Ruston Turbine Guide

This text outlines the fluid and thermodynamic principles that apply to all classes of turbomachines, and the material has been presented in a unified way. The approach has been used with successive groups of final year mechanical engineering students, who have helped with the development of the ideas outlined. As with these students, the reader is assumed to have a basic understanding of fluid mechanics and thermodynamics. However, the early chapters combine the relevant material with some new concepts, and provide basic reading references. Two related objectives have defined the scope of the treatment. The first is to provide a general treatment of the common forms of turbo machine, covering basic fluid dynamics and thermodynamics of flow through passages and over surfaces, with a brief derivation of the fundamental governing equations. The second objective is to apply this material to the various machines in enough detail to allow the major design and performance factors to be appreciated. Both objectives have been met by grouping the machines by flow path rather than by application, thus allowing an appreciation of points of similarity or difference in approach. No attempt has been made to cover detailed points of design or stressing, though the cited references and the body of information from which they have been taken give this sort of information. The first four chapters introduce the fundamental relations, and the suc ceeding chapters deal with applications to the various flow paths.

Advanced Gas Turbine Cycles

Gas Turbines for Electric Power Generation

Marine Engineering/log

The North Sea Field Development Guide

Applications, Cycles and Characteristics

Vols. for 1977-19 include a section: Turbomachinery world news, called v. 1-

ASME Technical Papers

Gas World

Electromechanical Prime Movers

Chartered Mechanical Engineer

The Gas Turbine Manual

Combined cycle technology is used to generate power at one of the highest levels of efficiency of conventional power plants. It does this through primary generation from a gas turbine coupled with secondary generation from a steam turbine powered by primary exhaust heat. Generating power at high efficiency thoroughly charts the development and implementation of this technology in power plants and looks to the future of the technology, noting the advantages of the most important technical features - including gas turbines, steam generator, combined heat and power and integrated gasification combined cycle (IGCC) - with their latest applications. Reviews key developments in combined cycle technology Uses examples drawn from plants around the world Looks at how combined cycle technology can evolve to meet future energy needs

Diesel & Gas Turbine Catalog

A Handbook of Air, Land and Sea Applications

A Brief Review of Power Generation Thermodynamics

Worldwide Engine Power Products Directory and Buyers Guide

Gas Turbines

Primarily this book describes the thermodynamics of gas turbine cycles. The search for high gas turbine efficiency has produced many variations on the simple "open circuit" plant, involving the use of heat exchangers, reheating and intercooling, water and steam injection, cogeneration and combined cycle plants. These are described fully in the text. A review of recent proposals for a number of novel gas turbine cycles is also included. In the past few years work has been directed towards developing gas turbines which produce less carbon dioxide, or plants from which the CO2 can be disposed of; the implications of a carbon tax on electricity pricing are considered. In presenting this wide survey of gas turbine cycles for power generation the author calls on both his academic experience (at Cambridge and Liverpool Universities, the Gas Turbine Laboratory at MIT and Penn State University) and his industrial work (primarily with Rolls Royce, plc.) The book will be essential reading for final year and masters students in mechanical engineering, and for practising engineers.

Industrial and Marine Fuels Reference Book

Machinery Lloyd

Scientific and Technical Aerospace Reports

Hearings Before the Committee on Energy and Natural Resources, United States Senate, One Hundredth Congress, First Session on the Report of the Secretary of the Interior to the Congress Regarding Oil and Gas Leasing on the Coastal Plain of the Arctic National Wildlife Refuge, Alaska

Practical Guide to Industrial Boiler Systems

Everything you wanted to know about industrial gas turbines for electric power generation in one source with hard-to-find, hands-on technical information.

Modern Power & Engineering

Water and Water Engineering

Principles of Turbomachinery

Modern Power Systems

Kempe's Engineers Year-book

A selection of annotated references to unclassified reports and journal articles that were introduced into the NASA scientific and technical information system and announced in Scientific and technical aerospace reports (STAR) and International aerospace abstracts (IAA)

Turbomachinery International

Arctic National Wildlife Refuge, Alaska

Revue de L'ingñierie

Metalworking News

Gas Turbine Engineering

This major reference book offers the professional engineer - and technician - a wealth of useful guidance on nearly every aspect of gas turbine design, installation, operation, maintenance and repair. The author is a noted industry expert, with experience in both civilian and military gas turbines, including close work as a technical consultant for GE and Rolls Royce. • Guidance on installation, control, instrumentation/calibration, and maintenance, including lubrication, air seals, bearings, and filters • Unique compendium of manufacturer's specifications and performance criteria, including GE, and Rolls-Royce engines • Hard-to-find help on the economics and business-management aspect of turbine selection, life-cycle costs, and the future trends of gas turbine development and applications in aero, marine, power generation and beyond

Ocean Industry

Aeronautical Engineering

Combustion Engine Progress

Turbomachinery International Handbook

Fossil Energy Update

This volume covers the fundamentals of boiler systems and gathers hard-to-find facts and observations for designing, constructing and operating industrial power plants in the United States and overseas. It contains formulas and spreadsheets outlining combustion points of natural gas, oil and solid fuel beds. It also includes a boiler operator's training guide, maintenance examples, and a checklist for troubleshooting.

Paper

The Chartered Mechanical Engineer

Kothari's Economic Guide and Investors' Handbook of India

Jane's High-speed Marine Craft

Airman's Guide