

1.	Record Nr.	UNIORUON00134692
	Autore	SEAUVE, Henri
	Titolo	Les relations de la France et du Siam (1680-1907) / Par le capitaine Seauve
	Pubbl/distr/stampa	122 p. ; 23 cm
	Edizione	[Paris : Charles-Lavauzelle]
	Descrizione fisica	Extrait de la Revue des Troupes coloniales
	Classificazione	TAI IV
	Soggetti	THAILANDIA - Storia
	Lingua di pubblicazione	Francese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
2.	Record Nr.	UNINA9911019935803321
	Autore	Sinaiskii E. G (Emmanuil Genrikhovich)
	Titolo	Hydromechanics : theory and fundamentals / / Emmanuil G. Sinaiski
	Pubbl/distr/stampa	Weinheim, Germany, : Wiley-VCH Verlag, 2011
	ISBN	9786612990212 9781282990210 1282990217 9783527633784 3527633782 9783527633760 3527633766 9783527633777 3527633774
	Descrizione fisica	1 online resource (520 p.)
	Disciplina	532
	Soggetti	Fluid mechanics
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia

Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	<p>Hydromechanics; Dedication; Contents; Preface; List of Symbols; 1 Introduction; 1.1 Goals and Methods of Continuum Mechanics; 1.2 The Main Hypotheses of Continuum Mechanics; 2 Kinematics of the Deformed Continuum; 2.1 Dynamics of the Continuum in the Lagrangian Perspective; 2.2 Dynamics of the Continuum in the Eulerian Perspective; 2.3 Scalar and Vector Fields and Their Characteristics; 2.4 Theory of Strains; 2.5 The Tensor of Strain Velocities; 2.6 The Distribution of Velocities in an Infinitesimal Continuum Particle; 2.7 Properties of Vector Fields. Theorems of Stokes and Gauss</p> <p>3 Dynamic Equations of Continuum Mechanics3.1 Equation of Continuity; 3.2 Equations of Motion; 3.3 Equation of Motion for the Angular Momentum; 4 Closed Systems of Mechanical Equations for the Simplest Continuum Models; 4.1 Ideal Fluid and Gas; 4.2 Linear Elastic Body and Linear Viscous Fluid; 4.3 Equations in Curvilinear Coordinates; 4.3.1 Equation of Continuity; 4.3.2 Equation of Motion; 4.3.3 Gradient of a Scalar Function; 4.3.4 Laplace Operator; 4.3.5 Complete System of Equations of Motion for a Viscous, Incompressible Medium in the Absence of Heating</p> <p>5 Foundations and Main Equations of Thermodynamics5.1 Theorem of the Living Forces; 5.2 Law of Conservation of Energy and First Law of Thermodynamics; 5.3 Thermodynamic Equilibrium, Reversible and Irreversible Processes; 5.4 Two Parameter Media and Ideal Gas; 5.5 The Second Law of Thermodynamics and the Concept of Entropy; 5.6 Thermodynamic Potentials of Two-Parameter Media; 5.7 Examples of Ideal and Viscous Media, and Their Thermodynamic Properties, Heat Conduction; 5.7.1 The Model of the Ideal, Incompressible Fluid; 5.7.2 The Model of the Ideal, Compressible Gas</p> <p>5.7.3 The Model of Viscous Fluid5.8 First and Second Law of Thermodynamics for a Finite Continuum Volume; 5.9 Generalized Thermodynamic Forces and Currents, Onsager's Reciprocity Relations;</p> <p>6 Problems Posed in Continuum Mechanics; 6.1 Initial Conditions and Boundary Conditions; 6.2 Typical Simplifications for Some Problems; 6.3 Conditions on the Discontinuity Surfaces; 6.4 Discontinuity Surfaces in Ideal Compressible Media; 6.5 Dimensions of Physical Quantities; 6.6 Parameters that Determine the Class of the Phenomenon; 6.7 Similarity and Modeling of Phenomena; 7 Hydrostatics</p> <p>7.1 Equilibrium Equations7.2 Equilibrium in the Gravitational Field; 7.3 Force and Moment that Act on a Body from the Surrounding Fluid; 7.4 Equilibrium of a Fluid Relative to a Moving System of Coordinates; 8 Stationary Continuum Movement of an Ideal Fluid; 8.1 Bernoulli's Integral; 8.2 Examples of the Application of Bernoulli's Integral; 8.3 Dynamic and Hydrostatic Pressure; 8.4 Flow of an Incompressible Fluid in a Tube of Varying Cross Section; 8.5 The Phenomenon of Cavitation; 8.6 Bernoulli's Integral for Adiabatic Flows of an Ideal Gas</p> <p>8.7 Bernoulli's Integral for the Flow of a Compressible Gas</p>
Sommario/riassunto	<p>Written by an experienced author with a strong background in applications of this field, this monograph provides a comprehensive and detailed account of the theory behind hydromechanics. He includes numerous appendices with mathematical tools, backed by extensive illustrations. The result is a must-have for all those needing to apply the methods in their research, be it in industry or academia.</p>