COMPUTER AIDED DESIGN FOR MECHANICAL LINKAGES

PROJECT REPORT SUBMITTED BY:
PAPAS MARIOS

IN PART OF SATISFACTION OF THE AWARD OF
DIPLOMA IN COMPUTER STUDIES OF THE
HIGHER TECHNICAL INSTITUTE
NICOSIA,CYPRUS

PROJECT NUMBER: CS/036

PROJECT SUPERVISOR: MISS MARIA TSINDA
LECTURER IN THE
STUDIES DEPARTMENT
HTI
BSC/MSC IN COMPUTER
SCIENCE

EXTERNAL SUPERVISOR: MR KYRIAKOS KOKKINOS
BSC/MSC
SALES REPRESENTATIVE
IBM WTC

MAY 1990

Mechanical Linkages

The project is about the two mechanical linkages.Link mechanism is a machine or an arrangement of parts(or element) which performs a certain action.A link mechanism consists of elements which are joined beetween them by links or bars and the elements move to each other when the action is performed.

The two mechanisms that is included to the project are:

   a) Slider Crank Mechanism (fig 1.1)
   b) Four-Bar Linkage (fig 1.2)

a)Slider Crank Mechanism.

A slider crank mechanism is used in machines like pistons.It consist of two bars.The first bar is attached to the motor and the second bar is attached to the slider.

b)Four Bar Linkages.

A four bar linkage has four links connected by four pins whose axes are parallel.

A very important consideration when designing a mechanism to be driven by a motor, obviously, is to ensure that the input crank can make a complete revolution.Mechanisms in

Contents