Principles of Engineering Thermodynamics. 8th Edition SI Version

Description: Now in its Eighth Edition, Principles of Engineering Thermodynamics continues to set the standard for teaching readers how to be effective problem solvers, emphasizing the authors' signature methodologies that have taught over a half million students worldwide. This new edition provides a student-friendly approach that emphasizes the relevance of thermodynamics principles to some of the most critical issues of today and coming decades, including a wealth of integrated coverage of energy and the environment, biomedical/bioengineering, as well as emerging technologies. Visualization skills are developed and basic principles demonstrated through a complete set of animations that have been interwoven throughout. This edition also introduces co-authors Daisie Boettner and Margaret Bailey, who bring their rich backgrounds of success in teaching and research in thermodynamics to the text.

New to This Edition
- Modern and forward-thinking real world applications.
- An increased emphasis on how thermodynamics principles are related to some of the most important issues of today and the coming decade around energy resource use and environmental engineering.
- Integrated coverage of contemporary applications for thermodynamics in the fields of biomedicine and bioengineering.
- New animation-based demonstrations reinforce the concepts in real-world situations.
- Emphasis on energy storage, an area of explosive growth, integrated throughout, including a new introductory section (sec. 2.7), feature on thermal energy storage (chap. 3), followed by a section on energy storage coverage of pumped energy by hydro and compressed storage (sec. 4.8).
- New coverage of the configuration of power plants (chap. 8).
- A wealth of new and revised homework problems, refreshing the extensive selection of problems in every chapter, organized to help students develop engineering skills in three modes: conceptual, skill building, and design/open ended problems.
- Focus on design concepts, which are interwoven through the book along with a set of newly revised and augmented questions on design and open-ended issues that are part of each set of end of chapter problems.

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