1. Record Nr. UNINA9911007080303321 Autore Granger Robert A **Titolo** Fluid Mechanics [[electronic resource]] Newburyport,: Dover Publications, 2012 Pubbl/distr/stampa **ISBN** 0-486-13505-5 1-62198-654-3 Descrizione fisica 1 online resource (1587 p.) Collana **Dover Books on Physics** Disciplina 620.1/06 Soggetti Fluid mechanics Civil & Environmental Engineering **Engineering & Applied Sciences** Civil Engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. DOVER BOOKS ON PHYSICS; Title Page; Dedication; Copyright Page; Nota di contenuto Table of Contents; Preface to the Dover Edition; Preface to the First Edition; Chapter 1 - Format and Fundamentals; 1.1 Introduction: A Survey of Fluid Mechanics; 1.2 Format of This Text; 1.3 Fundamental Quantities, Units; 1.4 Fundamental Idealizations; 1.5 Fundamental Coordinates: 1.6 Fundamental Kinematic Field: 1.7 Fundamental Descriptions: Lagrange versus Euler Description; References; Study Questions; Problems; Chapter 2 - Description of Fluids; 2.1 Introduction; 2.2 What Is a Fluid?; 2.3 Classification of Fluid Flows 2.4 Properties of FluidsReferences; Study Questions; Problems; Chapter 3 - A erohydrostatics; 3.1 Hydrostatics; 3.2 Uniform Acceleration; 3.3 Aerostatics; 3.4 Forces on Planar Bodies; 3.5 Hydrostatic Forces on

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## Sommario/riassunto

""The mixture of prose, mathematics, and beautiful illustrations is particularly well chosen."" - American ScientistThis monumental text by a noted authority in the field is specially designed to provide an orderly structured introduction to fluid mechanics, a field all too often seen by students as an amorphous mass of disparate equations instead of the coherent body of theory and application it should be. In addition, the book will help upgrade students' mathematical skills as they learn the fundamentals of fluid mechanics. The text presents a unified method of analysis that poses fluid mech