Mechanics Of Structures: Variational And Computational Methods
**Synopsis**

Mechanics of Structures presents a unified approach to the variational and computational mechanics of solids and structures. The fundamentals of the theory of elasticity and variational theorems are covered, as are generalized variational theorems and applications. Matrix structural mechanics (including transfer, stiffness, and flexibility methods), finite elements, weighted residuals, finite differences, and boundary element methods are presented in a rational, unified manner. The book also includes comprehensive chapters on stability and dynamics of structural systems. Mechanics of Structures provides solid information for students and professionals in civil, mechanical, and aerospace engineering. It is an excellent text for courses offering the fundamentals of finite elements; advanced strength of materials; matrix structural analysis; computational solid mechanics; variational methods of mechanics; and rods, plates, and shells.

**Book Information**

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**Customer Reviews**

"[This book] represents clear progress in this recent custom of popularizing structural mechanics. The book includes several important and deep topics that are often neglected in other works of the same kind. It shows a great effort towards completeness. It collects all classical variational principles of continuum mechanics. [T]he merit of the book resides in its colossal attempt to recombine three branches of the theory of elasticity (foundations, structures, numerical methods), which tend to diverge." - Meccanica, Vol. 39, 2004 --This text refers to an alternate Hardcover edition.
This book have some flaws. Tear part it

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