DESIGN OF TRANSMISSION ELEMENTS

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Design of Transmission Elements

T. J. Prabhu, the former Dean of Mechanical Engineering, Bharath University, Chennai — 73, has more than 40 years of varied experience — Industrial, Research and Teaching. He took his B.E (Mech.) degree from the erstwhile College of Engineering, Guindy and M.S (Mech.) and Ph.D (Appl. Meeh.) degrees from IIT, Madras. During his stay in industries , he has designed and developed Industrial Process Cameras (Standard Printing M/C Co),Acoustic Enclosures and Silencers, and Solar Flat Plate Collectors (Southern Power Systems (P) Ltd), and Low Cost Automatic Machines (W.S. Insulators) . Dr. Prabhu has published 18 Research papers of which 10 are in the International Journal "WEAR".

Dr. Prabhu has written six Engineering Textbooks.

1. Design of Transmission Elements
2. Fundamentals of Machine Design
3. Mechanics of Solids
4. Basic Mechanical Engineering and History of Mechanical Engineering
5. Engineering Mechanics
6. Projects in FEM using MATLAB

His areas of interest are Machine Tools, Vibrations, Stress Analysis and Finite Element Method.

FOREWORD

I congratulate the author, Dr. T.J. Prabhu, Professor and Head, Department of Mechanical Engineering, Bharath Institute of Science and Technology, Selaiyur, Madras for bringing out the book on "Design of Transmission Elements".

This book with its rich 18 main and 4 auxiliary chapters deals with the brief outline of each element at the beginning of each chapter and the detailed design of it subsequently through illustrative problems very systematically. This, in my opinion is a good approach, since the reasoning is well grasped then and there. This book is a valuable one to the students of Mechanical Engineering at the degree level and to a substantial extent to the students of AMIE in Mechanical Engineering, besides to the practising engineers in Design in industries.

Dr. Prabhu has a long experience in teaching and his sincerity is well known. These have been utilised rightly in the treatment of the subject, particularly in the presentation.

It is a known fact that quite a good volume of Design Data is used wherever to be used in Design. This book brings out reasoning to this wherever possible. This covers the full syllabus prescribed by the Universities in Tamil Nadu without any omission.

I am very sure that this book will be well utilised by the students in Mechanical Engineering and the engineers in industries as a valuable guide.

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