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2.3.2. structural stability of frames2.3.2.1. introduction; 2.3.2.2. elastic critical load; 2.3.2.3. 2nd order analysis; 2.3.3. imperfections; 2.3.4. worked example; 2.4. classification of cross sections; Chapter 3: Design of Members; 3.1. introduction; 3.1.1. General; 3.1.2. resistance of cross sections; 3.1.2.1. general criteria; 3.1.2.2. section properties; 3.1.3. buckling resistance of members; 3.2. tension; 3.2.1. Behaviour in tension; 3.2.2. design for tensile force; 3.2.3. worked examples; 3.3. laterally restrained beams; 3.3.1. Introduction; 3.3.2. design for bending
3.3.2.1. elastic and plastic bending moment resistance3.3.2.2. uniaxial bending; 3.3.2.3. bi-axial bending; 3.3.2.4. net area in bending; 3.3.3. design for shear; 3.3.4. design for combined shear and bending; 3.3.5. worked examples; 3.4. torsion; 3.4.1. Theoretical background; 3.4.1.1. introduction; 3.4.1.2. uniform torsion; 3.4.1.3. non-uniform torsion; 3.4.1.4. cross section resistance in torsion; 3.4.2. design for torsion; 3.4.3. worked examples; 3.5. compression; 3.5.1. Theoretical background; 3.5.1.1. introduction; 3.5.1.2. elastic critical load
3.5.1.3. effect of imperfections and plasticity3.5.2. design for compression; 3.5.3. worked examples; 3.6. laterally unrestrained beams; 3.6.1. Introduction; 3.6.2. lateral-torsional buckling; 3.6.2.1. introduction; 3.6.2.2. elastic critical moment; 3.6.2.3 effect of imperfections and plasticity; 3.6.3. lateral-torsional buckling resistance; 3.6.4. worked examples example; 3.7. beam-columns; 3.7.1. Introduction; 3.7.2. cross section resistance; 3.7.2.1. theoretical background; 3.7.2.2. design resistance; 3.7.3. buckling resistance; 3.7.3.1. theoretical background; 3.7.3.2. design resistance
3.7.4. worked examples

Sommario/riassunto

This book introduces the fundamental design concept of Eurocode 3 for current steel structures in building construction, and their practical application.Following a discussion of the basis of design, including the principles of reliability management and the limit state approach, the material standards and their use are detailed. The fundamentals of structural analysis and modeling are presented, followed by the design criteria and approaches for various types of structural members. The theoretical basis and checking procedures are closely tied to the Eurocode requirements. The following c