1. Record Nr. UNINA9910842491603321

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Titolo	Task Collection Technical Thermodynamics : With Complete Solutions / / by Martin Dehli
Pubbl/distr/stampa	Wiesbaden : , : Springer Fachmedien Wiesbaden : , : Imprint : Springer Vieweg, , 2024
ISBN	3-658-43399-X
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (439 pages)
Disciplina	536.7076
Soggetti	Thermodynamics Heat engineering Heat - Transmission Mass transfer Engineering Thermodynamics, Heat and Mass Transfer
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Thermodynamic Basics -- The First Law of Thermodynamics -- The Second Law of Thermodynamics -- Ideal Gases -- Real Gases and Vapors -- Thermal Machines -- Cyclic Processes -- Exergy -- Heat Transfer -- Humid Air -- Combustion -- Chemical Thermodynamics -- Multiple Choice and Question Answering Tasks -- Appendix.
Sommario/riassunto	This comprehensive collection of tasks contains questions from energy and thermal engineering practice as well as from existing exercises and examinations. The solutions are very detailed and thus comprehensible. Since the structure of the book is based on that of the textbook "Fundamentals of Technical Thermodynamics" (ISBN 978-3-658-38909-3, Springer.com), students can work through the contents in depth and check their learning success. In the present edition, extensions and additions have been made for a better understanding of the solution paths. Numerous tables and diagrams are added. The contents Introduction - Thermodynamic basic terms - The first law of thermodynamics - The second law of thermodynamics - Ideal gases - Real gases and vapors - Thermal machines - Cyclic processes - Exergy - Heat transfer - Humid air – Combustion – Chemical thermodynamics

– Multiple choice and question answering tasks - Appendix: tables and diagrams The target groups Students of mechanical engineering, energy engineering, process engineering, supply engineering and automotive engineering The author Prof. Dr.-Ing. Martin Dehli worked in the energy industry for 17 years, including as a department head in a large energy supply company in numerous fields of energy technology. Since 1991 he has been working at Esslingen University of Applied Sciences in the teaching areas of thermodynamics, energy technology, gas technology and combustion technology.