



Strength of Materials

Author : D.S. Bedi

ISBN 13 : 978-93-82609-11-7

ISBN 10 : 93-82609-11-3

E-ISBN 13 : 978-93-82609-11-7

Edition : 6

Pages : 752

Type of book : Paperback

Weight (g) : 841.00

Year : 2022

Language : English

Publisher : Khanna Publishing House

Regular Price : Rs 450.00

Sale Price : Rs 360.00

Categories : [All books, Mechanical Engineering,](#)
[Mechanical Engineering, UNIVERSITY](#)
[RECOMMENDED](#)

Condition Type : New

Country Origin : India



Khanna Publishing House

4C/4344, Ansari Road, Daryaganj, New Delhi-110002

Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: + +91-99109 09320

Product Description

The sixth edition of the book has thoroughly been modified and enlarged to meet the revised syllabi of many universities and other professional examination like AMIE and above all to incorporate the suggestions received from the students and faculty alike. Additional problems on two-dimensional complex stress systems have been fully solved by both analytical and Mohr's circle method so that the readers are made aware of the fact that the sign shear stress on a particular plane has its one important role to play so as to arrive at the correct result which otherwise is normally overlooked or even sometimes neglected. The term "bending Moment" and "twisting Moment" have been introduced as vector quantities in order to bring out the difference between them so that the reader can easily decipher each of them and proceed ahead to accomplish the associated objectives. The chapter on Thick Cylinders had been re-written to keep uniformity in sign convention of the stresses throughout the entire text. Further in this chapter the process of autofrettage of a thick cylinder has been introduced along with the "Simplified" theory of this process. The author has endeavored to familiarize the readers with the "Yield point phenomenon of low carbon steel", "quantitative definitions of ductility and malleability" and "Negative Poisson's Ratio" which were hitherto not dealt with in most of the text on the subject. On the specific demand of the students almost all the chapters have been supplemented with objective type questions along with more number of worked examples.

Table of Contents

Chapter 1: Simple Stress and Strain Chapter 2: Complex Stresses and Strains Chapter 3: Shearing Force and Bending Moments in Beams Chapter 4: Bending Stresses Chapter 5: Shear Stresses in Beams Chapter 6: Deflection of Beams Chapter 7: Torsion of Circular Shafts Chapter 8: Struts and Columns Chapter 9: Thin Shells Chapter 10: Thick Cylinders Chapter 11: Springs Chapter 12: Strain Energy and Deflection due to Shear and Bending Chapter 13: Theories of Failure Chapter 14: Bending of Curved Bars Chapter 15: Stresses Due to Rotation Chapter 16: Unsymmetrical Bending Chapter 17: Plastic Theory of Bending Chapter 18: Three Dimensional Stress System Chapter 19: Torsion of Non-Circular Shafts Chapter 20: Miscellaneous Problems Chapter 21: Plastic Theory of Bending : Index Appendix



Author

D.S. Bedi Dr. D.S. Bedi is one of the distinguished writers in India. He possesses a very excellent academic background. He had held various high positions viz. formerly Professor Emeritus at Department of Mechanical Engineering, Institute of Engineering and Technology (Punjab); Professor & Head, Dept. of Mechanical Engineering, Thapar Institute of Engineering & Technology (Punjab); Visiting Professor at Wayne State University, Detroit, MI (USA); Principal, Baba Banda Singh Bahadur Engineering College, (Punjab); Advisor-cum-Consultant at G.G.S. College of Modern Technology (Punjab); Director, Punjab College of Engineering; Technology, Punjab.

