

DESIGN OF HEAVY SORT SYSTEM SYSTEM BASED ON WEIGHT

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ABSTRACT

The role of this mature technology has evolved rapidly, coupled with the presence of the era of free competition. Automation is one of the realization of the development of technology, and is the only alternative that can not be avoided again to obtain a working system that is simple, practical, and efficient so as to obtain results with the level the accuracy is high. Based on the above considerations, in order to support the process of Automation so that factors of production can be accomplished required microcontroller control system. Goods that pass through a conveyor belt if it had reached its final destination, it will be selected in accordance with the weight of the items so that items can be arranged as you wish. Selection process the weight of this item is to distinguish objects that correspond to the weight with objects that do not correspond to the weight. The sensors used in this process is the ultrasonik sensor and sensor load cell. ultrasonik the sensor and sensor load cell will recognize the object item that is run by the conveyor. When touched by the goods, sensors and sensor load cell ultrasonik S will be activated that will send the signal at the input device as a microcontroller. The object will be identified are in accordance with the desired size or not after an object is touching the sensor load cell sensor and ultrasonik. The object will be selected based on the weight of the goods. If the object known as the goods according to the size, then the object would continue. When an object is identified as an item that doesn't match the size, then the object will be separated, 100% success rate.

Key words: *load cell Sensor, servo Motor, Ultrasonic Sensors, Arduino uno.*