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Descrizione fisica	1 online resource (XXIV, 398 p. 311 illus.)
Disciplina	620
Soggetti	Chemical engineering Thermodynamics Heat engineering Heat - Transmission Mass transfer Fluid mechanics Mechanical engineering Industrial Chemistry/Chemical Engineering Engineering Thermodynamics, Heat and Mass Transfer Engineering Fluid Dynamics Mechanical Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
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Nota di contenuto	Basic Equations for Flowing Streams -- Flow of Incompressible Newtonian Fluids in Pipes -- Compressible Flow of Gases -- Molecular Flow -- Non-Newtonian Fluids -- Flow Through Packed Beds -- Flow in Fluidized Beds -- Solid Particles Falling Through Fluids -- The Three Mechanisms of Heat Transfer: Conduction, Convection, and Radiation -- Combination of Heat Transfer Resistances -- Unsteady-state Heating and Cooling of Solid Objects -- Introduction to Heat Exchangers -- Recuperators: Through-the-Wall, Nonstoring Exchangers -- Direct-Contact Gas-Solid Nonstoring Exchangers -- Heat Regenerators: Direct-Contact Heat Storing Exchangers Using a Batch of Solids -- Potpourri of Problems.
Sommario/riassunto	The third edition of Engineering Flow and Heat Exchange is the most practical textbook available on the design of heat transfer and

equipment. This book is an excellent introduction to real-world applications for advanced undergraduates and an indispensable reference for professionals. The book includes comprehensive chapters on the different types and classifications of fluids, how to analyze fluids, and where a particular fluid fits into a broader picture. This book includes various a wide variety of problems and solutions – some whimsical and others directly from industrial applications. Numerous practical examples of heat transfer Different from other introductory books on fluids Clearly written, simple to understand, written for students to absorb material quickly Discusses non-Newtonian as well as Newtonian fluids Covers the entire field concisely Solutions manual with worked examples and solutions provided.
