

Design of a Coconut Grater with Automatic Weighing Using a Loadcell

by

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ABSTRACT

The use of grated coconut is an essential need in the food industry and households. The process of grating coconut manually often requires quite a long process and a lot of energy. Therefore, a coconut grater is needed to reduce the human workload. This research aims to design a coconut grater with automatic weighing using a load cell. This tool is designed to grate coconut quickly and automatically and is equipped with a weighing system to measure the weight of grated coconut accurately.

Test results show that this tool is capable of grating coconut with high efficiency and good weighing accuracy. By conducting a design feasibility test through a validation questionnaire, the test analysis results showed a feasibility level of 93%. In addition, the stress analysis simulation results show that the design meets the required safety standards.

Keyword: Design, Grater, Automatic Weighing, Coconut