

**Project report on**  
**FABRICATION AND DEVELOPMENT OF DEHUSKING**  
**MACHINE**

A project report submitted in the partial fulfillment of the requirement for the award of  
degree of

**BACHELOR OF TECHNOLOGY**  
**IN**  
**MECHANICAL ENGINEERING**

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**AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY**

**DEPARTMENT OF MECHANICAL ENGINEERING**

(Approved by AICTE and permanently Affiliated to JNTUK-KAKINADA,AP)

THAMARAM (VIL&PO),MAKAVARAPALEM (MD)

VISAKHAPATNAM (DISTRICT-531113)

**(2015- 19)**

# AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY

(Approved by AICTE and permanently Affiliated to JNTUK-KAKINADA, AP)

NBA Accredited Institution)

TAMARAM (VIL&PO), MAKAVARAPALEM (MD)

VISAKHAPATNAM (DISTRICT-531113)

## DEPARTMENT OF MECHANICAL ENGINEERING



### CERTIFICATE

This is to certify D.VARAHALA KUMAR (15811A0331), K.NAGENDRA KUMAR (15811A0353), G.MOHAN (15811A0348), A.RAJESH (15811A0310) of final year Engineerin have done their project work on "FABRICATION AND DEVELOPMENT OF COCONUT DEHUSKING MACHINE" at AVANTHI INSTITUTE OF ENGINEERING TECHNOLOGY, Narsipatnam in partial fulfillment of the requirements for the award of degree of "Bachelor of technology" in "MECHANICAL ENGINEERING" to JNTUK University, during the academic year 2015-2019. The result embodied in the project report has not been submitted to any other institute for the award of any degree.

Internal guide

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## Abstract

Now a days coconut is a main crop of konkan region, generally coconuts are dehusked manually using a machete. These methods require skilled labour and are laborious to use. Coconut dehusking involves removing the husk from the coconut. traditional dehusking is time consuming and difficult process. To overcome these limitations, to improve the automation and to provide the safety to the operator, a new design of dehusking machine is introduced and fabricated. Attempts made so far in the development of dehusking tools have only been partially successful and not effective in replacing manual methods. The reasons stated for the failure of these tools include unsatisfactory and incomplete dehusking. This a hand - operated coconut dehusking machine is being designed to solve this problem. This machine takes into consideration the dangers, hazards and risks involved in dehusking the coconut which will be efficient, productive, environmentally friendly, less laborious, easy to use and ergonomic, easy to assemble and disassemble, and most importantly, cost effective in production, maintenance and repairs. The new design of dehusking machine is introduced and fabricated. The dehusker comprises usage of two horizontal usage of two horizontal rollers with series of sharp tools which would shear the husk from the coconut when rolling against each other. Shear force is required for dehusking of mature green coconut and dry brown coconut. Optimum number of spikes is arranged on the rollers to dehusk the coconut with the minimum force. which does the dehusking at a rate of 70-80 coconuts per hour.

**Keywords:** Coconut; Dehusking; Machine; Skilled labour; Manual