

PROTOTYPE DESIGN COLLECTION

SERIES 1



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CHAPTER 65

Design and Fabrication of Vegetable Slicing Machine

Muhammad Amirul Hafiz Amirzali and Mohd Fadzli Ismail

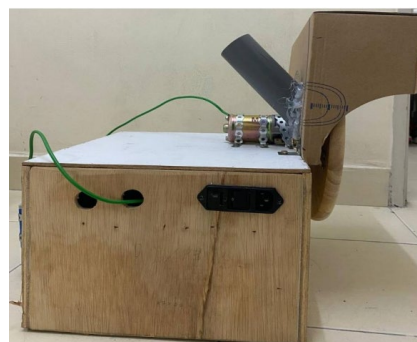
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PROJECT DESCRIPTION

The most popular tools for slicing and grating vegetables like peppers, tomatoes, carrots, onions, and lettuce are a knife and a plastic grater. The world's first automated vegetable cutting machine was created in the early 1960s. The technology for slicing has been developed. The goal of this project is to create a compact, functional, safe, and user-friendly automatic vegetable slicing machine. The final year project is an important component that allows students in the fifth semester of Mechanical Engineering to demonstrate advanced knowledge of a specialised field that is required for a career in research and development, and it includes project planning, literature review, project implementation, technical writing, and oral presentation all within a set time frame. The title of my final year project is the Design and Fabrication of Vegetable Slicing Machine. A vegetable slicing machine is a machine that allows the user to perform a good performance in a short period of time. A survey of 20 people will be conducted to study and identify the machine's specifications based on customer preferences. According to the survey results, we could discover what is the most important criterion for an automated vegetable slicing machine. This project presents the development of a vegetable slicing machine for cutting many vegetables into smaller pieces in a short amount of time and a user-friendly machine. The vegetable slicing machine is designed to be portable, time-saving, and long lasting. Our machine's target market is small industries such as the food and beverage industry and food stalls. The goal of this research was to design and analyse a project that could save human energy by reducing the amount of time spent slicing vegetables using solid work and also to fabricate vegetable slicing machines using locally available materials and technology to create a machine that is affordable to the public. Unfortunately, there are a few factors that were not put into account that cause unanticipated results. This proof that the prototype is far from perfect and has plenty of room for improvement.

Keywords: *vegetable slicing machine*

PROTOTYPE



DESIGN PARAMETER

