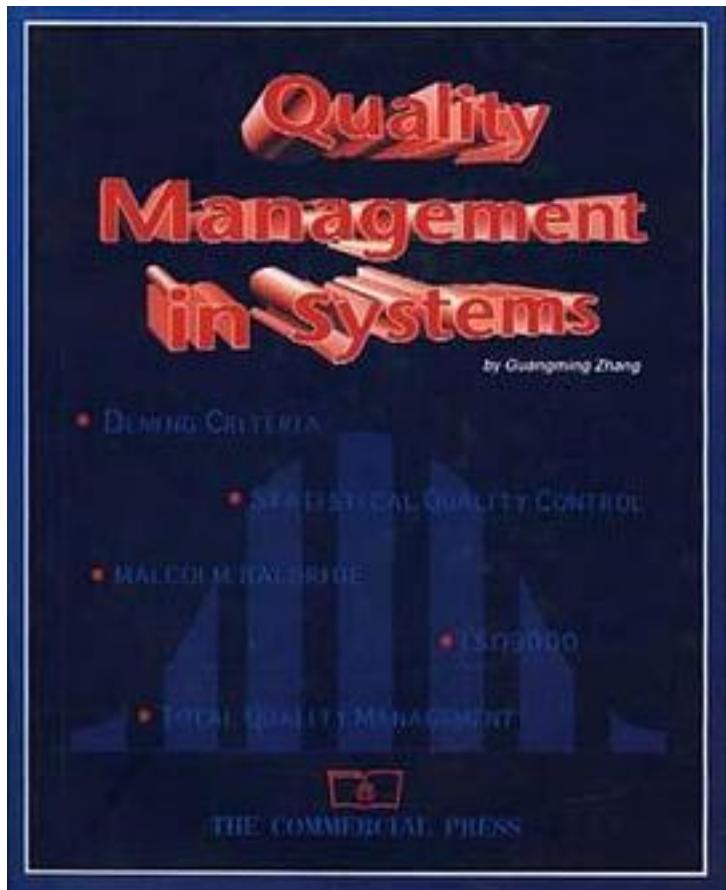


系统质量管理



[系统质量管理 下载链接1](#)

著者:张光明

出版者:商务印书馆

出版时间:1998-11

装帧:精装

isbn:9787100027786

作者介绍:

Guangming Zhang obtained a bachelor degree and a master degree, both in Mechanical

Engineering, from Tianjin University, the People's Republic of China. He obtained a master degree and a Ph.D. degree in Mechanical Engineering from the University of Illinois at Urbana-Champaign. He is currently an Associate Professor in the Department of Mechanical Engineering and Director of the Advanced Design and Manufacturing Laboratory at the University of Maryland at College Park. He holds a joint appointment with the Institute for Systems Research.

Professor Zhang worked at the Northwest Medical Surgical Instruments Factory in China where he served as a principal engineer to design surgical instruments and dental equipment. He also taught at the Beijing Institute of Printing and received the

National Award for Outstanding Teaching from the Press and Publication Administration

of the People's Republic of China in 1987. In 1992, he was selected by his peers at the University of Maryland to receive the Outstanding Systems Engineering Faculty Award. Also in 1992, he was a recipient of the Blackall Machine Tool & Gage Award of the American Society of Mechanical Engineers. He was the recipient of the E. Robert Kent Outstanding Teaching Award of the College of Engineering in 1993. In 1995 and 1997, he received Awards of Commendation from the Society of Manufacturing Engineers, Region 3, for his outstanding service as the Faculty Advisor to the SME Student Chapter at College Park.

He has actively participated in the NSF sponsored ECSEL grant since 1990. He currently serves as the principal investigator for this grant at the University of Maryland, and coordinates the ECSEL sponsored projects on integration of design, on active learning and hands-on experiences, and on developing methods for team learning. He is

an Associate Editor of the International Journal of Advanced Manufacturing Systems, and a member of the editorial board of the International Journal of Flexible Automation

and Integrated Manufacturing. He has written about 90 technical papers, published one

book and holds one patent.

