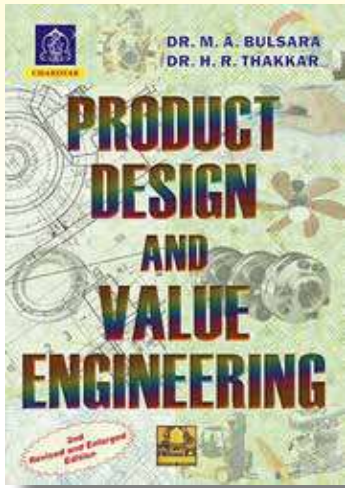


# PRODUCT DESIGN AND VALUE ENGINEERING



REVISED  
& ENLARGED

By

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**Edition** : 2<sup>nd</sup> Revised and Enlarged Edition : 2015  
**ISBN** : 9789385039140  
**Size** : 170 mm × 240 mm  
**Binding** : Paperback  
**Pages** : 280 + 16 = 296



₹ 225.00 **BUY**

## ABOUT THE BOOK

The text-book aims at presenting the topics of *Product Design and Value Engineering* in a simple manner. Each topic of the book has been arranged in such a way that reader is empowered with in-depth knowledge in the subject.

This is thoroughly revised and extensively enlarged edition. One new chapter on Product Design has been added. Some of the topics relevant to the subject have been added and few have also been described elaborately.

First six chapters contain topics on Product Design and Product Development. Product Design and Product development is a challenging task and can be learnt through experience. Many good universities have incorporated this course to introduce the challenges and difficulties in product development process, to the students. A product can be developed at lowest possible cost if the process is planned systematically. Initial few chapters of the book cover systematic procedure for "Product Development" in detail, supported with relevant examples.

Subsequent five chapters of the book cover the Value Engineering concept. Value Engineering approach is used to eliminate the unnecessary cost from the product. The implementation of Value Engineering concept has been elaborately described as value engineering job plan along with value engineering project selection, FAST diagram and Life Cycle Cost with relevant case studies.

Last chapter deals with practical aspects of manufacturing, affecting the design considerations.

*The salient features of this book are:*

- \***Lucid description of Product Development process and Value Engineering Concept.**
- \***Illustrative examples within the text.**
- \***Comprehensive summary at the end of each chapter.**
- \***Exercise at the end of each chapter.**
- \***Solved sample papers (GTU).**
- \***Case studies of various products to illustrate product development process.**
- \***Value Engineering Training programme course.**
- \***Illustrative engineering drawings to understand design for manufacture.**

The book covers major syllabus of the subject Product Design and Value Engineering (Subject code 171904 for B.E. Semester VII of Mechanical Engineering branch) prescribed by Gujarat Technical University (GTU) and other Indian Universities. The book will also be of immense help to the practicing engineers.

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**Annexure I : TYPICAL TRAINING PROGRAM FOR A 40-HOUR VALUE ENGINEERING TRAINING WORKSHOP COURSE**

**Annexure II : CASE STUDY: MARKET PULL PRODUCT \ DEVELOPMENT OF BICYCLE**

**Annexure III : PAPER SOLUTIONS OF PREVIOUS GTU EXAMINATIONS**

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