

Fabrication of Tender Coconut Opening & Cutting Machine

Sreenivasa R, Nithin R Sarathi, Sachin N B, Syed Rehan Ahmed, M D Sufiyan

Department of Mechanical Engineering,
Jain Institute of Technology
Davanagere, India

Abstract— Even with modern advanced technologies, the globe is currently challenged with a plethora of health challenges. High Blood pressure, Stones in kidney, malnutrition, and gallbladder illnesses are the most common and unavoidable health problems today, regardless of age. In this sense, there is more space for finding solutions that are both practicable and promising in terms of improved health. Organic coconut products, such as Virgin coconut oil, Tender coconut mint cooler, Tender coconut green chilly cooler, and Tender coconut tea, will provide the human being with a harmonious health advantage. The extensive literature on human health difficulties has offered positive hope for a healthier existence with the invention of a similar solution. As a result, the project's goal is to design, develop, and fabricate a machine that will help to alleviate some of the health problems. With earnest effort, the new strategy may provide good signals for a healthy life for humanity. The stated goals of the initiative are not just for health; they will also inspire coconut growers, unskilled employees, and jobless individuals to create their own businesses and earn a good living, boosting their economy.

Keywords— *Tender coconut opener, Cutting blade, Ecological.*

I. INTRODUCTION

The goal of the project is to increase the quality of coconut cutting with the less amount of work and manpower. Along with that, it decreases the risk of any harm while chopping the coconut. This machine is a portable gadget that may be readily transported due to its light weight. The machine has a long-life span. Only the cutting blades and hole must be changed after a specified amount of cutting of coconut. In comparison to previous coconut cutting methods, it needed less work. The only requirement is that the blades be checked for sharpness. The paper will give a brief overview of how to create a new machine using some of these instruments. Along the roadside, there are an increasing number of tender coconut shops. However, the machete is nearly always the implement of choice for chopping the husk and cutting open the shell. As a result, only individuals with the necessary skills could own such a salon. Though various attempts were made to design simple hand tools for punching open the nut and then dividing it in two halves, none of these efforts yielded a tool that could be used by even women.

II. LITERATURE REVIEW

"Fabrication of husk remover with shell cutter" by Nagarajan.N1 and Sundararajan. P.N2. [1] In May of 2015, The removal of the coconut husk necessitates the new suggested design. In this, there are two pneumatic actuators. One is at the bottom of the construction and holds the coconut, while the other is at the top and is joined by a hinge

connection and is used to peel the husk. Five connections are employed to dehusk the coconut in the hinge joint. Pneumatic actuators are used to control these devices. The 5/2 DC solenoid valve is in charge of the actuations.

"Development of a multifunctional coconut cutting machine" by S. M. Fulmali¹ and A. A. Bhoyar². S. M. Fulmali¹, A. A. Bhoyar² "development of multifunctional coconut cutting machine" S. M. Fulmali¹, A. A. Bhoyar² "development of multipurpose coconut cutting machine" [2] Nov-2015: Using different tools such as a cutting blade and a hole-making tool, this machine is primarily meant to cut coconuts and make holes in them. The most important feature of this machine is that it lowers the time it takes to cut the coconut. These machines may also be used to cut out various fruits in addition to the coconut. The two processes can be carried out concurrently, and no additional equipment is necessary to carry them out. The designed machine is inexpensive enough to be employed in Restaurants and businesses for small groups. This will surely increase output.

Reddy Naik, J2: "Tender Coconut Punching and Splitting Machine Product Design and Development"

Reddy Naik, J2, Rajanikanth1:"Machine" (n.d.) (n.d.) (n.d.)

The main purpose of this project is to cut and punch the coconut with the compressor. The construction of a punch-cum-splitter is required for punching and dividing the sensitive coconut. The purpose of this project is to build a coconut punch-cum-splitter that can gather coconut water and flesh manually. The customer's desires were translated into a product in this way. notion through concept generation. Using the Pugh matrix and the concept score matrix, the best concept was chosen. The chosen concept primarily comprises of a lever- operated punch and a torsion spring mechanism. When it's time to punch the tender coconut, the operator places on the table.

III. METHODOLOGY

The main components are

- **Cutter:** It has been used for cutting the coconuts by applying the force on the lever to cut the coconut.



Fig: 1 Cutter

➤ FRAME

- To investigate the available ways for opening and cutting coconuts with ease.
- To create a coconut opening and cutting machine that can be operated manually.
- To determine the effectiveness of a tender coconut opening and cutting machine.



Fig: 2 Frame

IV. DISCUSSION

- It is less expensive than other manual cutting machines.
- It does not pollute the environment.
- It is environmentally friendly.

V. CONCLUSION

- The manual cutting of coconut is a more leading method for cutting coconuts in a simple manner. This will reduce human effort and eliminate the risk of manual operation-related accidents.
- It lowers the work's operational costs. This model is a very effective and excellent approach when compared to the automatic method.
- This project saves more valuable time.
- Cut the coconut and punch the coconut to solve these challenges.
- It is more efficient than the current method.
- Human effort is nearly removed, yet output rises.

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