1. Record Nr. UNINA9911006904303321

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Titolo	Creep and Relaxation of Nonlinear Viscoelastic Materials
Pubbl/distr/stampa	Newburyport, : Dover Publications, 2013
ISBN	9780486145174 0486145174 9781621986416 1621986411
Edizione	[1st ed.]
Descrizione fisica	1 online resource (638 p.)
Collana	Dover Civil and Mechanical Engineering
Altri autori (Persone)	DavisFrancis A
Disciplina	620.1/1233
Soggetti	Viscoelasticity - Creep Materials Stress relaxation (Physics) Chemical & Materials Engineering Engineering & Applied Sciences Materials Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Title Page; Copyright Page; PREFACE; Table of Contents; CHAPTER 1 - INTRODUCTION; 1.1 Elastic Behavior; 1.2 Plastic Behavior; 1.3 Viscoelastic Behavior; 1.4 Creep; 1.5 Recovery; 1.6 Relaxation; 1.7 Linearity; CHAPTER 2 - HISTORICAL SURVEY OF CREEP; 2.1 Creep of Metals; 2.2 Creep under Uniaxial Stress; 2.3 Creep under Combined Stresses; 2.4 Creep under Variable Stress; 2.5 Creep of Plastics; 2.6 Mathematical Representation of Creep of Materials; 2.7 Differential Form; 2.8 Integral Form; 2.9 Development of Nonlinear Constitutive Relations; CHAPTER 3 - STATE OF STRESS AND STRAIN 3.1 State of Stress3.2 Stress Tensor; 3.3 Unit Tensor; 3.4 Principal Stresses; 3.5 Mean Normal Stress Tensor and Deviatoric Stress Tensor; 3.6 Invariants of Stress; 3.7 Traces of Tensors and Products of Tensors; 3.8 Invariants in Terms of Traces; 3.9 Hamilton-Cayley Equation; 3.10 State of Strain; 3.11 Strain-Displacement Relation; 3.12 Strain Tensor; CHAPTER 4 - MECHANICS OF STRESS AND DEFORMATION ANALYSES;

4.1 Introduction; 4.2 Law of Motion; 4.3 Equations of Equilibrium; 4.4 Equilibrium of Moments; 4.5 Kinematics; 4.6 Compatibility Equations; 4.7 Constitutive Equations
4.8 Linear Elastic Solid4.9 Boundary Conditions; 4.10 The Stress Analysis Problem in a Linear Isotropic Elastic Solid; CHAPTER 5 - LINEAR VISCOELASTIC CONSTITUTIVE EQUATIONS; 5.1 Introduction; 5.2 Viscoelastic Models; 5.3 The Basic Elements: Spring and Dashpot; 5.4 Maxwell Model; 5.5 Kelvin Model; 5.6 Burgers or Four-element Model; 5.7 Generalized Maxwell and Kelvin Models; 5.8 Retardation Spectrum for tn; 5.9 Differential Form of Constitutive Equations for Simple Stress States; 5.10 Differential Form of Constitutive Equations for Multiaxial Stress States
5.11 Integral Representation of Viscoelastic Constitutive Equations5.12 Creep Compliance; 5.13 Relaxation Modulus; 5.14 Boltzmann's Superposition Principle and Integral Representation; 5.15 Relation Between Creep Compliance and Relaxation Modulus; 5.16 Generalization of the Integral Representation to Three Dimensions; 5.17 Behavior of Linear Viscoelastic Material under Oscillating Loading; 5.18 Complex Modulus and Compliance; 5.19 Dissipation; 5.20 Complex Compliance and Complex Modulus of Some Viscoelastic Models; 5.21 Maxwell Model; 5.22 Kelvin Model; 5.23 Burgers Model
5.24 Relation Between the Relaxation Modulus and the Complex Relaxation Modulus5.25 Relation Between Creep Compliance and Complex Compliance; 5.26 Complex Compliance for tn; 5.27 Temperature Effect and Time-Temperature Superposition Principle; CHAPTER 6 - LINEAR VISCOELASTIC STRESS ANALYSIS; 6.1 Introduction; 6.2 Beam Problems; 6.3 Stress Analysis of Quasi-static Viscoelastic Problems Using the Elastic-Viscoelastic Correspondence Principle; 6.4 Thick-walled Viscoelastic Tube; 6.5 Point Force Acting on the Surface of a Semi-infinite Viscoelastic Solid; 6.6 Concluding Remarks
CHAPTER 7 - MULTIPLE INTEGRAL REPRESENTATION

Sommario/riassunto

This pioneering book presents the basic theory, experimental methods, experimental results and solution of boundary value problems in a readable, useful way to designers as well as research workers and students. The mathematical background required has been kept to a minimum and supplemented by explanations where it has been necessary to introduce specialized mathematics. Also, appendices have been included to provide sufficient background in Laplace transforms and in step functions. Chapters 1 and 2 contain an introduction and historic review of creep. As an aid to the reader a background on