

DESIGN AND FABRICATION OF SHOE RACK

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UNIVERSITI MALAYSIA PAHANG

DESIGN AND FABRICATION OF SHOES RACK

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Report submitted in partial fulfilment of the requirements

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24 NOVEMBER 2009

SUPERVISOR'S DECLARATION

I hereby declare that I have checked this project report and in my opinion this project is satisfactory in terms of scope and quality for the award of the degree of Diploma of Mechanical Engineering

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Date: 24 NOVEMBER 2009

STUDENT'S DECLARATION

I hereby declare that the work in this report is my own except for quotations and summaries which have been duly acknowledged. The report has not been accepted for any diploma and is not concurrently submitted for award of the degree of Diploma of Mechanical Engineering.

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ABSTRACT

This report presents the design and fabrication shoes rack for use in Masjid UMP. This design and fabrication of shoes rack according to the type of the place that we want to place it. Shoes rack is always used in many type of place such as school, office, Masjid, house and etc. The idea of the fabricating of this shoes rack is based on student's creativity and own inspiration. The selection of suitable materials in the fabricating of this shoes rack is a loaded material which has lightweight, long life-span and can detain heavy load. Materials are proposed for the fabrication of the shoes rack is a mild steel carbon material. In this report, we'll also be having more to the fabrication and analysis of this shoes rack.

ABSTRAK

Laporan ini membentangkan tentang merkabentuk dan penghasilan rak kasut untuk kegunaan di masjid UMP. Rekabentuk dan penghasilan rak kasut ini mengikut tempat atau kawasan yang hendak diletakkan. Rak kasut biasanya digunakan di kebanyakan tempat seperti sekolah, pejabat, masjid, rumah dan lain-lain. Idea penghasilan rak kasut ini adalah hasil inspirasi pelajar sendiri. Pemilihan bahan yang sesuai untuk digunakan bagi pembentukkan rak kasut ini merupakan bahan yang mempunyai berat yang ringan, jangka hayat yang tahan lama dan boleh menahan beban yang berat. Bahan yang dicadangkan untuk pembentukkan rak kasut ini merupakan material jenis mild steel karbon. Dalam laporan ini juga akan lebih memfokuskan kepada penghasilan dan analisis kepada rak kasut.

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LIST OF SYMBOLS

T_u Ultimate Strength (*MPa*)

A Area (m^2)

σ Stress (N/m^2)

F Concentrated force (N)

m Distance (m)

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LIST OF ABBREVIATIONS

MIG	Metal Inert Gas Welding
SMAW	Shielded Metal Arc Welding
UMP	Universiti Malaysia Pahang