

**INVESTIGATION OF STRESSES ON A FLAT PLATE WITH A HOLE
USING EXPERIMENTAL TECHNIQUES AND COMPARING THE
RESULTS USING ALGOR FINITE ELEMENT PROGRAMME**

**A project report presented in partial fulfillment of the requirement for the award of
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INTRODUCTION

The aim of our project is making a research about the characteristic of stress which existed at a flat plat with a tensile force applied to the piats. The flat plat used in our project here was bored in a circular and elliptical hole, so that we could determined the effect of stress concentration factor through the values of stress we've got.

This research was done by using sketches in all process with 2 techniques:

- a) Experimental Techniques
- b) Algor FEA programme

After all the values we needed from both techniques determined, the next method was comparing all the results of stresses from both methods.

From all the results in the comparison between algor and experiment techniques done, conclusion and all the comments were explained in the report.

The main objective of this research:

1. Determined the uses of Algor FEA in engineering design.
2. The uses of Algor FEA in doing certain project, such as save times and energy in designing and also comparing the methods nowadays.

CONTENTS

1. INTRODUCTION	1-2
2. GENERAL STRESS ANALYSIS	3-17
3. EXPERIMENTAL TECHNIQUES	
(A) <u>PRINCIPLE OF TENSILE TESTING</u>	
1.0 Definition of Tensile Testing	18
2.0 Percentage Elongation	19-20
3.0 Maximum Force	20
4.0 Stress (Normal Stress)	20
5.0 Yield Stress	20-21
6.0 Tensile Strength	21
7.0 Proof Stress Total Elongation (Rt)	22
(B) <u>Test Piece</u>	
1.0 Shape And Dimensions	23-25
2.0 Types	25
3.0 Preparation Of Test Pieces	26-29
4.0 Accuracy Of Testing Machine	29-32
5.0 Method Of Gripping	32
(C) <u>Testing Techniques</u>	
1.0 Factors Affecting The Rate Of Straining	33
2.0 Determination Of Testing System Characteristics	33
3.0 Application Of K	34

4. EXPERIMENT DONE - USING EXPERIMENTAL TECHNIQUES

1.0	Speciment Material	35
2.0	Types Of Specimen	35
3.0	Specimen Layout	36-37
4.0	Machine Used To Prepare The Specimens	37
5.0	Machine Used To Run The Experiment	38
6.0	Experiment Results	39
7.0	Conclusions	40

5. FEA METHOD

1.0	Intoductory Definition	41-42
2.0	Finite Element Terminologies	42
3.0	Steps Of Finite Element Analysis	43-44
4.0	Displacement Based On Finite Element Method	44-47
5.0	Principle Of Virtual Work	47-48
6.0	Summarization	48-49
7.0	Stiffness Matrix	49-53
8.0	2 - Dimensional Elements	54-56
9.0	Shape Function	57-60
10.0	Finite Element analysis Of 2-D Elasticity	61-70
11.0	Numerical Integration	71
12.0	Selection Of Gauss Point	72
13.0	Some Considerations Based On /J/ Of An Element	73-75
14.0	Modelling Guidelines	76-78

15.0	Modelling Consideration	78-80
16.0	Finite Element Method	81
17.0	Modelling Considerations	81-82

6. EXPERIMENT DONE - USING ALGOR F.E.A. PROGRAMME

1.0	Algor F.E.A. System	83
2.0	Model Analysis Flow	84
3.0	Programming	85-86
4.0	Experiment Results	87
5.0	Conclusion	88

7. ADVANTAGES & DISADVANTAGES OF F.E.A SOFTWARE

1.0	Advantages	89
2.0	Disadvantages	90

8. CONCLUSIONS

91

9. REFFERENCES

92

ATTACHMENTS