

HIGHER TECHNICAL INSTITUTE

MECHANICAL ENGINEERING

COURSE

DIPLOMA PROJECT

DESIGN CONSTRUCTION AND TESTING  
OF A MOBILE QUALITY CONTROL UNIT

M/776

GEORGIOS DEMETRIOU

VASILIS OXINOS

JUNE 1997

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| HIGHER<br>TECHNICAL<br>INSTITUTE | PROJECT NO<br>2701 |
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# DESIGN, CONSTRUCTION AND TESTING OF A MOBILE QUALITY CONTROL UNIT

by

Georgios Demetriou  
and  
Vasilis Oxinos

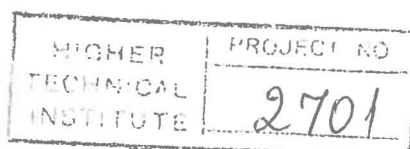
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## Abbreviations

- M.Q.C.U - Mobile Quality Control Unit
- SPC - Statistical Process Control
- SQC - Statistical Quality Control
- Q.C - Quality Control



## SUMMARY

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## SUMMARY

The objectives of this project are to design the layout of a mobile quality control unit, construct this unit, and finally test the effectiveness of the unit by applying it in a specific manufacturing industry.

The whole content of the project is divided into six main chapters.

In chapter 1 an introduction to quality control and its importance was made.

In chapter 2 the design and construction of the mobile quality control unit were described.

In chapter 3 the application of the computer technology in quality control by using the SQC pack/PLUS software was analyzed.

In chapter 4 the quality control charts which have been used in the specific manufacturing industry were analyzed.

In chapter 5 an investigation of the quality control procedures and methods of the selected manufacturing industry was performed.

In chapter 6 an analysis, implementation and commissioning of the mobile quality control unit in the manufacturing firm was performed.