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MEC 299

**DESIGN AND FABRICATION OF
ERGONOMIC PINEAPPLE CUTTER**

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ABSTRACT

The project consists of improving a pineapple cutter that is already available on the market. The reason for making this project is to solve the problem that has arisen in the pineapple business, where employees and sellers are experiencing problems with their current cutting tools such as using the pineapple cutting tool that does not have safety measures and does not provide comfort to the users. The main objective is to create a portable pineapple cutter, that provides comfort, and also has a variety of functions. The pineapple cutter can be used by the workers or sellers without any problems such as causing an injury or making the users feel discomfort. In conclusion, this project will be able to help the people who are in the pineapple industry such as workers or sellers to do their work without any problem.

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1.0 Introduction

The goal of this project is to modify and improve an existing pineapple cutting tool. It also entails several processes, such as redesigning and upgrading an existing product, in this case, the pineapple cutting tool that will be used by pineapple industry workers. This project is likely to be employed as a cutting device in any pineapple sector, both for workers and sellers.

1.1 Background of Study

This project is focused on the workers in the pineapple industries that work by cutting the pineapple fruit. Besides that, it also focused on the pineapple sellers that also cut the fruit to sell it. As for the product, it is a 2-in-1 pineapple cutter that can easily cut the head of the pineapple and slice out that inner pineapple flesh out of its skin perfectly, a portable tool that we can bring anywhere we go, a friendly-user tool and provides comfort to the users.

1.2 Problem Statement

Many problems occur in the pineapple industry. First, the workers or sellers often cut the pineapple manually with a sharp knife. Using a knife may injure some of the body parts such as the hands or fingers. It may cause the user to suffer disability or a long-term injury. To avoid this thing from happening, they need to use the pineapple cutter to reduce problems that may affect their daily life. Apart from that, the ergonomics principle will be adapted to the pineapple cutter criteria to reduce injuries, as well as improve the productivity and quality of the pineapple cutter. This shows that the pineapple cutter can make the work of cutting the pineapple easy and far from any injury.

1.3 Objectives

The objectives of this study are:

- i) To design a pineapple cutter with a new improvement using SolidWorks.
- ii) To fabricate a pineapple cutter that has a lot of functionality and gives comfort to the user.