

1. Record Nr.	UNINA9910458428303321
Autore	Babu V.
Titolo	Fundamentals of gas dynamics / / V. Babu
Pubbl/distr/stampa	Chichester, England : , : John Wiley & Sons, Inc., , 2015 ©2015
ISBN	1-118-97338-0 1-118-97337-2
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (276 p.)
Collana	Ane/Athena Books
Disciplina	533.2
Soggetti	Gas dynamics Gas engineering Gas fields Electronic books.
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	Cover; Title Page; Copyright; Preface; Contents; Chapter 1: Introduction; 1.1 Compressibility of Fluids; 1.2 Compressible and Incompressible Flows; 1.3 Perfect Gas Equation of State; 1.3.1 Continuum Hypothesis; 1.4 Calorically Perfect Gas; Chapter 2: One Dimensional Flows - Basics; 2.1 Governing Equations; 2.2 Acoustic Wave Propagation Speed; 2.2.1 Mach Number; 2.3 Reference States; 2.3.1 Sonic State; 2.3.2 Stagnation State; 2.4 T-s and P-v Diagrams in Compressible Flows; Exercises; Chapter 3: Normal Shock Waves; 3.1 Governing Equations 3.2 Mathematical Derivation of the Normal Shock Solution 3.3 Illustration of the Normal Shock Solution on T-s and P-v diagrams; 3.4 Further Insights into the Normal Shock Wave Solution; Exercises; Chapter 4: Flow with Heat Addition- Rayleigh Flow; 4.1 Governing Equations; 4.2 Illustration on T-s and P-v diagrams; 4.3 Thermal Choking and Its Consequences; 4.4 Calculation Procedure; Exercises; Chapter 5: Flow with Friction - Fanno Flow; 5.1 Governing Equations; 5.2 Illustration on T-s diagram; 5.3 Friction Choking and Its Consequences; 5.4 Calculation Procedure; Exercises Chapter 6: Quasi One Dimensional Flows 6.1 Governing Equations; 6.1.1

Impulse Function and Thrust; 6.2 Area Velocity Relation; 6.3 Geometric Choking; 6.4 Area Mach number Relation for Choked Flow; 6.5 Mass Flow Rate for Choked Flow; 6.6 Flow Through A Convergent Nozzle; 6.7 Flow Through A Convergent Divergent Nozzle; 6.8 Interaction between Nozzle Flow and Fanno, Rayleigh Flows; Exercises; Chapter 7: Oblique Shock Waves; 7.1 Governing Equations; 7.2 --M curve; 7.3 Illustration of the Weak Oblique Shock Solution on a T-s diagram; 7.4 Detached Shocks; 7.5 Reflected Shocks
7.5.1 Reflection from a WallExercises; Chapter 8: Prandtl Meyer Flow; 8.1 Propagation of Sound Waves and the Mach Wave; 8.2 Prandtl Meyer Flow Around Concave and Convex Corners; 8.3 Prandtl Meyer Solution; 8.4 Reflection of Oblique Shock From a Constant Pressure Boundary; Exercises; Chapter 9: Flow of Steam through Nozzles; 9.1 T-s diagram of liquid water-water vapor mixture; 9.2 Isentropic expansion of steam; 9.3 Flow of steam through nozzles; 9.3.1 Choking in steam nozzles; 9.4 Supersaturation and the condensation shock; Exercises; Suggested Reading; Table A. Isentropic table for $\gamma = 1.4$
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Sommario/riassunto

Fundamentals of Gas Dynamics, Second Edition is a comprehensively updated new edition and now includes a chapter on the gas dynamics of steam. It covers the fundamental concepts and governing equations of different flows, and includes end of chapter exercises based on the practical applications. A number of useful tables on the thermodynamic properties of steam are also included.Fundamentals of Gas Dynamics, Second Edition begins with an introduction to compressible and incompressible flows before covering the fundamentals of one dimensional flows and normal shock waves. Flows with heat additi

2. Record Nr.	UNIORUON00111206
Titolo	al-Ahadit al-Qudsiyyah
Pubbl/distr/stampa	al-Qahira, : [s.n.], 1969
Descrizione fisica	2 v. ; 28 cm
Classificazione	ARA VII AC
Soggetti	Hadith
Lingua di pubblicazione	Arabo
Formato	Materiale a stampa
Livello bibliografico	Monografia