DESIGN AND DESIGN OF AN AUTOMATIC RICE MEASURING PROTOTYPE BASED ON ARDUINO MEGA MICROCONTROLLER

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ABSTRACT

Rice is a basic daily need for society. Almost the majority of the Indonesian population consumes rice as a staple food. In Indonesia there are many rice shops or basic food shops. Rice shops sell various types of rice with certain brands. The number of types of rice depends on the size of the shop. If the shop is small, it can only sell certain types of rice. Usually there is a shelf or tub for rice samples. There are many sacks as rice containers. Consumers can feel confused when choosing the type of rice because there are many sacks filling the shop, making it difficult for consumers to choose rice. Not only that, the process of weighing rice is generally still done manually. This weighing process is usually carried out in a hurry, which often results in inaccurate weighing results. This will cause losses to one party, either the buyer or the seller. So a prototype tool was designed in the form of an Arduino Mega-based Automatic Rice Measurer. Based on the results of the accuracy and precision testing that was carried out, the accuracy value for Rice A was 98.58% and Rice B was 99.90%. Meanwhile, the precision value for Rice A is 99.18% and Rice B is 99.08%.

Keywords: Automatic Rice Measuring Machine, Load Cell.