



## Strength of Materials (Dover Books on Physics)

*By J. P. Den Hartog*

Download now

Read Online ➔

### **Strength of Materials (Dover Books on Physics) By J. P. Den Hartog**

Among introductory texts on the strength of materials, this work is particularly distinguished. It was originally developed by Professor Den Hartog to meet the needs of engineering students at M.I.T. for a sound yet lucid first course in strength of materials. As such it has also enjoyed wide popularity in engineering schools throughout the world.

But the book was remarkable in a number of other ways, so that it has become one of the favorite refresher and reference works for engineers as well as a popular self-study text. Perhaps the chief reason for this is that in addition to all the customary elementary material on the subject (i.e., clear instructions to the fundamentals of tension, torsion, bending, compound stresses, deflection of beams, etc.) it also contains a considerable amount of more advanced material concerning methods of great practical value to working engineers which are not usually included in introductory texts. This material is presented in starred sections (which may be omitted on a first reading without interrupting the flow of the presentation) and includes a full treatment of the Mohr circle and its application to the determination of moments of inertia and strains as well as stresses; a lucid elementary presentation of the theory of the center of shear; and one of the few elementary presentations of the theory of the center of shear; and one of the few elementary discussions of the "Myosotis" method of calculating beam deflections, a method which often possesses considerable advantages over the more usual methods involving moment-area or the differential equation of bending.

Other material not usually found in elementary texts but which are frequently of great value to the practicing engineer are the discussions of the statically indeterminate truss, reinforced concrete, plastic deformations, thick-walled cylinders, thick curved bars, Maxwell's Reciprocal Theorem, and photoelasticity. In all sections, both general principles and concrete applications are given. Another feature which readers have found unusually helpful is the 85-page section of 350 problems which gives the student practice in techniques and further illustrates applications. All problems are complete with answers.

 [\*\*Download\*\* Strength of Materials \(Dover Books on Physics\) ...pdf](#)

 [\*\*Read Online\*\* Strength of Materials \(Dover Books on Physics\) ...pdf](#)

# Strength of Materials (Dover Books on Physics)

*By J. P. Den Hartog*

## **Strength of Materials (Dover Books on Physics) By J. P. Den Hartog**

Among introductory texts on the strength of materials, this work is particularly distinguished. It was originally developed by Professor Den Hartog to meet the needs of engineering students at M.I.T. for a sound yet lucid first course in strength of materials. As such it has also enjoyed wide popularity in engineering schools throughout the world.

But the book was remarkable in a number of other ways, so that it has become one of the favorite refresher and reference works for engineers as well as a popular self-study text. Perhaps the chief reason for this is that in addition to all the customary elementary material on the subject (i.e., clear instructions to the fundamentals of tension, torsion, bending, compound stresses, deflection of beams, etc.) it also contains a considerable amount of more advanced material concerning methods of great practical value to working engineers which are not usually included in introductory texts. This material is presented in starred sections (which may be omitted on a first reading without interrupting the flow of the presentation) and includes a full treatment of the Mohr circle and its application to the determination of moments of inertia and strains as well as stresses; a lucid elementary presentation of the theory of the center of shear; and one of the few elementary presentations of the theory of the center of shear; and one of the few elementary discussions of the "Myosotis" method of calculating beam deflections, a method which often possesses considerable advantages over the more usual methods involving moment-area or the differential equation of bending. Other material not usually found in elementary texts but which are frequently of great value to the practicing engineer are the discussions of the statically indeterminate truss, reinforced concrete, plastic deformations, thick-walled cylinders, thick curved bars, Maxwell's Reciprocal Theorem, and photoelasticity. In all sections, both general principles and concrete applications are given. Another feature which readers have found unusually helpful is the 85-page section of 350 problems which gives the student practice in techniques and further illustrates applications. All problems are complete with answers.

