FINAL YEAR PROJECT REPORT

INDUSTRIAL AUTOMATION BY DCS

In fulfillment of the requirement
For degree of
BE (Electronics)

By

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Acknowledgments

Handling this massive task that we took was confusing at times and led us in situations where we feel stuck. But the teachers and higher authorities helped us a lot.

Our Ex-engineering HOD Dr. Talha Ahsan arranged a visit to Pakistan cables Pvt. Ltd where it proved to be very fruitful and time worth spending, He even managed to make it possible to work on Saturdays within the university limits, which was not common before. The Supervisor for our project i.e. Engr. Burhan Ahmed, who is also the Final Year project Coordinator, helped us throughout the presentations time after time. The support and guidance from Sir Adnan indeed helped.

Not forgetting Sir Azmat, who taught industrial automation in final semester, simply cleared our misconceptions regarding, designing and even coding a PLC on your own.

In the next introduction section, we will discuss briefly about Distributed Control Systems and how it works.

Abstract

Implementing Distributed Control System was less demanding in olden days, due to the fact that the science did not evolve that much. Nowadays Programmable logic Controllers are used everywhere, there are no boundaries to it, i.e. industry which includes assembly lines, processes, control system etc. All the mentioned are less than 5-10% of its applications, available as a whole.

Using a single Programmable Logic Controller for some small area applications in not harder to implement, but connecting several PLCs together or connecting on network, is quite challenging. This DCS revolves around communication between two PLCs, communication with each other, each PLC possesses different configurations, depending upon the program we are willing to implement.

The process being displaying on Human Machine interface is programmed in INFO U software. The tags and graphics are defined in INFO U, resulting in status and controls being available on the HMI software.

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