

DESIGN AND OPTIMIZATION OF FOUR BAR
MECHANISM

Project report submitted by:

ANDREOU ANDREAS

In part satisfactory of the award of Diploma of Technician Engineer in Mechanical Engineering of the Higher Technical Institute Cyprus.

Project Supervisor: ELIAS PANTELIDES
Lecturer in Mechanical
Engineering - H.T.I.

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ANDREOU ANDREAS 3M1

SUMMARY

The purpose of this book is to develop a computer program for calculating link lengths as a function of a parameter. The rocker swing angle Ψ and the corresponding crank rotation ϕ are given.

To optimize the value of that parameter for:

- (a) Optimum transmission angle variation.
- (b) Optimum torque ratio (T_o/T_i) T_o = Output torque,
 T_i = input torque.

To optimize that parameter using the combined optimization which is a compromise between the two above criteria and to run several examples by varying Ψ and ϕ .

As it is seen from the results the combined optimization is between the optimum transmission angle and optimum torque ratio.

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