

HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

**SEQUENCE CONTROL SCHEME FOR A BOTTLING LINE
USING PROGRAMMABLE LOGIC CONTROLLERS**

by

RODOSTHENOUS RODOSTHENIS (E/938)

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PROJECT REPORT

"SEQUENCE CONTROL SCHEME FOR A BOTTLING LINE USING PROGRAMMABLE LOGIC CONTROLLERS"

SUBMITTED BY :

RODOSTHENOUS RODOSTHENIS

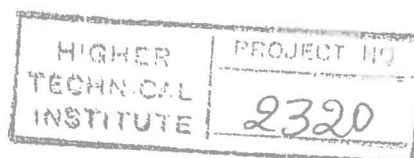
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PROJECT SUPERVISOR :

Mr E. Michael BSc, MSc lecturer in Electrical Engineering, H.T.I

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Summary

This project deals with Programmable Logic Controllers (PLCs) and a sequence control scheme for a bottling line is carried out using such control system. The project is divided into four chapters.

In chapter 1 a brief definition of the PLC is given and the historical development, the characteristics and capabilities of Programmable Logic Controllers are examined. A brief description of the major sections of a PLC is made.

In chapter 2 the programming capabilities of a "ladder language" are investigated. The instructions which may be contained in a ladder diagram or "user program" are analysed.

Using a PLC and having in mind the capabilities of a PLC and the programming capabilities of a "ladder language", an application program explained in details, is developed for the control of a Bottling line in chapter 3.

Finally, in chapter 4, cost estimation of the PLC system used is provided and it is compared to conventional methods.