UNIVERSITI TEKNOLOGI MARA

DEVELOPMENT OF AN EASY CUTTER

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ABSTRACT

One of the important utensils in the kitchen is a cutter. The main function of the cutter is to cut vegetables or fruit from their original size to the intended size. The cutter that is available in the market mostly are manually operated and demand more energy especially when the material volume is large. From the literature review, the current food-cutting cutter has several limitations such as contamination, the need for more labor, and time-consuming due to manual processing. Some of the available easy cutters in the market operate on the concept of rotating grind powered by AC motor. Even though this technology has the advantage over manually operated cutters, it also has disadvantages because of how expensive and energy-intensive it is. To overcome this problem we suggest the usage of the substantial rack and pinion power as its main automation. The mechanism of the proposed easy cutter consists of a rigidly mounted steel plate for high pressure that is installed on a container that has cutting blades at its bottom. A rack and pinion circuit is used to activate the plate. It is expected to cut all kinds of food, be easy to use, and have low investment cost used. One of the important utensils in the kitchen is a cutter. The main function of the cutter is to cut vegetables or fruit from their original size to the intended size. The cutter that is available in the market mostly are manually operated and demand more energy especially when the material volume is large. From the literature review, the current food-cutting cutter has several limitations such as contamination, the need for more labor, and time-consuming due to manual processing. Some of the available easy cutters in the market operate on the concept of rotating grind powered by AC motor. Even though this technology has the advantage over manually operated cutters, it also has disadvantages because of how expensive and energy-intensive it is. To overcome this problem we suggest the usage of the substantial rack and pinion power as its main automation. The mechanism of the proposed easy cutter consists of a rigidly mounted steel plate for high pressure that is installed on a container that has cutting blades at its bottom. A rack and pinion circuit is used to activate the plate. It is expected to cut all kinds of food, be easy to use, and have low investment cost used.

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CHAPTER ONE
INTRODUCTION

1.1 Background of Study

The purpose of easy cutter is to automate and simplify the process of cutting ingredients. Easy cutters are designed to increase ingredients preparation's consistency, productivity, and safety. The study's backgrounds can be found in the broader topic of automated food processing systems. The need for effective and time-saving equipment to aid in food preparation duties grew as the demand for prepared foods and convenience products expanded. Easy cutter were created as a result of the time and labor-intensive nature of traditional manual ingredients cutting techniques. They provide ease and variety in food preparation while also reducing labour costs, saving time, and ensuring uniform cuts. These tools are frequently used to speed up any ingredients cutting chores and raise the general effectiveness of food preparation operations in both commercial kitchens and household settings. These tools were created with the express purpose of rapidly, effectively, and precisely chopping ingredients. They may be a lot of food cutting machines in market , but the things that make this food cutter different from the others because it is small in size which will take a small space in the kitchen , easier to use , suitable for small kitchen and also cheaper than the other machines in the market.