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Titolo	Fluid Mechanics // by Joseph H. Spurk, Nuri Aksel
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ISBN	3-030-30259-8
Edizione	[3rd ed. 2020.]
Descrizione fisica	1 online resource (XIV, 589 p. 237 illus.)
Disciplina	620.106
Soggetti	Power electronics Fluid mechanics Power Electronics, Electrical Machines and Networks Engineering Fluid Dynamics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	The Concept of the Continuum and Kinematics -- Fundamental Laws of Continuum Mechanics -- Constitutive Relations for Fluids -- Equations of Motion for Particular Fluids -- Hydrostatics. -- Laminar Unidirectional Flows -- Fundamentals of Turbulent Flow -- Hydrodynamic Lubrication -- Stream Filament Theory -- Potential Flows -- Supersonic Flow -- Boundary Layer Theory -- Creeping Flows.
Sommario/riassunto	This successful textbook emphasizes the unified nature of all disciplines of Fluid Mechanics as they emerge from the general principles of continuum mechanics. The different branches of Fluid Mechanics, always originating from simplifying assumptions, are developed according to the basic rule: from the general to the specific. The first part of the book contains a precise and coherent introduction into kinematics and the formulation of the laws of mechanics and thermodynamics. The second part consists of the methodical application of these principles to technology. This book is offered to engineers, physicists and applied mathematicians; it can be used for self-study, as well as in conjunction with a lecture course. In this third edition additional comments are made, whenever necessary, to deepen the subject. Also, connecting remarks between the chapters are made to homogenize the book. As far as possible we eliminated the obvious

typos. The index is expanded according to the text.
