HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

CONCRETE MIXER SYSTEM USING A PROGRAMMABLE LOGIC CONTROLLER

E/1194

NEOPHYTOU CHRISTINA

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BY
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SUPERVISOR
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CONCRETE MIXER SYSTEM USING A PROGRAMMABLE LOGIC CONTROLLER

SUBMITTED BY :

NEOPHYTOU CHRISTINA

**In partial fulfilment of the requirements
For the diploma award of the
Technician Engineer in Electrical
Engineering Department of the
Higher Technical Institute
Nicosia - Cyprus**

**PROJECT SUPERVISOR :
Mr. E. MICHAEL**

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SUMMARY

"Concrete mixer system using a programmable logic controller"

SUBMITTED BY: Neophytou Christina

This project provides a programmable logic controller ladder program in order to enable automatic mixing.

The first four chapters give information about programmable logic controllers. Chapter 5 and chapter 6 examine the capabilities of programmable logic controllers, by analyzing the application case study. The application program is based on the Allen Bradley SLC500 PLC instruction manual.

At the end in chapter 8 is discussed and estimated the total cost of the work done, on the concrete mixer system.

INTRODUCTION

Programmable logic controller is the best over all choice for a control system. The use of programmable logic controllers in Cyprus is increasing year by year. Nowadays are extensively used in variety of applications.

The application case study explains the operation of PLCs and shows their applications in modern industry.

Chapter 1: Gives the introduction to PLCs. It outlines its historical development and compare PLCs with other control panels.

Chapter 2: Gives the system description and the internal operation.

Chapter 3: Outlines PLC programming languages. The ladder language programming characteristics is extensively reported, since it will apply in the project.

Chapter 4: Shows the basic functions of PLC.

Chapter 5: explains the ladder diagram in detail, rung by rung.