



ELECTRIC SAND SIFTER FOR FOUNDRY

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POLITEKNIK MUKAH**

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This report is submitted to the Department of Mechanical Engineering in partial fulfillment of the requirements for graduation Diploma in Mechanical Engineering

PERPUSTAKAAN POLITEKNIK MUKAH

PROJECT REPORT VERIFICATION

This report entitled 'Electric Sand Sifter for Foundry' has been submitted and reviewed as to meet the conditions requirements of project writing.

Reviewed by:

SUPERVISOR

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We were grateful that we are finally able to complete our tasks in project 1 successfully. Our group would like to take this opportunity to express our appreciation.

First of all, we would like to thank you to our parents who have been supported while we complete the tasks given in this project 1. Our parents who have been very supportive in terms of moral, and encouragement to complete this final project, without their help, would not be able to complete our tasks with perfect especially in terms of financial.

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ABSTRACT

The Electric Sand Sifter is the machine to separate greensand from unwanted particles like stones and metal in foundry. The problems statement is we found that PMU's student took a long time to sift the greensand and need more workers at one time. The objectives are to build Electric Sand Sifter that is able to separate greensand and process 50 KG of greensand within 5 minute. We started our project to identifying the problems and collect the information about Electric Sand Sifter and then continued by designing the 3D model using Autodesk Inventor. Then, we list and prepare all the materials for this project. Lastly, we fabricate the project based on the ideas that has been planned. At the end of this project, the Electric Sand Sifter will be unutilized in foundry process for the mechanical students.

ABSTRAK

Pengayak pasir elektrik untuk kegunaan foundry ini adalah mesin untuk memisahkan Greensand daripada zarah yang tidak diingini seperti batu dan logam dalam foundry. Kenyataan masalah ialah kami mendapati bahawa pelajar Politeknik Mukah Sarawak mengambil masa yang lama untuk menapis greensand dan memerlukan lebih ramai pelajar pada satu masa. Matlamat kami adalah untuk membina pengayak pasir elektrik yang mampu memisahkan 50KG greensand dan memproses greensand dalam 1 minit. Kami memulakan projek kami untuk mengenalpasti masalah dan mengumpul maklumat pengayak pasir elektrik dan kemudian terus dengan mereka bentuk model 3D menggunakan Autodesk Inventor. Kemudian, kami menyenaraikan dan menyediakan semua bahan-bahan untuk projek ini. Akhir sekali, kami membina projek ini berdasarkan idea-idea yang telah dirancang. Pada akhir projek ini, pengayak pasir elektrik ini akan digunakan oleh pelajar Semester 2 Jabatan Kejuruteraan Mekanikal.