



STRENGTH OF MATERIALS

FOURTH EDITION



S S BHAVIKATTI

Strength of Materials

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Fourth Edition

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Preface to the Fourth Edition

In the earlier editions, compound stresses were studied only after dealing with all types of simple stresses, including stresses due to bending and torsion. But, in keeping with the requirement of students, in this edition compound stresses have been dealt with immediately after dealing with simple stresses in general.

Methods of finding deflections of beams by moment-area method, conjugate beam method and energy methods were only studied under structural analysis. But, since students had to study separate books for these topics, these are being included in *Strength of Materials* also. Also, the students of branches other than civil engineering do not study structural analysis but require the knowledge of these methods, they will also benefit by this inclusion. Apart from these changes, some explanations have been added in the text to make concepts clearer.

Thanks are due to the readers for their valuable suggestions from whom I solicit support in the form of continued suggestions.

S S Bhavikatti

Preface to the First Edition

“Strength of Materials” is a basic course for almost all branches of engineering. The subject matter studied in the course, is frequently used in many design papers in higher classes and in design practice. Hence, it is essential that engineering students develop clear concept of the subject. They should have clear ideas about the units to be used. The author has concentrated on these two aspects. The book is written in SI units and the standard notations used in the national codes of practice are strictly adhered to. In the SI units, only unit or unit ^{$3n$} , where n is a positive or negative integer, is to be used. Hence, the unit ‘centimetre’ should not be used.

In general, while writing answers, students copy the style of textbook they refer to. Therefore, they skip many steps while answering if the book adopts to that style. In this book, emphasis has been laid on writing solutions in a systematic way without skipping any step.

The book caters to the syllabus of almost all Universities which offer the paper “Strength of Materials”.

With emphasis on developing concepts systematically and solving problems clearly, in this book the author hopes that the students will get a strong foundation for studying the design papers in higher classes.

S S Bhavikatti

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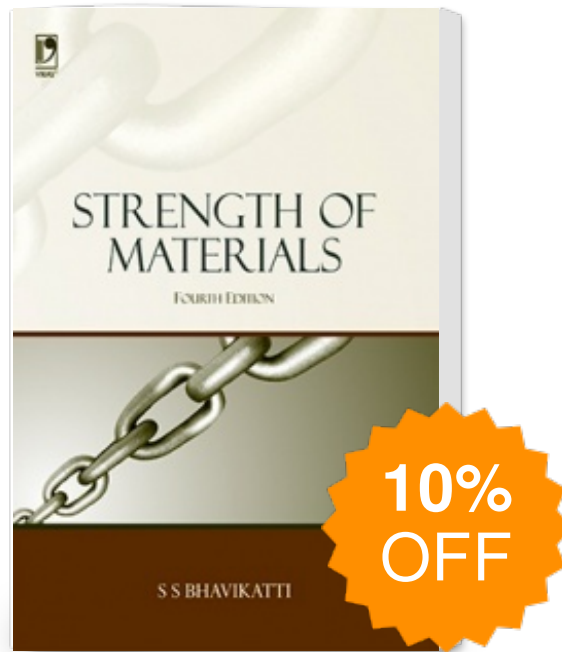
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