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Nota di contenuto	Cover; Title Page; Copyright; Preface; Acknowledgments; About the Companion Website; 1.1 Introduction to Machines; 1.2 Units; 1.3 Machines and Mechanisms; 1.4 Linkage Mechanisms; 1.5 Common Types of Linkage Mechanisms; 1.6 Gears; 1.7 Cams; 1.8 Solution Methods; 1.9 Methods of Problem Solving; 1.10 Review and Summary; Problems; Further Reading; Chapter 1: Introductory Concepts; 2.1 Introduction; 2.2 Basic Concepts of Velocity and Acceleration; 2.3 Translational Motion; 2.4 Rotation About a Fixed Axis; 2.5 General Plane Motion; 2.6 Computer Methods; 2.7 Review and Summary; Problems Further Reading Chapter 2: Essential Kinematics Concepts; 3.1 Introduction; 3.2 Mobility; 3.3 Inversion; 3.4 Grashof's Criterion; 3.5 Coupler Curves; 3.6 Cognate Linkages; 3.7 Transmission Angle; 3.8 Geometrical Method of Position Analysis; 3.9 Analytical Position Analysis; 3.10 Toggle Positions; 3.11 Computer Methods for Position Analysis; 3.12 Review and Summary; Problems; Further Reading; Chapter 3: Linkage Position Analysis; 4.1 Introduction; 4.2 Finite

Displacement: Approximate Velocity Analysis; 4.3 Instantaneous Centers of Rotation; 4.4 Graphical Velocity Analysis  
4.5 Analytical Velocity Analysis Methods 4.6 Graphical Acceleration Analysis Methods; 4.7 Analytical Acceleration Analysis Methods; 4.8 Kinematic Analysis of Linkage Mechanisms with Moving Slides; 4.9 Review and Summary; Problems; Further Reading; Chapter 4: Linkage Velocity and Acceleration Analysis; 5.1 Introduction; 5.2 Synthesis; 5.3 Two-Position Graphical Dimensional Synthesis; 5.4 Three-Position Graphical Dimensional Synthesis; 5.5 Approximate Dwell Linkage Mechanisms; 5.6 Quick Return Mechanisms; 5.7 Function Generation; 5.8 Review and Summary; Problems; Further Reading  
Chapter 5: Linkage Synthesis 6.1 Introduction; 6.2 Matrix Review; 6.3 Position Equations; 6.4 Velocity Analysis; 6.5 Acceleration Equations; 6.6 Dynamic Simulation Using Autodesk Inventor; 6.7 Review and Summary; Problems; Further Reading; Chapter 6: Computational Methods for Linkage Mechanism Kinematics; 7.1 Introduction; 7.2 Involute Curves; 7.3 Terminology; 7.4 Tooth Contact; 7.5 Analysis of Spur Gears; 7.6 Analysis of Parallel Helical Gears; 7.7 Analysis of Crossed Helical Gears; 7.8 Analysis of Bevel Gears; 7.9 Analysis of Worm Gearing; 7.10 Review and Summary; Problems; Further Reading  
Chapter 7: Gear Analysis 8.1 Introduction; 8.2 Simple Gear Trains; 8.3 Compound Gear Trains; 8.4 Reverted Compound Gear Trains; 8.5 Gear Trains with Different Types of Gears; 8.6 Planetary Gear Trains; 8.7 Differentials; 8.8 Computer Methods for Gear Train Design; 8.9 Review and Summary; Problems; Further Reading; Chapter 8: Gear Trains; 9.1 Introduction; 9.2 Types of Cams and Followers; 9.3 Basic Concepts of Cam Geometry and Cam Profiles; 9.4 Common Cam Functions; 9.5 Using Cam Functions for Specific Applications; 9.6 Application of Cam Functions for Double-Dwell Mechanisms  
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