1. Record Nr. UNINA9910460577403321 Autore Wong Kaufui Vincent **Titolo** Thermodynamics for engineers / / by Kaufui Vincent Wong Boca Raton, FL:,: CRC Press, an imprint of Taylor and Francis,, 2011 Pubbl/distr/stampa **ISBN** 0-429-18488-3 1-4398-9702-6 Edizione [Second edition.] Descrizione fisica 1 online resource (440 p.) Collana Mechanical Engineering Series Disciplina 621.402/1 Soggetti Thermodynamics Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Front Cover; Contents; Preface; Acknowledgments; Author; Conversion Nota di contenuto Table: Chapter 1: Concepts, Definitions, and the Laws of Thermodynamics; Chapter 2: Properties of Pure Substances; Chapter 3: Mass Conservation and the First Law of Thermodynamics: Chapter 4: Second Law of Thermodynamics and Entropy; Chapter 5: Exergy (Availability) Analysis; Chapter 6: Vapor Power Systems; Chapter 7: Thermodynamic Property Relations; Chapter 8: Principles of Energy (Heat) Transfer; Appendix A: A-Series Tables (SI); Appendix B: B-Series Tables (SI); Appendix C: C-Series Tables (SI) Appendix D: D-Series Tables (SI)Appendix E: E-Series Tables (SI); Appendix F: F-Series Tables (SI); Appendix G: AA-Series Tables (US); Appendix H: BB-Series Tables (US); Appendix I: CC-Series Tables (US); Appendix J: DD-Series Tables (US); Appendix K: EE-Series Tables (US); Appendix L: FF-Series Tables (US); Answers to Problems; Back Cover Sommario/riassunto Aspiring engineers need a text that prepares them to use thermodynamics in professional practice. Thermodynamics instructors need a concise textbook written for a one-semester undergraduate course—a text that foregoes clutter and unnecessary details but furnishes the essential facts and methods. Thermodynamics for Engineers, Second Edition continues to fill both those needs. Paying special attention to the learning process, the author has developed a

unique, practical guide to classical thermodynamics. His approach is

remarkably cohesive. For example, he develops the same example through his presentation of the first law and both forms of the second law—entropy and exergy. He also unifies his treatments of the conservation of energy, the creation of entropy, and the destruction of availability by using a balance equation for each, thus emphasizing the commonality between the laws and allowing easier comprehension and use.