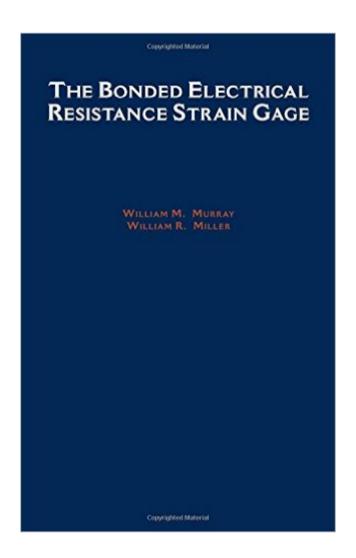
## The book was found

# The Bonded Electrical Resistance Strain Gage: An Introduction





## **Synopsis**

Experimental stress analysis is an important tool in the overall design and development of machinery and structures. While analytical techniques and computer solutions are available during the design stage, the results are still dependent on many assumptions that must be made in order to adapt them to the problems at hand. One popular method of finding structural and design weaknesses is through the use of the electrical resistance strain gage. These devices are relatively low in cost, easily applied by a reasonably skilled technician, and require little investment in instrumentation (for the general user), yet they yield a wealth of information in a relatively short time period. The information and its validity is, of course, dependent on the training and knowledge of the engineer who plans the tests and reduces the data. In addition to serving as a reference for engineers, this practical, instructive book has a high potential as a textbook for senior and first-year graduate students in engineering and related fields, such as engineering physics and geology. A solutions manual is available to instructors using the book as a text. To request a free copy of the manual, please write: Peter Gordon, Engineering Editor, Oxford University Press, 198 Madison Avenue, New York, NY 10016.

### **Book Information**

Hardcover: 424 pages

Publisher: Oxford University Press; 1 edition (April 30, 1992)

Language: English

ISBN-10: 019507209X

ISBN-13: 978-0195072099

Product Dimensions: 6.4 x 1.2 x 9.5 inches

Shipping Weight: 1.6 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars Â See all reviews (2 customer reviews)

Best Sellers Rank: #1,366,876 in Books (See Top 100 in Books) #123 in Books > Engineering &

Transportation > Engineering > Materials & Material Science > Testing #127 in Books > Science

& Math > Experiments, Instruments & Measurement > Scientific Instruments #1168 in Books >

Textbooks > Engineering > Civil Engineering

#### Customer Reviews

In my opinion this book is a thorough and carefully written introduction into the topic of stress analysis of machinery and structures. The book covers the theory of the basic concepts. The author paid attention to carefully explain the important ideas. First, the fundamental concepts of strain

gages and strain gage types are explored. Second, the fundamental concepts of stress-strain analysis are reviewed. What follows is a thorough development of the circuit equations, from the elementary circuits to the Wheatstone Bridge. Then, certain effects are addressed and data analysis is discussed. Since this book is an introduction to the topic it is not necessarily a practical handbook to perform stress analysis. But I think it provides the background to use such a handbook.

I am a Structural Engineer and I perform Non-Destructive test on equipment and other structures. This book provides a great foundation for the use and analysis tools for strain measurements. It goes beyond Hooke's Law!

#### Download to continue reading...

The Bonded Electrical Resistance Strain Gage: An Introduction Our Church Guests: Black Bonded Leather, Gilded Page-Edges (Bonded Leather Guest Books) The Strain: Book One of The Strain Trilogy Phineas Gage: A Gruesome but True Story About Brain Science A woman's book of choices: abortion, menstrual extraction, RU-486 / Rebecca Chalker and Carol Downer; illustrations by Suzann Gage Illustrated Guide to the National Electrical Code (Illustrated Guide to the National Electrical Code (Nec)) McGraw-Hill's National Electrical Code 2014 Handbook, 28th Edition (McGraw Hill's National Electrical Code Handbook) Electrical Estimating Methods (Means Electrical Estimating, 2nd ed) DEWALT Electrical Code Reference: Based on the 2011 National Electrical Code (DEWALT Series) NIV, Thinline Bible, Bonded Leather, Black, Red Letter Edition NRSV Go-Anywhere Compact Thinline Bible with the Apocrypha (Bonded Leather, Navy Bonded Porcelain) Restorations in the Anterior Dentition: A Biomimetic Approach Nelson's Classic Companion NKJV Bible (Black Bonded Leather) NIV, Cultural Backgrounds Study Bible, Bonded Leather, Black, Indexed, Red Letter Edition: Bringing to Life the Ancient World of Scripture The Andromeda Strain Beyond Horse Massage: A Breakthrough Interactive Method for Alleviating Soreness, Strain, and Tension Thunder and Ashes: The Morningstar Strain, Book 2 Plague of the Dead: The Morningstar Strain, Book 1 Survivors: The Morningstar Strain, Book 3 The Strain

**Dmca**