

UNIVERSITI TEKNOLOGI MARA

**DESIGN, ANALYSIS &
FABRICATION OF AUTOMATIC
FOLDING CLOTHES MACHINE**

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ABSTRACT

This project is presenting an automatic folding machine that could automatically fold the clothes when a piece of laundry is put on the machine. T-Shirt Folding Machine is an automatic motor-controlled t-shirt folding machine. The aim of this project is to fold t-shirts merely by pressing a button. The folding machine is fully automatic where one must place the t-shirt on the folding tray and press the button. It will then fold the t-shirt by itself [1]. The purpose of this project is to make a cost-effective so that people can afford it near their store. People always get tired and spent so much their time to fold their clothes after they wash it. Before this, people use more their energy to fold their clothes and it also takes so much time during the process. So, with this automatic folding machine, people can use less energy and reduce spending time during the folding process. This automatic folding machine is suitable to people who always busy and not have time to do house chores and to people who wants simple things in their life. This project really can help people solve their problems in folding clothes. After doing some research, the cloth folding machine can automatically fold them in a nice way.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Automatic folding machine nowadays are compulsory, especially for house chores activities. As many can imagine, folding clothes is tedious for human, but it is even harder for machines. However, it is not impossible to achieve such a task through machines. Hotels, hospitals, and many factories have machines that can fold large number of towels, sheets, and other fabrics. These machines are typically huge in terms of size and requires large amount of power to operate [2]. For household laundry, the only available machine in the market is called Foldimate but it costs higher and not affordable. Our design is so much affordable to achieve the similar function in a smaller environment and lower power consumption. It usually can be used for people all around the world, especially for a housewives, teenagers, and even senior citizen. With an automatic folding machine, it will give advantage to people who wants to fold their clothes in instant. The product of this project is automatic folding machine with three part of mechanism which is can automatic fold our clothes instantly after we switch on the button. The support in this project we use servo motor which can give enough power to fold the three mechanisms. This product also can use wasted materials such as cardboard, plywood, and aluminium plate.

1.2 Problem Statement

The textile industry hasn't witnessed the growth in the field of technology aiding the industry to the most optimum of the availability of the mechanism in towards world; that mainly being altogether automation in the manufacturing sector of the textile industry [3]. Nowadays, the population of working humans increasing rapidly every year. They have no time to think about doing house chores which is spent more time to clear things up. With the busy type of person, this automatic folding machine will give them a hand to solve the problems instantly without spending much time doing house chores. Besides that, if folding is done manually, it will spend a huge amount of time and waste time for those are always busy with their career. This is because they need some rest after getting busy at their office and