

**UNIVERSITI TEKNOLOGI MARA**

**DESIGN AND FABRICATION OF  
AUTOMATIC CORN CUTTER WITH  
MULTIFUNCTIONAL GRATER.**

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## **ABSTRACT**

Many types of corn kernel cutters have been commercialized in the market. However, some of it are not practical to be applied and are less safe. It is also take time and need more energy to cut the corn kernel. Apart from cutting, the multifunctional grater can also be used for slicing and shredding fruits and vegetables. Therefore, a fabrication of automatic corn cutter with multi grater will be proposed in this project. Stainless steel material as a main material of the product will be proposed. The welding process will be involve for joining. Conclusion, this project will help people get easy and take less energy as well as time to cut the corn kernel and can lower the risks of injury and with the dual 2 in 1 design, user can get the benefits of both with only one value of product.

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# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of Study

The purpose of this project is to design and fabricate a model called “Automatic Corn Cutter with multifunctional grater” by using simple mechanical mechanisms and parts.

Consumers tend to get injured while cutting the corn kernel because of corn cutter that have been commercializes in the market are not practical and less safe. It is also take a time and need more energy to cut the kernel. Hence, that is why an automatic corn kernel cutter exists and its existence will make cutting corn easier without using much energy. Moreover, this kernel cutter will be fabricated together with casing which to prevent the cut kernels from scattering everywhere like the existing one as they are sliced off the cob.

Instead of a kernel cutter, this project will have 2 in 1 functions design which is together with multifunctional grater. There are also multiple types of blades that user can use based on their needs.

The idea of this project will benefit people, especially housewives and small businesses to make work in the kitchen easier and less energy consuming. The design of an automatic corn kernel cutter with a multifunctional grater is user-friendly and consumers can get both benefits just in one product.