PROJECT REPORT

"DEVELOPMENT OF THE CONTROL SCHEME OF A PLASTIC INJECTION MOULDING MACHINE USING PROGRAMMABLE LOGIC CONTROLLERS"

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JUNE - 1994

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HIGHER TECHNICAL INSTITUTE PROJECT NO 2308

SUMMARY

TITLE: **DEVELOPMENT OF THE CONTROL SCHEME OF A PLASTIC INJECTION MOULDING MACHINE USING PROGRAMMABLE LOGIC CONTROLLERS**

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This report examines the characteristics and capabilities of Programmable Logic Controllers and also it investigates the programming capabilities of "Ladder Language". Then an application program for the Control of a Plastic Injection Moulding Machine is developed, using Programmable Logic Controller. Also the program analysis, costing and comparison with conventional methods are given. Finally useful appendices and data sheets are submitted.

The application program is developed using the ALLEN-BRADLEY SLC 500 PLC, available in HTI, and the programming is based on the instruction manual of the SLC 500 PLC.

Throughout this project report the most basic concepts of PLCs are explained in detail, simple technical language is used and also helpful diagrams and pictures are illustrated so that the report is comprehensible and pleasant to read by people who are not familiar and do not have background to PLC theory and technology.

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