

Title AN EFFECTIVE FILTER FOR WEIGHT ESTIMATION OF DYNAMIC WEIGHING SYSTEMS

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ABSTRACT

This research project has designed and developed a filter with a digital signal processing to reduce noise and estimation of mass using dynamic weighing systems for grading of mangoes from size 0 g to 500 g on the conveyor belt speed up to 2,160 fruits per hour. The dynamic weighing systems developed resulting provide very high performance with the accuracy of 98.89%, higher than 92.96% which obtained from the analog filter with PLC method.