PROJECT REPORT

" DEVELOPMENT OF THE CONTROL SCHEME OF AN EXTRUSION MACHINE USING PROGRAMMABLE CONTROLLERS "

SUBMITTED BY :

PANTELIS A. ANGELIDES

In partial fulfilment of the requirements of the award of the Diploma of the Technician Engineer in Electrical Engineering of the Higher Technical Institute of CYPRUS.

PROJECT SUPERVISOR : Mr I. Demetriou Electrical Engineering lecturer H.T.I

JUNE -1993

H.T.I

ACKNOWLEDGEMENTS

I would like to pay great gratitude to my project supervisor, Mr I. Demetriou and to Mr I. Pampouris, laboratory assistant for their assistance and guidance for the preparation and completion of this project.

I would, also like to express my appreciation and thanks to my uncle Mr Angelos Ionas for his continuous supervision and valuable assistance during the preparation of the project report.

Finally, I would like to thank my family for their encouragement and tolerance, they offered to me throughout my studies.

Pantelis A. Angelides
3rd year student in Electrical Engineering
H.T.I

JUNE 1993.

SUMMARY

TITLE : " Development of the Control Scheme of an Extrusion Machine using Programmable Controllers ".
AUTHOR : Pantelis A. Angelides

The present report investigates the programming capabilities of the Ladder language and examines the characteristics and capabilities of Programmable Controllers. Then an application program is developed, using one of the Programmable Controllers available in H.T.I, for the control of an Extrusion machine. In addition, costing is made and helpful data sheets are submitted.
The development of the application program is planned for the SLC 500 of ALLEN BRADLEY PLC and the programming format is based on the manual of the SLC 500 PLC.
The report sticks to basic information concerning the PLC technology; the fact that such technology is not very well known to technical people is taken under consideration and the most basic concepts and features of PLCs are explained in detail.

CONTENTS