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moment relationships; 3.6 Torsion; 3.7 Principle of superposition; PROBLEMS; CHAPTER 4 Analysis of Pin-jointed Trusses; 4.1 Types of truss; 4.2 Assumptions in truss analysis; 4.3 Idealization of a truss; 4.4 Statical determinacy; 4.5 Resistance of a truss to shear force and bending moment; 4.6 Method of joints; 4.7 Method of sections; 4.8 Method of tension coefficients; 4.9 Graphical method of solution; 4.10 Compound trusses; 4.11 Space trusses; 4.12 A computer-based approach; PROBLEMS; CHAPTER 5 Cables
5.1 Lightweight cables carrying concentrated loads
5.2 Heavy cables; GOVERNING EQUATION FOR DEFLECTED SHAPE; CABLE UNDER ITS OWN WEIGHT; CABLE SUBJECTED TO A UNIFORM HORIZONTALLY DISTRIBUTED LOAD; SUSPENSION BRIDGES; PROBLEMS; CHAPTER 6 Arches; 6.1 The linear arch; 6.2 The three-pinned arch; SUPPORT REACTIONS - SUPPORTS ON SAME HORIZONTAL LEVEL; SUPPORT REACTIONS - SUPPORTS ON DIFFERENT LEVELS; 6.3 A three-pinned parabolic arch carrying a uniform horizontally distributed load; 6.4 Bending moment diagram for a three-pinned arch; PROBLEMS; CHAPTER 7 Stress and Strain
7.1 Direct stress in tension and compression
7.2 Shear stress in shear and torsion; 7.3 Complementary shear stress; 7.4 Direct strain; 7.5 Shear strain; 7.6 Volumetric strain due to hydrostatic pressure; 7.7 Stress-strain relationships; HOOKE'S LAW AND YOUNG'S MODULUS; SHEAR MODULUS; VOLUME OR BULK MODULUS; 7.8 Poisson effect; 7.9 Relationships between the elastic constants; 7.10 Strain energy in simple tension or compression; DEFLECTION OF A SIMPLE TRUSS; COMPOSITE STRUCTURAL MEMBERS; THERMAL EFFECTS; INITIAL STRESSES AND PRESTRESSING; 7.11 Plane stress; 7.12 Plane strain; PROBLEMS
CHAPTER 8 Properties of Engineering Materials

Sommario/riassunto

Structural analysis is the corner stone of civil engineering and all students must obtain a thorough understanding of the techniques available to analyse and predict stress in any structure. The new edition of this popular textbook provides the student with a comprehensive introduction to all types of structural and stress analysis, starting from an explanation of the basic principles of statics, normal and shear force and bending moments and torsion. Building on the success of the first edition, new material on structural dynamics and finite element method has been included. Vi
