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| Autore | Theodore Louis |
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| Collana | Essential Engineering Calculations Series ; ; v.9 |
| Altri autori (Persone) | RicciFrancesco<br>Van VlietTimothy |
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| Nota di contenuto | Thermodynamics for the Practicing Engineer; Contents; Preface; Part I INTRODUCTION; 1. Basic Calculations; 2. Process Variables; 3. Gas Laws; 4. Conservation Laws; 5. Stoichiometry; 6. The Second Law of Thermodynamics; Part II ENTHALPY EFFECTS; 7. Sensible Enthalpy Effects; 8. Latent Enthalpy Effects; 9. Enthalpy of Mixing Effects; 10. Chemical Reaction Enthalpy Effects; Part III EQUILIBRIUM THERMODYNAMICS; 11. Phase Equilibrium Principles; 12. Vapor-Liquid Equilibrium Calculations; 13. Chemical Reaction Equilibrium Principles; 14. Chemical Reaction Equilibrium Applications<br>Part IV OTHER TOPICS15. Economic Considerations; 16. Open-Ended |

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| | Problems; 17. Other ABET Topics; 18. Fuel Options; 19. Exergy: The Concept of "Quality Energy"; Appendix; I. Steam Tables; II. SI Units; III. Conversion Constants; IV. Selected Common Abbreviations; References; Index |
| Sommario/riassunto | This book concentrates specifically on the applications of thermodynamics, rather than the theory. It addresses both technical and pragmatic problems in the field, and covers such topics as enthalpy effects, equilibrium thermodynamics, non-ideal thermodynamics and energy conversion applications. Providing the reader with a working knowledge of the principles of thermodynamics, as well as experience in their application, it stands alone as an easy-to-follow self-teaching aid to practical applications and contains worked examples. |