



**INFLUENCE OF PARTICLE SIZE IN NATURAL DRYING OF COMPACTION ON
FIBROUS MATERIAL : SEM MICROSTRUCTURE ANALYSIS**

**NUR SHAEBAH BINTI MAT HUSSAIN
2006690512**

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**FACULTY OF MECHANICAL ENGINEERING
UNIVERSITI TEKNOLOGI MARA (UiTM)
MALAYSIA**

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“I declared that this thesis is the result of my own work except the ideas and summaries which I clarified their sources. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any degree”.

Signed :
Date : 24/5/2010

NUR SHAEBAH BT MAT HUSSAIN

UiTM No: 2006690512

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In prosperity the friend knows us...

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ABSTRACT

Incense is a preparation of aromatic organic materials, intended to release fragrant smoke when burned. This study is detailed on physical and mechanical characteristics of fibrous material which is wood based material. This study more in natural absorption, compaction and several techniques of drying microstructure. This is a comparison between fine fibrous with all the samples above. This project is decided to make in three sizes of fibre, 150 μ m, 90 μ m and 53 μ m. This analysis is done by using scanning electron microscope (SEM). By using this machine, the data which can be obtained from the SEM monitor is analyzed in order to get the optimum result. The fibrous is made in pallet size which is water as a binder. The study also consists of data on the best rate of burning. To produce a better quality of incense, the rate of burn should be longer rather than normal incenses exist. Study on microstructure of pallet is an analysis of how to increase the production of incense in mechanical engineering scope. This study is more detailed on porosity, moisture content and interbonding that occurs between the particles.

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