



The book was found

Fracture Mechanics Of Metals, Composites, Welds, And Bolted Joints: Application Of LEFM, EPFM, And FMDM Theory

FRACTURE MECHANICS OF METALS, COMPOSITES, WELDS, AND BOLTED JOINTS

Application of LEFM, EPFM,
and FMDM Theory

Bahram Farahmand, Ph.D.
Boeing Technical Fellow

Kluwer Academic Publishers



Synopsis

In the preliminary stage of designing new structural hardware to perform a given mission in a fluctuating load environment, there are several factors that the designer should consider. Trade studies for different design configurations should be performed and, based on strength and weight considerations, among others, an optimum configuration selected. The selected design must withstand the environment in question without failure. Therefore, a comprehensive structural analysis that consists of static, dynamic, fatigue, and fracture is necessary to ensure the integrity of the structure. Engineers must also consider the feasibility of fabricating the structural hardware in the material selection process. During the past few decades, fracture mechanics has become a necessary discipline for the solution of many structural problems in which the survivability of structure containing pre-existing flaws is of great interest. These problems include structural failures resulting from cracks that are inherent in the material, or defects that are introduced in the part due to improper handling or rough machining, that must be assessed through fracture mechanics concepts.

Book Information

Hardcover: 408 pages

Publisher: Springer; 2001 edition (November 30, 2000)

Language: English

ISBN-10: 0792372395

ISBN-13: 978-0792372394

Product Dimensions: 6.1 x 0.9 x 9.2 inches

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

Average Customer Review: Be the first to review this item

Best Sellers Rank: #2,563,930 in Books (See Top 100 in Books) #84 in Books > Engineering & Transportation > Engineering > Materials & Material Science > Fracture Mechanics #184 in Books > Engineering & Transportation > Engineering > Materials & Material Science > Strength of Materials #1469 in Books > Science & Math > Physics > Mechanics

[Download to continue reading...](#)

Fracture Mechanics of Metals, Composites, Welds, and Bolted Joints: Application of LEFM, EPFM, and FMDM Theory The Periodic Table of Elements - Alkali Metals, Alkaline Earth Metals and Transition Metals | Children's Chemistry Book Fracture and Fatigue Control in Structures: Applications of Fracture Mechanics (Prentice-Hall International Series in Civil Engineering and

Engineering Mechanics) Probabilistic fracture mechanics and reliability (Engineering Applications of Fracture Mechanics) Fracture Mechanics of Concrete: Applications of Fracture Mechanics to Concrete, Rock and Other Quasi-Brittle Materials Fracture and Fatigue Control in Structures: Applications of Fracture Mechanics (Astm Manual Series) Dynamic Fracture Mechanics (Cambridge Monographs on Mechanics) Fracture and Fatigue of Welded Joints and Structures (Woodhead Publishing Series in Welding and Other Joining Technologies) An Introduction to Grain Boundary Fracture in Metals (1) Model of Human Occupation: Theory and Application (Model of Human Occupation: Theory & Application) The Mechanics of Adhesives in Composite and Metal Joints Joining Composites with Adhesives: Theory and Applications Deformation and Fracture Mechanics of Engineering Materials Fracture Mechanics: Fundamentals and Applications, Fourth Edition Fracture Mechanics: Fundamentals and Applications, Third Edition By T. L. Anderson - Fracture Mechanics: Fundamentals and Applications, Third Edition (3rd Edition) (5/25/05) Fracture Mechanics: Fundamentals and Applications, Second Edition Deformation and Fracture Mechanics of Engineering Materials, 5th Edition Fracture Mechanics: Fundamentals and Applications Analytical Fracture Mechanics (Dover Civil and Mechanical Engineering)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)