## **Strength of Materials (Dover Books on Physics) By J. P. Den Hartog Bibliography**

- Sales Rank: #117306 in Books
- Published on: 1961-06-28
- Released on: 1961-06-01
- Original language: English
- Number of items: 1
- Dimensions: 7.80" h x .70" w x 5.68" l, .82 pounds
- Binding: Paperback
- 352 pages

 [Download Strength of Materials \(Dover Books on Physics\) ...pdf](#)

 [Read Online Strength of Materials \(Dover Books on Physics\) ...pdf](#)



## **Editorial Review**

About the Author

### **J. P. Den Hartog: The Reprint Engineer**

J. P. Den Hartog (1901–1989), who taught for most of his career at MIT, was one of the founders of the Dover reprint program in engineering. As the author of several books that Dover reprinted and still has in print, and as an advisor from the 1950s until just a few years before his death in 1989, Professor Den Hartog gave invaluable advice concerning books of lasting interest and importance in his field.

Not many books in engineering have a productive shelf life spanning several decades. Among the exceptions are these four books of Professor Den Hartog, which Dover reprinted and occasionally revised in later printings from 1961 through 1987: *Mechanics*, 1961, *Strength of Materials*, 1961, *Mechanical Vibrations*, 1985, and *Advanced Strength of Materials*, 1987. Still widely read and cited by authors in these areas, Den Hartog's books are a tribute to his gift for exposition and clarity.

The J. P. Den Hartog Award, established in 1987, is presented in recognition of lifetime contributions to the teaching and practice of vibration engineering.

## **Users Review**

### **From reader reviews:**

#### **Evelina Lewis:**

The particular book Strength of Materials (Dover Books on Physics) will bring one to the new experience of reading some sort of book. The author style to spell out the idea is very unique. In the event you try to find new book to see, this book very ideal to you. The book Strength of Materials (Dover Books on Physics) is much recommended to you to read. You can also get the e-book through the official web site, so you can quickly to read the book.

#### **Samuel Stratton:**

Reading a book tends to be new life style within this era globalization. With reading through you can get a lot of information that could give you benefit in your life. Having book everyone in this world can share their idea. Ebooks can also inspire a lot of people. Lots of author can inspire their reader with their story or even their experience. Not only situation that share in the ebooks. But also they write about the ability about something that you need instance. How to get the good score toefl, or how to teach your sons or daughters, there are many kinds of book that exist now. The authors on this planet always try to improve their ability in writing, they also doing some study before they write to their book. One of them is this Strength of Materials (Dover Books on Physics).

#### **Willie McCall:**

Book is one of source of knowledge. We can add our know-how from it. Not only for students and also

native or citizen will need book to know the revise information of year to year. As we know those ebooks have many advantages. Beside we all add our knowledge, may also bring us to around the world. By book Strength of Materials (Dover Books on Physics) we can have more advantage. Don't one to be creative people? Being creative person must want to read a book. Just choose the best book that suitable with your aim. Don't be doubt to change your life with this book Strength of Materials (Dover Books on Physics). You can more inviting than now.

#### **Warren Cruz:**

Some people said that they feel bored stiff when they reading a reserve. They are directly felt the idea when they get a half portions of the book. You can choose the book Strength of Materials (Dover Books on Physics) to make your own reading is interesting. Your own skill of reading skill is developing when you just like reading. Try to choose straightforward book to make you enjoy to study it and mingle the impression about book and reading through especially. It is to be initial opinion for you to like to wide open a book and go through it. Beside that the book Strength of Materials (Dover Books on Physics) can to be a newly purchased friend when you're really feel alone and confuse in doing what must you're doing of that time.

**Download and Read Online Strength of Materials (Dover Books on Physics) By J. P. Den Hartog #BWQZR364FND**

## **Read Strength of Materials (Dover Books on Physics) By J. P. Den Hartog for online ebook**

Strength of Materials (Dover Books on Physics) By J. P. Den Hartog Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Strength of Materials (Dover Books on Physics) By J. P. Den Hartog books to read online.

## **Online Strength of Materials (Dover Books on Physics) By J. P. Den Hartog ebook PDF download**

### **Strength of Materials (Dover Books on Physics) By J. P. Den Hartog Doc**

**Strength of Materials (Dover Books on Physics) By J. P. Den Hartog Mobipocket**

**Strength of Materials (Dover Books on Physics) By J. P. Den Hartog EPub**

**BWQZR364FND: Strength of Materials (Dover Books on Physics) By J. P. Den Hartog**