

Design and Fabrication of Automated Coconut Scraping and Milk Extracting Machine

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Abstract

Scraping coconut and extracting coconut milk are laborious and time-consuming processes. The available commercialized coconut scraping machines are not automated and still involve manual effort. Here, an automated coconut scraping machine has been developed to solve the challenges regarding the process of extracting coconut milk and to extract it with high efficiency and purity. The developed process eliminates virtually all hazards related to coconut scrapping. The system includes an automatically changing blade that allows movement along two axes, this changes depending on the centrifugal force. A clamping mechanism holds the coconut shell and it moves in the front and backward direction. The mounting of the coconut shell in the clamp takes no more than five seconds. Upon mounting, at the push of a start button, the scraping of the coconut is automatic. Safety features are included in the design to avoid accidents. It is possible to get coconut milk quickly without human intervention and 95% - 98% of coconut milk can be extracted easily.

Keywords: *Coconut Scraping, Extracting Coconut milk*