results. This research was conducted for the purpose of knowing the accuracy of filling coffee grounds into 100 Gram plastic standing pouches and knowing the ability to cover the standing pouch with a DC motor that rotates the wheel. From the test results of 10 standing pouches, the accuracy of filling coffee grounds into standing pouches of 100 Grams sequentially, it was found that the average perstanding pouch showed the number 0.5 Gram with an overall accuracy percentage of 95% and an error percentage value of 5% so that it can be declared successful.

Keywords : *Arduino Nano, Standing Pouch charging, Standing Pouch closing*