1. Record Nr. UNISA996466376203316

Autore	Bratteli Ola
Titolo	Derivations, dissipations, and group actions on C-algebras / / Ola Bratteli
Pubbl/distr/stampa	Berlin, Germany ; ; New York, New York : , : Springer-Verlag, , [1986] ©1986
ISBN	3-540-47376-9
Edizione	[1st ed. 1986.]
Descrizione fisica	1 online resource (VIII, 284 p.)
Collana	Lecture Notes in Mathematics, , 0075-8434 ; ; 1229
Disciplina	515
Soggetti	Harmonic analysis Operator theory Global analysis (Mathematics)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	with historical remarks -- General theory of derivations -- Noncommutative vectorfields -- Dissipations -- Additional remarks.

2.

Record Nr.	UNINA9911004776003321
Autore	Dixon S. L (Sydney Lawrence)
Titolo	Fluid mechanics and thermodynamics of turbomachinery / / S.L. Dixon, C.A. Hall
Pubbl/distr/stampa	Amsterdam ; ; Boston, : Butterworth-Heinemann, 2010
ISBN	1-282-54079-3 9786612540790 0-08-096259-9
Edizione	[6th ed.]
Descrizione fisica	1 online resource (481 p.)
Altri autori (Persone)	HallC. A (Cesare A.)
Disciplina	621.406
Soggetti	Turbomachines - Fluid dynamics Turbomachines - Thermodynamics
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	Front Cover; Fluid Mechanics and Thermodynamics of Turbomachinery; Copyright; Table of Contents; Preface to the Sixth Edition; Acknowledgments; List of Symbols; 2.1 Dimensional Analysis and Performance Laws; 2.2 Incompressible Fluid Analysis; 2.3 Performance Characteristics for Low Speed Machines; 2.4 Compressible Fluid Analysis; 2.5 Performance Characteristics for High Speed Machines; 2.6 Specific Speed and Specific Diameter; 2.7 Cavitation; Problems; 3.1 Introduction; 3.2 Cascade Geometry; 3.3 Cascade Flow Characteristics; 3.4 Analysis of Cascade Forces; 3.5 Compressor Cascade Performance 3.6 Turbine CascadesProblems; 4.1 Introduction; 4.2 Velocity Diagrams of the Axial-Turbine Stage; 4.3 Turbine Stage Design Parameters; 4.4 Thermodynamics of the Axial-Turbine Stage; 4.5 Repeating Stage Turbines; 4.6 Stage Losses and Efficiency; 4.7 Preliminary Axial Turbine Design; 4.8 Styles of Turbine; 4.9 Effect of Reaction on Efficiency; 4.10 Diffusion within Blade Rows; Problems; Chapter 5. Axial-Flow Compressors and Ducted Fans; 5.1 Introduction; 5.2 Mean-Line Analysis of the Compressor Stage; 5.3 Velocity Diagrams of the Compressor Stage; 5.4 Thermodynamics of the Compressor Stage 5.5 Stage Loss Relationships and Efficiency5.6 Mean-Line Calculation Through a Compressor Rotor; 5.7 Preliminary Compressor Stage Design; 5.8 Simplified Off-Design Performance; 5.9 Multi-Stage

Compressor Performance; 5.10 High Mach Number Compressor Stages; 5.11 Stall and Surge Phenomena in Compressors; 5.12 Low Speed Ducted Fans; 5.14 Blade Element Efficiency; 5.15 Lift Coefficient of a Fan Aerofoil; Problems; 6.1 Introduction; 6.2 Theory of Radial Equilibrium; 6.3 The Indirect Problem; 6.4 The Direct Problem; 6.5 Compressible Flow Through a Fixed Blade Row; 6.6 Constant Specific Mass Flow
6.7 Off-Design Performance of a Stage6.8 Free-Vortex Turbine Stage; 6.9 Actuator Disc Approach; 6.11 Application of Computational Fluid Dynamics to the Design of Axial Turbomachines; 6.12 Secondary Flows; Problems; 7.1 Introduction; 7.2 Some Definitions; 7.3 Thermodynamic Analysis of a Centrifugal Compressor; 7.4 Diffuser Performance Parameters; 7.5 Inlet Velocity Limitations at the Eye; 7.6 Optimum Design of a Pump Inlet; 7.7 Optimum Design of a Centrifugal Compressor Inlet; 7.8 Slip Factor; 7.9 Head Increase of a Centrifugal Pump; 7.10 Performance of Centrifugal Compressors
7.11 The Diffuser System7.12 Choking In a Compressor Stage; Problems; 8.1 Introduction; 8.2 Types of Inward-Flow Radial Turbine; 8.3 Thermodynamics of the 90° IFR Turbine; 8.4 Basic Design of the Rotor; 8.5 Nominal Design Point Efficiency; 8.6 Mach Number Relations; 8.7 Loss Coefficients in 90° IFR Turbines; 8.8 Optimum Efficiency Considerations; 8.9 Criterion for Minimum Number of Blades; 8.10 Design Considerations for Rotor Exit; 8.11 Significance and Application of Specific Speed; 8.12 Optimum Design Selection of 90° IFR Turbines; 8.13 Clearance and Windage Losses
8.14 Cooled 90° IFR Turbines

Sommario/riassunto

Turbomachinery is a challenging and diverse field, with applications for professionals and students in many subsets of the mechanical engineering discipline, including fluid mechanics, combustion and heat transfer, dynamics and vibrations, as well as structural mechanics and materials engineering. Originally published more than 40 years ago, Fluid Mechanics and Thermodynamics of Turbomachinery is the leading turbomachinery textbook. Used as a core text in senior undergraduate and graduate level courses this book will also appeal to professional engineers in the aerospace, glob