Abtsract

This project study provides a framework on the operational procedures of a coin sorter and counter machine. This was intended to aid the Piso Para sa Iskolar" project, local churches, and other foundation and establishments that have to go through the process of sorting and counting coins. The method used in this project is the combination of a gravity rail equipped with electromechanical solenoids and photoelectric sensors.

The development and construction of the coin sorter and counter machine followed the following processes: Planning (Sketching, Dimensioning and estimating the average capacity of coins that will be sorted); Programming and Fabrication (Includes the basic framework and construction, significance of each material to each other and as well as the bill of materials from canvassing to furnishing of aesthetics.); Performance testing (Data gathering, Experimentation, Setting of limits, troubleshooting, testing by different batch of specific amount and number of coins and accuracy testing).

The accuracy of the fabricated coin sorter and counter machine in sorting and counting of coins increases when the feeding rate of coins and capacity of the machine decreases. The finalized coin sorter and counter machine rated at 28 coins per minute achieved an accuracy of 98%.