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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Part A. Experiments in Fluid Mechanics -- Part B. Measurement of Primary Quantities -- Part C. Specific Experimental Approaches -- Part D. Analyses and Post-Processing of Data -- About the Authors -- Subject Index.
Sommario/riassunto	This Handbook consolidates authoritative and state-of-the-art information from the large number of disciplines used in experimental fluid mechanics into a readable desk reference book. It comprises four parts covering Experiments in Fluid Mechanics, Measurement of Primary Quantities, Specific Experimental Environments and Techniques, and Analyses and Post-Processing of Data. The Springer Handbook of Experimental Fluid Mechanics has been prepared for physicists and engineers in research and development in universities, industry and in governmental research institutions or national laboratories. Both experimental methodology and techniques are covered fundamentally and for a wide range of application fields. A generous use of citations directs the reader to additional material on

each subject. Key Topics Experiments in fluid mechanics The boundary-value problem Measurement of material properties: density, surface tension, contact angle, thermal conductivity and thermal diffusivity, diffusion, electric and magnetic parameters of liquids and gases Fundamentals of data acquisition, processing and analysis Measurement systems for temperature, density, flow velocity, vorticity, Mach number, heat flux, pressure shear stress, forces and moments Applications: non-Newtonian flows, turbulence, turbomachinery, aerodynamics, hydraulics, microfluidmechanics, flow visualization, atmospheric and oceanographic measurements, electrohydrodynamic systems, combustion diagnostics Features Contains over 900 two-color illustrations. Includes over 100 comprehensive tables summarizing experimental techniques and properties of materials. Emphasizes physical concepts over extensive mathematical derivations. Delivers a wealth of up-to-date references and further reading.