

**HIGHER TECHNICAL INSTITUTE**

**MECHANICAL ENGINEERING DEPARTMENT**

**DIPLOMA PROJECT**

**QUALITY CONTROL AND IMPROVEMENT IN AN  
INDUSTRY**

by

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# Quality Control and Improvement in an Industry

by

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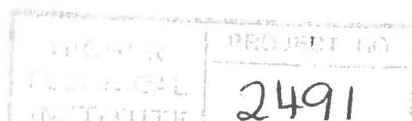
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**Dedicated to my Parents**

## ABSTRACT

It is internationally accepted that a competitive industry has to reach the higher quality at the most economical cost. Quality control is therefore the key to a successful industry.

The effort to achieve these goals is even bigger to relatively small industries as "Conal Ltd", reentering quality control the key element to be used for its survival.

The present project made use of quality control as a tool to assess the current situation of "Conal Ltd. By means of inspection of the production process, the condition of the raw material and the final products, the quality was assessed. During the survey measurements of pH, specific gravity, viscosity, centrifuged stability, formaldehyde tests (ionic-active matter and non-ionic matter) were performed. In addition the surveying involved an investigation of the marketing policy of the company.

The data analysis that followed the monitoring survey by means of control charts revealed that the final product complies with the standards set by the company's quality control department.

Despite this fact several control strategies are presented and suggestions are made that could be applied by the company in order to reduce the possibilities of defective products and increase the efficiency of the already existing quality control system.

### ACKNOWLEDGEMENTS

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## OBJECTIVES

1. To study existing quality control methods.
2. To select a manufacturing industry and carry out a quality control study to identify areas needing improvement.
3. To design a quality control system using new techniques to improve the quality of the products.
4. To implement the quality system as a pilot study with the collaboration of the chosen industry.