

UNIVERSITI TEKNOLOGI MARA

**MECHANICAL DESIGN OF
AUTOMATIC BEACH CLEANER**

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ABSTRACT

The aim for this project is to design the machine that capable to help clean up on the beach more efficiently without using a lot of energy and reduces the cost that is affordable for everyone. The method of operating this machine is pushes and pulls mechanism because it has a wheel. Rather than picking up trash on the beach manually, this machine will pick it up automatically without digging into the sand and collecting one by one the trash that found on the beach. The design of the machine should be suitable on sandy place like on the beach because it has a mechanism that separates the sand and trash. The machine also will be design with the right size.

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TABLE OF CONTENTS

	Page
CONFIRMATION BY SUPERVISOR.....	II
AUTHOR’S DECLARATION.....	III
ABSTRACT.....	IV
ACKNOWLEDGEMENT.....	V
TABLE OF CONTENTS.....	VI
LIST OF TABLES.....	VIII
LIST OF FIGURES.....	IX
LIST OF ABBREVIATIONS.....	X
 CHAPTER ONE : INTRODUCTION	
1.1 Background of Study.....	1
1.2 Problem Statement.....	2
1.3 Objectives.....	3
1.4 Scope of Study.....	3
1.5 Significance of Study.....	4

CHAPTER TWO : LITERATURE REVIEW

2.1	Benchmarking/Comparison with Available Products.....	5
2.2	Related Manufacturing Process.....	8
2.3	Patent and Intellectual Properties.....	9
2.4	Summary and Sustainability/Ergonomic Related Items.....	12

CHAPTER THREE : METHODOLOGY

14

3.1	Overall Process Flow	14
3.2	Detail Drawing	21
3.3	Engineering Calculation and Analysis	24
3.4	Bill of Materials	30

CHAPTER ONE INTRODUCTION

1.1 Background of Study

People are so busy working for their lives that they have no time to take care of their surroundings. However, each day, the beach gets dirtier and cleaner requiring more and more manpower. This will ruin the attraction of Malaysia and the beauty of the country's beaches and will cause harmful effects such as sharp objects such as glass and iron fragments. Therefore, by implementing this project can give hope to make it easier for maintaining the cleanliness of the beach.

1.2 Problem Statement

Nowadays, majority of the cleaning workers complained that the beach was often polluted and difficult to clean on an ongoing basis. There is only one tools that commonly used to clean the beach is trash rake and its not efficient to use it with a huge place like a beach. The technology tools available there are too expensive to obtain. This product called beach cleaner will help the cleaners to clean all the trash and unwanted thing at the beach easily. The beach cleaner is built with a mechanical application such as a rotating conveyor and the studies of dynamic have been done in the making of this project.