TOTAL QUALITY MANAGEMENT

G. Murugesan

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PREFACE

It is indeed a great pleasure and proud privilege for me to present this treatise on 'Total Quality Management' to the immediate benefit of final year engineering students of all branches. This book is written in tune with the latest syllabus of various universities and we have taken the syllabus as guidelines for the organization of this book.

In writing this book, the author has constantly kept in mind the tremendous amount of ground which the student and the practicing engineers of today is expected to cover. No effort has been spared to enrich the book with simple language and self-explanatory diagrams.

The author's responsibility here is to stress abundantly that we lay on no chaim to the original research in preparing this text. Many of the subject matters that are available in the works of eminent authors have been made freely. Perhaps, what we may chaim, in all modesty, is that we have tried to fashion the vast amount of materials available from primary and secondary sources into coherent body of description and analysis.

I am very thankful to Dr. A. Shanmugasundram, Chancellor of Vinayaka Missions Unversity, Salem, Tamil Nadu. Dr. A. Nagappan, Principal, Prof. P. Ganasekaran, Dean, Placement, V.M.K.V. Engineering College, Periya Seeragapadi, Salem, Tamil Nadu. It's my great pleasure to express may heartfelt gratitude to my wife and my daughter who have shouldered my burdens for the successful completion of my book.

—Author

Unit 1

INTRODUCTION

1.1 MEANING OF QUALITY

Quality refers to the end-use of the product. Quality is the requirement of customers.

For example, the gear used in the sugarcane juice extracting machine may not possess good surface finish, tolerance and accuracy as compared with one used in the headstock of a lathe.

1.2 DEFINITION OF QUALITY

"Quality is the totality of features and characteristics of a product or service at bear on its ability to satisfy stated or implied needs". **—ISO 8402**

"Quality is fitness for use". **—Juran**

"Quality is a predictable degree of uniformity and dependability at low cost and suited to the market". **—Deming**

1.3 DIMENSIONS OF QUALITY

Quality has nine different dimensions. These are explained under the table.

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