



FINAL YEAR PROJECT REPORT

DESIGN AND FABRICATE A PRESS MOULD/DIE SYSTEM FOR
MAKING FIBRE MATERIAL SPECIMENS

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ABSTRACT

The project work is to design and fabricate press mould/die system. This process mould/die is to produce two form of fiber material specimens, which are square and hemisphere. The fiber material specimens will be use by students and lecturers for experiment at strength of material laboratory. It is also beneficial for research work of composite material.

This project consists two parts, which are design and fabricate. The design work begins with sketching the desired press mould/die system. The next process is to design the system using CAD technique. The CAD software that was used known as solid work software. Advantages of using this software are designer can design the press mould/die at a little time and it can produce an accurate design.

Meanwhile, the fabricate work involves machining and welding process. Several types of machines that we used in this project were lathe machine, milling machine, surface grinding machine and drilling machine. We used only arc welding.

Knowledge and experience in machining and welding are two major factor of successful project. The lack of knowledge and experience in certain matter will cause a big problem to finish any project.

The last part of this project is to test press mould/die system. This is to ensure that the system can function well and produce a desired product. By using this press mould/die, it is possible to make a fiber material specimens as easier as possible. The advantage is to help students to make more analysis on strength material test on different type of composite material.

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