

DESIGN OF A TREE SHAKER

by

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Project Report

submitted to

the Department of Mechanical Engineering

of the Higher Technical Institute

Nicosia Cyprus

in partial fulfillment of the requirements

for the diploma of

TECHNICIAN ENGINEER

in

MECHANICAL ENGINEERING

June 1992

HIGHER TECHNICAL INSTITUTE	PROJECT NO 2042
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## ACKNOWLEDGEMENTS

I would like to express my sincere thanks to my project supervisor Mr. P. Tramontanellis for his great help and guidance during the project period.

Also those who contributed in completing this project and finally my family and all my friends for having offered me so much.

## PREFACE

This project deals with the design of a tree shaker, that is, a system by means of which vibrations will be induced to the trees, mainly olive trees, in order to achieve harvesting of their fruits.

For this purpose the project is separated in two parts.

Part A, which is an investigation about the modern systems of harvesting existing today, through which analysis of the systems is proceeded concerning their Technical characteristics, advantages and disadvantages. The purpose of this part is basically leading to the design of the new harvesting system by combining the individual advantageous characteristics of each existing system.

Part B is the actual design procedure, starting with the basic phases of design up to the decision making. Then follows an analysis and specification of the harvesting requirements based on the system characteristics. And it proceeds with components design and manufacturing drawings as well as selection of accessories and closes with determination of safety modes of operation, instructions and safety rules.

## CONTENTS

	pages
AKNOWLEDGEMENTS	I
PREFACE	II
INTRODUCTION	1
<hr/>	
<u>PART A - MODERN METHODS OF HARVESTING OLIVES</u>	8
<u>CHAPTER 1 - TREE SHAKERS</u>	8
1.1 Vibrator with mobile platform, model V.M.-30	
1.2 Vibrator on tyred tractor, model V.G.-30	
1.3 Vibrator mounted laterally on a chain-track tractor, model V.C.-30	
1.4 SR-12 limb shaker	
1.5 Other tree shaker models	
<u>CHAPTER 2 - OTHER HARVESTING METHODS</u>	24
2.1 Manual comp	
2.2 Vibrating comp PV & Olistar	
2.3 Vibrating rods	
2.4 Rotating harvesting machine	
CONCLUSIONS AND COMMENTS ON PART A	32
<hr/>	
<u>PART B - DESIGN OF A TREE SHAKER</u>	34
<u>CHAPTER 1 - PHASES OF DESIGN</u>	34
1.1 Need identification	
1.2 Questions asked	
1.3 Aims and objectives	
1.4 Questionnaire	
1.5 Creativity - Divergent thinking	

1.6 Decision making	
<u>CHAPTER 2</u> - HARVESTING REQUIREMENTS	41
2.1 Clamping range of the unit	
2.2 Vibration requirements	
2.2.1 Frequency and amplitude of vibrations	
2.2.2 Vibrating force requirements	
<u>CHAPTER 3</u> - MOTOR SELECTION	56
<u>CHAPTER 4</u> - DESIGN OF THE UNIT ACCESSORIES	61
4.1 Design of the clamping device	
4.2 Design of the motor base	
<u>CHAPTER 5</u> - CLAMPING DEVICE MANUFACTURING SPECIFICATIONS	65
<u>CHAPTER 6</u> - MOTOR BASE MANUFACTURING SPECIFICATIONS	67
<u>CHAPTER 7</u> - UNIT SPECIFICATIONS	68
<u>CHAPTER 8</u> - DESIGN CALCULATIONS	69
8.1 Design of the supporting hooks weld	
8.2 Design of the bolts	
8.3 Design of bolted connections	
8.4 Safety factors and material selection	
8.5 Design of resilient bases	
<u>CHAPTER 9</u> - ELECTRICAL REQUIREMENTS	74
<u>CHAPTER 10</u> - SAFETY MODE OF OPERATION	76
<u>CHAPTER 11</u> - OPERATOR INSTRUCTIONS AND SAFETY RULES	80
11.1 Recommended general instructions	
11.2 How to operate properly the unit	
<u>CHAPTER 12</u> - COST ANALYSIS	85
CONCLUSIONS	86
REFERENCES	88
MANUFACTURING DRAWINGS	
APPENDICES	