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Nota di contenuto	Basic Concepts of Fluid Flow -- Introduction to Numerical Methods -- Finite Difference Methods -- Finite Volume Methods -- Solution of Linear Equation Systems.-Methods for Unsteady Problems -- Solution of the Navier-Stokes Equations -- Complex Geometries -- Turbulent Flows -- Compressible Flows -- Efficiency, Accuracy and Grid Quality -- Special Topics.
Sommario/riassunto	In its 4th edition, this classic textbook offers an overview of the techniques used to solve problems in fluid mechanics on computers and describes in detail those most often used in practice. Included are advanced methods in computational fluid dynamics, like direct and large-eddy simulation of turbulence, multigrid methods, parallel computing, moving grids, structured, block-structured and unstructured boundary-fitted grids, free surface flows. The book also contains a great deal of practical advice for code developers and users, it is designed to be equally useful to beginners and experts. The issues of numerical accuracy, estimation and reduction of numerical errors are dealt with in detail, with many examples. All computer codes can be

accessed from the publishers server on the internet.