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Sommario/riassunto	Constitutive modelling is the mathematical description of how materials respond to various loadings. This is the most intensely researched field within solid mechanics because of its complexity and the importance of accurate constitutive models for practical engineering problems. Topics covered include: Elasticity - Plasticity theory - Creep theory - The nonlinear finite element method - Solution of nonlinear equilibrium equations - Integration of elastoplastic constitutive equations - The thermodynamic framework for constitutive modelling Thermoplasticity - Uniqueness and discontinuous bifurcations More comprehensive in scope than competitive titles, with detailed discussion of thermodynamics and numerical methods. Offers appropriate strategies for numerical solution, illustrated by discussion of specific models. Demonstrates each topic in a complete and self-contained framework, with extensive referencing