



**DESIGN & FABRICATION OF IMPACT TESTING EQUIPMENT FOR
WOOD PALLET**

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

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ABSTRACT

This project is collaboration with SIRIM QAS International Sdn. Bhd. (Mechanical & Automotive Testing Section) on design and fabrication of test equipment for commercial pallet. This project aims to design and to construct appropriate specialized equipment as well as conducting a preliminary impact test for determining the resistance of pallet by contacting of fork arms to a fork lift truck. The project has been carried out in three stages which are design stage, fabrication stage and experimental stage. The first stage involves in designing of equipment by using CATIA V5R16. Further more, the fabrication process of the model has been built by using mild steel as the material for the equipment. Finally, the experimental works have been tested on the new impact test equipment at the Packaging Laboratory in SIRIM, Shah Alam and the equipment is approved according to ISO by SIRIM.

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Nothing is perfect in this world; any errors in this book are for me alone to bear. All comments and criticisms are greatly welcomed.

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TABLE OF CONTENTS

CONTENTS	PAGE
ACKNOWLEDGEMENT	v
ABSTRACT	vi
TABLE OF CONTENTS	vii
LIST OF FIGURES	x
LIST OF TABLE	xii
CHAPTER I INTRODUCTION	
1.1 Project Overview	1
1.2 Company's Profile	2
1.3 Problem Statement	3
1.4 Objectives	3
1.5 Scope of Project	3
1.6 Significant of Project	3
CHAPTER II LITERATURE REVIEW	
2.1 Introduction of the Pallets	4
2.2 Wooden Pallets Inspection Overview	6
2.3 Pallet Tests	10