

COINS SORTER

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ABSTRACT

Most countries normally change their circulation of coins every 20 to 30 years with the main purposes of incorporating new security features, updating coin designs and to design coins that are more cost effective. Malaysia is also of no exception; the second series of Malaysian coins has been in circulation for more than 23 years, and the third series of coins was just issued into circulation on 16th January 2012. The newest series coins are found to have variations with the second series coins: they have different sizes, colour, weight and even the metal composition. As a result, most Malaysians who always have to deal with coins are met with certain difficulties. The purpose of this project is to use engineering knowledge to design and build a coin counting and sorting machine. The machine will allow the user to sort both the new and old (second) series of Malaysia coins for 10 cents, 20 cents and 50 cents, and reject 1 cent, 5 cents or any dummy items like pins and beads into a dummy box. Sorted coins will be collected in each box container, and when the box is full, the buzzer will alarm the user to remove the coins or replace the box with a new one. The total amount of the sorted coins will be displayed on the LCD display. The design is emphasised on make sorting and counting coins simple, easy, and low cost, in order to make this product be affordable by all Malaysians in both commercial and domestic use.