



[Cont Mech_ 下载链接1](#)

著者:H, Dill Ellis

出版者:CRC Pr I Llc

出版时间:2006-11

装帧:HRD

isbn:9780849397790

Most books on continuum mechanics focus on elasticity and fluid mechanics. But whether student or practicing professional, modern engineers need a more thorough treatment to understand the behavior of the complex materials and systems in use today. "Continuum Mechanics: Elasticity, Plasticity, Viscoelasticity" offers a complete tour of the subject that includes not only elasticity and fluid mechanics but also covers plasticity, viscoelasticity, and the continuum model for fatigue and fracture mechanics. In addition to a broader scope, this book also supplies a review of the necessary mathematical tools and results for a self-contained treatment. The author provides finite element formulations of the equations encountered throughout the chapters and uses an approach with just the right amount of mathematical rigor without being too theoretical for practical use. Working systematically from the continuum model for the thermomechanics of materials, coverage moves through linear and nonlinear elasticity using both tensor and matrix notation, plasticity, viscoelasticity, and concludes by introducing the fundamentals of fracture mechanics and fatigue of metals. Requisite mathematical tools appear in the final chapter for easy reference. "Continuum Mechanics: Elasticity, Plasticity, Viscoelasticity" builds a strong understanding of the principles, equations, and finite element formulations needed to solve real engineering problems.

作者介绍:

目录:

[Cont Mech_ 下载链接1](#)

标签

评论

[Cont Mech_ 下载链接1](#)

书评

[Cont Mech_下载链接1](#)