

**UNIVERSITI TEKNOLOGI MARA**

**SATAY GRILLER MACHINE**

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## **ABSTRACT**

Satay has been one of the most famous foods and our seller struggles with monitoring the satay. This project was done to achieve a high efficiency satay griller machine so that it will need less manpower than usual. This machine was automatically rotate by a motor and does not need anyone to flips the satay by time. Furthermore, this project also helps those satay tenders to complete and satisfy their huge number of customers on time. Most of the problems that arise was burned satay, satay take longer time to cook, and customers was not satisfied because of the late order received can be solved by this machine. The objective of this project is always to increase the efficiency of satay griller machine by designing the best possible stay griller design and this machine will be fabricate by using the gear and chain mechanism with the help of the 12V DC motor to run the mechanism smoothly. The expected result can be seen when the satay can be grilled automatically and perfectly without any many manpower helps.

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# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of Study

In this era, most of the machines that were used by our people have their own advantages and disadvantages, and there are also some people who want to improve the efficiency and the fluency of the machines. For this project, the main idea is to make sure that the production of satay at any restaurant can be fastened and easier. As we know, satay was usually grilled by using manpower and always has its own difficulty. If we could imagine how a restaurant could produce a huge amount of satay if they only have few workers to grill the satays. Normally, satay takes a longer time to cook and the cooker needs to be there to make sure that the satay was not burned, or it will taste bad. Satay also need proper care of the wind so that the embers does not get too hot and burned up the satay. So, this project will make sure the satay grilling process easier as it was automatically rotated by itself.

Next, the idea for this project is also to reduce the manpower but can also produce a great quality of satay within the right time. With this creation, less worker is needed to handle the satay grilling process. We can see that satay will be sold in a huge amount for even a small family, for example a family will order approximately 50 sticks of satays, and this is not including the family that want to buy and bring it to home. Satay order can reach to 12,000 sticks especially during Raya festival and any Malaysian festival. To make sure that the order can be made and can be completed in time, this machine can help the satay dealer or the people with satay business satisfy all their customers.



Figure 1: Traditional Satay Grilling Process