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Literature Review; 5.3 Analysis of BEF; 5.4 Infinite Beams on Elastic Foundations; 5.5 Finite Beams on Elastic Foundations; 5.6 Plates on Elastic Foundations; 5.7 Summary; Appendix 5.A Matrix of Influence Functions (Method of Initial Parameters); Chapter 6: Numerical and Finite Difference Methods; 6.1 Introduction
6.2 Trial Solutions with Undetermined Parameters6.3 Finite Difference Method; 6.4 FDM Applications to General BEF Problems; 6.5 Boundary Conditions; 6.6 Calculation of Bending Moments; 6.7 Shear Forces; 6.8 Vertical Reactions; 6.9 Simplification for Prismatic Beams; 6.10 FDM for Rectangular Plates on Elastic Foundations; 6.11 FDM for Circular and Annular Plates on Elastic Foundations; 6.12 BEF Software Package; 6.13 Summary; Chapter 7: Finite Element Method; 7.1 General Philosophy; 7.2 Finite Element Procedure; 7.3 Formulation of Finite Element Characteristics (Stiffness Analysis)
7.4 Beam Elements

Sommario/riassunto

In Foundation Design: Theory and Practice, Professor N. S. V. Kameswara Rao covers the key aspects of the subject, including principles of testing, interpretation, analysis, soil-structure interaction modeling, construction guidelines, and applications to rational design. Rao presents a wide array of numerical methods used in analyses so that readers can employ and adapt them on their own. Throughout the book the emphasis is on practical application, training readers in actual design procedures using the latest codes and standards in use throughout the world.Presents updated des