目录: CHAPTER1

INTRODUCTION TO QUALITY MANAGEMENT IN SYSTEMS

1.1 HISTORY OF QUALITY CONTROL

1.2 THE NEED FOR STATISTICAL QUALITY CONTROL (SQC)

1.2.1 Definition of Quality

1.2.2 Fundamental Principles of Quality

1.3 QUALITY THROUGH SYSTEMS ENGINEERING

1.3.1 Definition of a System

1.3.2 Systems Engineering Process

1.4 MEASUREMENT PARAMETERS FOR SYSTEMS ENGINEERING AND SQC

1.4.1 Cost

1.4.2 Time

1.4.3 Performance/Quality

1.4.4 Resources

1.4.5 Business Policy

1.4.6 Customer Satisfaction

1.5 HUMAN FACTORS AND QUALITY

1.6 QUALITY SYSTEMS

1.6.1 Deming

1.6.2 The Malcolm Baldrige National Quality Award

1.6.3 ISO9000

1.7 QUALITY MANAGEMENT

1.8 ASSIGNMENT PROBLEMS

1.9 BIBLIOGRAPHY

CHAPTER 2

DETAILS OF QUALITY MANAGEMENT IN SYSTEMS

2.1 INTRODUCTION

2.2 TOTAL QUALITY MANAGEMENT AND DEMING'S 14 POINT PROGRAM

2.2.1 The Way of Thinking

2.2.2 Ways of Producing and Conducting Business

2.2.3 Ways of Cultivating Employees

2.2.4 Ways of Organizing and Managing

2.3 THE MALCOLM BALDRIGE NATIONAL QUALITY AWARD

2.3.1 Evaluation System

2.3.2 Benefits

2.3.3 Qualifications

2.3.4 Total Quality Management

2.4 ISO 9000 REGISTRATION

2.5 COMPARISON OF THREE QUALITY CRITERIA

2.6 SUMMARY

2.7 ASSIGNMENT PROBLEMS

2.8 BIBLIOGRAPHY

CHAPTER 3

FUNDAMENTALS OF ENGINEERING STATISTICS

3.1 INTRODUCTION

3.2 PROCESS VARIATIONS

3.3 CHARACTERIZATION OF DATA

3.3.1 The Histogram: A Graphical Representation of the Distribution

3.3.2 Characteristics of Data: Mean, Variance, and Standard Deviation

3.4 PROBABILITY DISTRIBUTIONS

3.4.1 Discrete Distributions

3.4.2 Continuous Distributions

3.4.3 Central Limit Theorem

3.4.4 Linear Operator

3.5 THE STUDENT T-DISTRIBUTION

3.6 SUMMARY

3.7 ASSIGNMENT PROBLEMS

3.8 BIBLIOGRAPHY

3.9 APPENDIX

CHAPTER 4

STATISTICAL PROCESS CONTROL

4.1 INTRODUCTION

4.2 ASSESSMENT OF PROCESS CAPABILITY

4.3 CONTROL CHARTS

4.4 ACCEPTANCE SAMPLING

4.4.1 Conflict of Interest

4.4.2 Design of a Sampling Process

4.4.3 The Operating Characteristic Curve

4.5 ACCEPTANCE PLANS USING DOUBLE SAMPLING

4.6 DODGE-ROMIG INSPECTION SYSTEM

4.7 LTPD AND AOQL

4.7.1 The LTPD System

4.7.2 The AOQL Plan

4.7.3 Computations

4.7.4 Advantages and Disadvantages of the Dodge-Romig System

4.8 ANSI/ASQC Z1.4-1981 CIVILIAN STANDARD

4.8.1 Concepts

4.8.2 Advantages and Disadvantages of the ANSI/ASQC Z1.4

4.9 SUMMARY

4.10 ASSIGNMENT PROBLEMS

4.11 BIBLIOGRAPHY

4.12 APPENDIX

CHAPTER 5

ANALYSIS OF DATA

5.1 CONFIDENCE INTERVALS

5.2 SIGNIFICANCE TESTS

5.3 COMPARISON OF TWO TREATMENTS

5.3.1 Principle of Blocking

5.3.2 Principle of Randomization

5.4 COMPARISON OF MORE THAN TWO TREATMENTS

5.4.1 Analysis of Variance

5.4.2 Latin Square Design

5.5 ASSIGNMENT PROBLEMS

5.6 BIBLIOGRAPHY

APPENDIX - F DISTRIBUTION TABLES

CHAPTER 6

DESIGN OF EXPERIMENTS

6.1 FACTORIAL DESIGN AT TWO LEVELS

6.2 CALCULATION OF THE MAIN AND INTERACTION EFFECTS

6.3 DERIVATION OF AN EMPIRICAL MODEL

6.4 ERROR ESTIMATIONS

6.4.1 Use of Replicated Runs for Error Estimation

6.4.2 Error Estimation from Higher-Order Interactions

6.5 FRACTIONAL FACTORIAL DESIGN AT TWO LEVELS

6.5.1 Linear Combinations

6.5.2 General Class of 2^{k-p} Fractional Factorial Designs

6.5.3 Design Generator and the Defining Relation

6.6 ASSIGNMENT PROBLEMS

6.7 BIBLIOGRAPHY

CHAPTER 7

MODEL BUILDING

7.1 REGRESSION

7.2 RESPONSE SURFACE METHOD

7.3 ASSIGNMENT PROBLEMS

7.4 BIBLIOGRAPHY

• • • • • (收起)

[系统质量管理](#) [下载链接1](#)

标签

评论

[系统质量管理](#) [下载链接1](#)

书评

[系统质量管理](#) [下载链接1](#)