

HIGHER TECHNICAL INSTITUTE
MECHANICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

DESIGN OF A MOVABLE SYSTEM

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BY NICOLAS ACHILLEOS

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DESIGN OF A MOVABLE ROOF SYSTEM

Project report submitted by

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*In part satisfaction of the conditions for the award of
Diploma of Technician Engineer in Mechanical Engineering
of the Higher Technical Institute, Cyprus.*

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*Dedicated to those who
has helped me to accomplish
the project.*

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ABSTRACT

This project deals with the design of a movable roof system.

Chapter 1 deals with the design of the parts of the movable roof.

Chapter 2 deals with the selection of conveyor chain, gear unit and stock wheels.

Chapter 3 deals with the design of conveyor wheels shafts.

Chapter 4 deals with the design of the support structure and chain support.

Chapter 5 deals with the maintenance and accessories of the movable roof system.

Chapter is a cost estimate of the movable roof system.

Tables, catalogues and drawings are included at the end of the book.

INTRODUCTION

One of the many features encountered in buildings is the one of the utilisation of a movable roof system.

The movable roof system in order to be good it must be light, simple in operation, capable to withstand the weather conditions e.t.c.

In this project we are going to deal with the design of such movable roof system.

A number of sketches of design ideas are presented in this chapter one of which will be chosen to be designed.

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