

HIGHER TECHNICAL INSTITUTE

MACHANICAL ENGINEERING COURSE

DIPLOMA PROJECT

DESIGN OF A HYDRAULIC TENSILE
TESTING MACHINE

M/972

PETRIDES COSTAS KYRIAKOU

JUNE 2003

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By

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HIGHER TECHNICAL INSTITUTE	PROJECT NO. 3446
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By

Petrides Costas

**Project Report
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Project supervisor: Mr. George Katodrytis

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CONTENTS

Chapter 1

Introduction

pg. 2

Chapter 2

Tensile testing of materials

pg. 4 - 7

Procedure in doing a tensile testing experiment

pg. 8

Chapter 3

Need of design and problem definition

pg. 10

Objectives

pg. 10

Terms and conditions

pg. 11

Assumptions

pg. 11

Chapter 4

Ideation phase

pg. 13 - 17

Chapter 5

Decision making

pg. 19

Factors considered in decision making

pg. 19 - 22

Chapter 6

Designing the machine

pg. 24 - 26

Useful data

pg. 27

Hydraulic system

pg. 28 - 30

Selection of hydraulic system

pg. 31 - 37

Design of the frame and slider

pg. 38 - 41

Construction and preparation of the machine

pg. 42 - 43

Total weight of machine

pg. 44

Total cost of machine

pg. 45

Chapter 7

Grippers

pg. 48 - 51

Measuring instruments

pg. 52

Extensometers

pg. 53 - 54

Pressure gauges

pg. 55

Chapter 8

Instruction manual

pg. 57

Safety regulations

pg. 58

Conclusions

pg. 59

Reference

pg. 60

Technical drawings

pg. 61 - 85

Appendices

pg. 86

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SUMMARY

Chapter 1: is an introduction to the project and also some primary thoughts of how the machine is going to be designed.

Chapter 2: is a study that was made about tensile testing of materials.

Chapter 3: refers to the need of the design and some general objectives and assumptions.

Chapter 4: refers to the different ideas I had about the tensile testing machine.

Chapter 5: is the decision making process, to find the most suitable idea to design.

Chapter 6: refers to the design of the machine, where the selection of the hydraulic system and materials for the load frame was made.

Chapter 7: refers to the research that was made in the internet, to find useful information about grippers and measuring instruments.

Chapter 8: includes the instruction manual of how to operate the machine and some safety regulations.