1. Record Nr. UNINA9910154809603321 Autore Wilson Charles E. Titolo Kinematics and dynamics of machinery / / Charles E. Wilson, J. Peter Sadler Pubbl/distr/stampa Harlow, Essex, England: ,: Pearson, , [2014] ©2014 **ISBN** 1-292-05601-0 Edizione [Third, Pearson new international edition.] Descrizione fisica 1 online resource (849 pages): illustrations Collana Pearson custom library Disciplina 621.811 Machinery, Kinematics of Soggetti Machinery, Dynamics of Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Cover -- Table of Contents -- Symbols -- Chapter 1. Mechanisms and Nota di contenuto Machines: Basic Concepts -- Chapter 2. Motion in Machinery --Chapter 3. Velocity Analysis of Planar and Spatial Mechanisms --Chapter 4. Acceleration Analysis of Planar and Spatial Mechanisms --Chapter 5. Design and Analysis of Cam and Follower Systems --Chapter 6. Spur Gears: Design and Analysis -- Chapter 7. Helical, Worm, and Bevel Gears: Design and Analysis -- Chapter 8. Drive Trains: Design and Analysis -- Chapter 9. Static-Force Analysis -- Chapter 10. Dynamic-Force Analysis -- Chapter 11. Synthesis -- Partial Answers to Selected Problems -- Index. The text is designed for undergraduate Mechanical Engineering courses Sommario/riassunto in Kinematics and Dynamics of Machinery. It is a tool for professors who wish to develop the ability of students to formulate and solve problems involving linkages, cams, gears, robotic manipulators and other mechanisms. There is an emphasis on understanding and utilizing the implications of computed results. Students are expected to explore questions like "What do the results mean?" and "How can you improve the design?".