HIGHER TECHNICAL INSTITUTE

MECHANICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT
(M/711)

Study on the Implementation of a Quality Control System for an Industry.

by
POLYKARPOS ANIFTOS

February 1995

STUDY ON THE IMPLEMENTATION OF A QUALITY CONTROL SYSTEM FOR AN INDUSTRY

by

Polykarpos Aniftos

Project report

Submitted to
the Department of Mechanical Engineering
of the Higher Technical Institute
Nicosia/Cyprus

in partial fulfillment of the requirements
for the diploma of
TECHNICIAN ENGINEER

in

MECHANICAL ENGINEERING

February 1995

Project (M 711)

HIGHER TECHNICAL INSTITUTE
NICOSIA - CYPRUS
MECHANICAL ENGINEERING DEPARTMENT
Additional Project for a 1991/92 student:
Mr Polycarpos Aniftos (3ME1)

Project Number: M/711

Title: "Study on the Implementation of a Quality Control System for an Industry"

Objectives:

1. Review of Quality Control Tools and Techniques.

2. Describe the existing Quality Control system of the selected company.

3. State the deficiencies of the existing system.

4. Design a Quality Control system to eliminate the above deficiencies and improve the companies overall quality performance. (Show details, tables, charts).

5. Design an implementation plan for the above recommendations.

6. Execute the initial stages of the implementation plan, collecting data from processes and present the first analytical results.

Terms and References

1. Apply modern Quality Control methods and techniques, this involves material taught on 2nd and 3rd year Metrology and Quality Control and Production Management.

2. Recorded data should be presented on standard tables, flow charts, etc.

3. Utilisation of the existing software and hardware facilities of the HTI is extremely recommended.

4. Suggestions for improvement must be detail in description. (Charts, tables, drawings etc).

5. Professional guidance will be provided.

Student: Polycarpos Aniftos

Supervisor: Dr V. Messaritis

External Assessor:

VM/MI
project(40)

DEDICATION

Dedicated to Diamando,
my precious diamond.

CONTENTS

ACKNOWLEDGEMENTS:

I would like to express my thanks to my project supervisor Dr Messarites Vassos, who gladly accepted the supervision of my work, for his constructive criticism and comments.

Also my most thanks to my project supervisor Mr Angeli I. Ioannis, for his help and guidance to my whole work. Without his advise the completion of this project would have been very difficult.

My respects to Mr Iordanou who has shown understanding and gave his approval to change my previous project and take this one with the subject on Quality Control.

My love to my family for their understanding and moral support,

SUMMARY OF THE PROJECT

The thitle of this project is "to study on the implementation of a Quality Control (QC) system for an industry." The objectives are: To review Q.C tools and techniques, describe the existing Q.C system for the selected company and state the deficiencies. Also to design a Q.C system to eliminate the above deficiencies, and improve the companys' overall quality performance through tables and charts. To design an implementation plan for the above recommendations. Finally to execute the initial stages of the implementation plan, correcting data from processes and present the first analytical results.

The employment of SPC is highly requested by the author since this would give monitoring of the processes and future predictions could be made. A collective work would reduce the limits and variations of the processes to minimum and defectives to zero. Thus there will be an industry of perfect efficiency and performance.

Through this project the author had the chance to participate an SPC and ISO 9000 course help by Mr I.I. Angelis and learned the sqc pack software for computerised SPC. The results of computerised SPC have been presented in the appendices to assure the correct handmade charts done by the author and give more data, like histograms, making the project more pioneer.