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Titolo	Case studies in fluid mechanics with sensitivities to governing variables // Dr. M. Kemal Atesmen
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ISBN	1-119-52487-3 1-119-52471-7 1-119-52486-5
Descrizione fisica	1 online resource (198 pages)
Collana	The Wiley-ASME Press series in mechanical engineering
Disciplina	620.1/06
Soggetti	Fluid mechanics Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Draining fluid from a tank -- Vertical rise of a weather balloon -- Stability of a floating cone in water -- Wind drag forces on people -- Creeping flow past a sphere -- Venturi meter -- Fluid's surface shape in a rotating cylindrical tank -- Pin floating on surface of a liquid -- Small rain drops -- Range of an aircraft -- Designing a water clock -- Water turbine under a dam -- Centrifugal separation of particles -- A simple carburetor -- Ideal gas flow in nozzles and diffusers -- Laminar flow in a pipe -- Water supply from a lake to a factory -- Air or water supply required to cool a pc board -- Convection mass transfer through air-water interface -- Heating a room by natural convection -- Laminar flow through porous material -- Condensation on the surface of a vertical plate in laminar flow regime -- A non-newtonian fluid flow in a pipe -- Bubble rise in a glass of beer.
Sommario/riassunto	"Covers a wide range of practical fluid mechanics, heat transfer, and mass transfer problems - Examines the basic laws of fluid mechanics, heat transfer and mass transfer - Each problem solution starts with simplifying engineering assumptions and identifies the governing equations and dependent and independent variables - Presents solutions to governing equations with experimental studies Market

description: Tier 3/ P&R Primary: Practicing engineers working in thermo-physical sciences. Secondary: Graduate students in mechanical engineering"--
