

UNIVERSITI TEKNOLOGI MARA

CAWANGAN TERENGGANU

MEC299

DESIGN AND FABRICATION OF CORN PEELER

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ABSTRACT

Corn peeler machine can aid in peeling the corn more efficiently than using old method such as using knife. They are commonly being used at factory to help worker peel the corn but not at home. The objective of this project is to help people to peel the corn more with less energy used. This project used the mechanical engineering design process method. Traditional peeling method is now still being used although it is less efficient because the corn is not perfectly being cut.

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CHAPTER 1

1.0 INTRODUCTION

Corn is a one of a popular food source in Malaysia and very easily to plant in Malaysia. There is knife peeler, auto peeler, manual peeler, and many more to peel the corn. The research's major goal is to create a low-cost corn peeler. The process that involved in this project is the engineering design process.

1.1 Problem Statement

People are attempting to start small businesses selling corn related food corn related food such as sweet corn cup and people are eager to make it at home or selling at roadside stall. Most peeling machines on the market are imported and pricey. Manual peeling machines such as knife peeler will consume a lot of energy.

1.2 Objectives

The main objectives of this study are:

-To design corn peeler machine using computer aided design software

-To fabricate the prototype of corn peeler machine by using the mechanical engineering design process.

1.3 Scope of The Project

The corn that are suitable used for this project for corn peeler is the one that already matured or old dry corn. The main purpose of the project is to design and fabricate. Some of the fund for this project will be provided by the student. The project will be done at the UiTM Cawangan Bukit Besi workshop.

1.4 Expected Result.

There are already existed product that can do this job perfectly but it is expensive to buy and it is for factory used. The improvement is this new product is small and affordable to move to bring everywhere. It also can save the owner's budget because the cost is lower so they can buy more stock of corn. The mechanism used is rotation either using human strength or using motor to rotate it.