

UNIVERSITI TEKNOLOGI MARA

MINI TABLE SAW PROJECT

**MUHAMMAD HAZIM IRFAN BIN
KAMARUZAMAN**

Dissertation submitted in partial fulfillment
of the requirements for the degree of
Diploma
(Mechanical Engineering)

College of Engineering

Feb 2023

ABSTRACT

The mini table saw is often referred to as the wood shop's workhorse since it is the most flexible and prolific of all woodworking machines. The problem facing by many small workshop owner and local carpenter Is that in order to cut single piece of wood they have to use bigger expensive table saw. As a result, more electricity is consumed and more room is acquired. The objective of this project is to perform essential cut quickly, safely and efficiently. It also to cut work piece precisely in required dimension. Next, to reduce the power consumption of electricity usage. The methodologies used in this project is 12V-24V dc motor, circular saw blade, base frame and screws. The expected result for this project is should be can cut small work piece wisely.

ACKNOWLEDGEMENT

First and importantly, I want to express my thanks to God for allowing me the chance to pursue my diploma and for seeing me through this exhausting and difficult process. My appreciation and thanks are sent to my supervisor, Dr. Hasannuddin Bin Abd Kadir. Finally, I dedicate this dissertation to my parents for having the foresight and perseverance to send me to school. I dedicate this win to the two of you.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

In the 18th century, the first table saw was invented. Samuel Miller of South Hampton, England, created it in 1777. A table saw is a wood-cutting tool with an electric motor that drives a circular saw blade mounted on an arbour. The blade goes through the table's top, which acts as a support for the workpiece being cut. Saw bench is another name for it. The table saw is mostly used for cutting woodwork, although it can also be used to cut metal sheets. A fixed arbour and table are included with the wood tool. To cut the work piece at different heights, it must move the table up and down. To cut the work pieces, you had two options, clamp it in the wise or place the component you needed to cut on the blade and turn the motor on to cut it in a circular motion. Miller Medal's biggest flaw was that it didn't allow you to adjust the depth and direction of the cut, and it was a bulky model.

The main reason me making a mini table saw machine is to provide a machine that is inexpensive to those who cannot afford a costly table saw machine, allowing them to work on their project or operation at a low cost. Because of the machine's light weight and small size, it may be used on any job site without difficulty. In many ways, a mini table saw machine will be less expensive than a larger machine, it will use less electricity than a larger machine, and it will be lighter in weight, lowering the machine's price. It will be a much more compact machine, so you won't have to worry about the machine's space requirements. The machine will increase productivity and save time, which is one of the main reasons for the project. When using a large table saw, you face the risk of injury, which can be deadly. However, because of its small size, injury is unlikely to happen and will be avoided if used properly.