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4.14 Example: Estimation of Importance of Neglected Product Species4.15 Adiabatic Flame Temperature; 4.16 Example: Adiabatic Flame Temperature for Stoichiometric H2-O2 Mixture; 4.17 Nomenclature; References; Chapter 5 - Nozzles; 5.1 Nozzle Characteristics and Simplifying Assumptions; 5.2 Flow in a Nozzle with Simple Area Change; 5.3 Mass Flow in an Isentropic Nozzle; 5.4 Nozzle Operation; 5.5 Normal Shock inside the Nozzle; 5.6 Example: Shock in Nozzle; 5.7 Two-Dimensional Considerations in Nozzle Flows; 5.8 Example: Overexpanded Nozzles; 5.9 Example: Underexpanded Nozzles
5.10 Afterburning for Increased Thrust

Sommario/riassunto

Readers of this book will be able to: utilize the fundamental principles of fluid mechanics and thermodynamics to analyze aircraft engines, understand the common gas turbine aircraft propulsion systems and be able to determine the applicability of each, perform system studies of aircraft engine systems for specified flight conditions, perform preliminary aerothermal design of turbomachinery components, and conceive, analyze, and optimize competing preliminary designs for conventional and unconventional missions. Early coverage of cycle analysis provides a systems pers

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