

UNIVERSITI TEKNOLOGI MARA

**AUTOMATIC SAND SIEVE
FOLDABLE**

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ABSTRACT

In recent years, the use of sand filter machines has gradually increased. But, most of them are quite large, difficult to move and use big space to keep it. Usually construction workers will use the traditional ways to separate the sand. So the workers will use their energy to separate the sand using traditional style. This traditional ways waste the time and money because need to pay a lot of construction workers. Therefore, I have created a product that can assist the construction work on the construction site. Main goal of creating sand filter machine is to reduce the workload of construction workers when they want to filter the sand. This machine will use an electric motor to shake the filter and the fine sand will fall through the funnel and enter the basket. This machine definitely different from the traditional sand filter. It will reduce energy of construction workers and save time. It also can be fold and we can keep it after use it. We don't need to separate this sand filter anymore compare with traditional sand filter. In summary, this machine can save time and cost.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

The purpose of this research is to come up with a new design for a sand sieve machine. This idea came when contractor workers difficult to filter the sand. who needed to build sand filters on their own using the wood. It waste energy consumption as well as time as it is necessary to build the filter before it can be used. As we know the technology now already advance. So to follow the technologies we must improvise our style work. It difficult to get a fine sand when use the traditional sand filter. This project purpose is to improvise and upgrade that old sand filter that can help to get a better fine sand and can reducing the workload of filtering sand. Other than that this product can easily to keep it and no need separate it.

1.2 Problem Statement

I came up with the idea of making this sand filter since I observed contractors expend a lot of energy only to produce fine sand. They must create sand filters using recycled wood. We have no idea how many there are Nails, iron, stone, and other unwanted materials found on construction sites. The existed sand filter now difficult to bring anywhere and difficult to keep it. Because of that they need to separate that traditional sandfilter to bring to another place. That traditional sand filter also make the workers difficult to filter the sand . Other than that traditional sand filter need to use human energy and waste our time to filter the sand.