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Differential Equilibrium Equation; 3.1.2 Stiffness Equation; 3.2 Numerical Verification; 3.2.1 Symmetry of Stiffness Matrix; 3.2.2 Static Deflection; 3.2.3 Elastic Critical Load
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5.3.2 Equation of Ultimate Yielding Surface5.3.3 Approximate Expression of Ultimate Yielding Surface; 5.3.4 Effects of Torsion Moment; 5.4 Hysteretic Model; 5.4.1 Cyclic Loading and Hysteretic Behaviour; 5.4.2 Hysteretic Model of Beam Section; 5.4.3 Hysteretic Model of Column Section Subjected to Uniaxial Bending; 5.4.4 Hysteretic Model of Column Section Subjected to Biaxial Bending; 5.5 Determination of Loading and Deformation States of Beam-Column Sections; Chapter 6 Hysteretic Behaviour of Composite Beams; 6.1 Hysteretic Model of Steel and Concrete Material Under Cyclic Loading
6.1.1 Hysteretic Model of Steel Stress-Strain Relationship

Sommario/riassunto

Steel frames are used in many commercial high-rise buildings, as well as industrial structures, such as ore mines and oilrigs. Enabling construction of ever lighter and safer structures, steel frames have become an important topic for engineers. This book, split into two parts covering advanced analysis and advanced design of steel frames, guides the reader from a broad array of frame elements through to advanced design methods such as deterministic, reliability, and system reliability design approaches. This book connects reliability evaluation of structural systems to advanced analysis of