UNIVERSITI TEKNOLOGI MARA

DEVELOPMENT OF A PROTOTYPE SEMI AUTOMATIC PACKAGE WRAPPER USING CHAIN DRIVE

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ABSTRACT

In this time and age, couriers and packaging industry have experienced a dramatic change in how they wrap their package. Industries have adopted the use of stretch films or plastic films on securing packages due to their effectiveness. From that, industry has revolutionised from wrapping packages manually into using machines such as package wrappers. Yet all package wrappers are very costly and inaccessible to the public. This proposal is to introduce a new and improved prototype of the package wrapper that is cost-friendly and easy for the public to buy in today's market.

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CHAPTER ONE INTRODUCTION

1.1 Background of Study

Packages are always packed properly to ensure they arrive at their assigned destination in good condition. Courier companies, small business or any industries that involves with packages always packed their received packages with multiple layers of protection such as cardboard boxes, plastic bubbles and plastic films to ensure optimum protection and undamaged goods. Thus, having good satisfaction from the receiving customers.

In the packaging process, the final process of packing the package is by wrapping it with layers of plastic films. Usually this is done by a worker by taking a tube of plastic packaging wrap and wrapping the package. This is considered as the conventional way of getting the job done.

This method is considered quite hefty and difficult to do but rather cheap as it only requires a tube of plastic wrapping. Business owners can opt on buying industrial package wrapper equipment but the drawback of it is that it is expensive and difficult to get their hands on it. A normal package wrapper can send them back around RM20,000 for the price tag. For larger companies such as KLIA do not consider this as an issue as their budget is far wider.

This project introduces new equipment that is budget friendly, easy to use and accessible to the public consumers and small businesses that need to wrap their goods. The semi auto package wrapper combines the conventional way of wrapping package with industrial level technology in a compact form that is portable to be carried anywhere. The semi auto package wrapper consists of a wrapping film tube stand and a rotatable platform that is connected to a motor that can be turned on or off. This can make it easier for users to wrap their package quickly and reduce work labour without having to cost a fortune.