ABSTRACT

At a production process such as food production, packaging made vary depending on the amount of its contents. For example the packaging is different from net 500mg 1000mg. To measure the length and width can be same but for the size of the packaging height is different. If the production process is carried out in large numbers and at same place the packaging needs to be sorted out according to the group before going into the process of packing and distribution. That problems can be overcome by using a grouping of items according to the criteria of high with control by plc using touch screen.

Sensors are used in the simulation of grouping items are infrared sensors and limit switches. Pneumatic systems are used as the driving force of the object that will fit the high objects are grouped into each basket. Pneumatic system uses two double-acting cylinder and valve 3/2 single solenoid. For system automation using PLC and tools for visualization and control media using the touch screen. This final project helps grouping items according to accurate and high items more easily because it uses PLC control. Touch-screen display can provide data on the number of existing items in the basket.

The success rate in this simulation tool is 80%, which is seen from its success in detecting the correct goods and wrong goods. The average time required in this simulation is 6-7 seconds.

Key words: classification goods, PLC, pneumatic, touch screen
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