UNIVERSITI TEKNOLOGI MARA

DISSERTATION FOR THE DESIGN AND FABRICATION OF MOTORIZED FOOD PACKER

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ABSTRACT

Most of Malaysian vendors prefer to use food plastics to pack up their customers foods as it is cheap and plentiful to buy everywhere. But as it requires tieing unlike plastic and polysterene food packs, it is very time consuming and troublesome. Not to forget, calculating customers' total purchases also contributes to this problems , which the main objective of this project is to eliminate these problems. A food plastic tieing string is pulled out from a ready-made slot in the machine. The user only has to load the food packaging to the machine and pull the plastic to tie the food quickly without spending a lot of time tieing using the traditional way. The machine itself rely on the tieing mechanism triggered by two components : weight and sensor. It is expected for this machine to tie (pack) the food when it exceeds set weight limit**.**

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INTRODUCTION

1.0 Background of Study

It is common to see where vendors would opt for food packages such as polysterenes and oil paper. Yet some would still choose traditional plastic packaging as it is very versatile in terms of usage. It can be used for packing both drinks and food compared to other types of usual food packaging. Though this might not be the main reason for this option, some would think that this type of packaging is cheaper than others. As a proof, we would normally see this at most of street vendors that we would find along every streets. But the problem of this option is that it is time consuming just to pack the food and to do other work to aid vendors to multitask. It would be nicer if there is a machine that could handle these tasks at the same time. Hence, this machine is planned to heat seal food packages upon triggering sensor.

1.1 Problem Statement

The elapsed time taken for the usual and traditional tying method takes a lot of time. This is caused by two major factors, picking a tier and the tying process itself. So this project would solve the problem if it can eliminate one of the problem. The simplest method thought is to eliminate the use of any kind of tier such as rubber bands and plastic strings. Hence, heat sealing is used. Heat sealing also can prevent loose food ties problem which could lead to food contamination. By heat sealing at an ample temperature, a tight seal would prevent the this problem from happening. Lastly, the problem for traditional tieing method is also closely related to time consumption. Entry level vendors would have a struggle where they would spend a lot of time figuring a way to tie and familiarise themselves overtime. It would be easier if this problem would be solved by designing a machine that would seal automatically while only require the user to just place the food on the machine.