

Dual Fuel Me Gi Engine Performance And The Economy

Dual-Fuel Diesel Engines offers a detailed discussion of different types of dual-fuel diesel engines, the gaseous fuels they can use, and their operational practices. Reflecting cutting-edge advancements in this rapidly expanding field, this timely book: Explains the benefits and challenges associated with internal combustion, compression ignition, gas-fueled, and premixed dual-fuel engines Explores methane and natural gas as engine fuels, as well as liquefied petroleum gases, hydrogen, and other alternative fuels Examines safety considerations, combustion of fuel gases, and the conversion of diesel engines to dual-fuel operation Addresses dual-fuel engine combustion, performance, knock, exhaust emissions, operational features, and management Describes dual-fuel engine operation on alternative fuels and the predictive modeling of dual-fuel engine performance Dual-Fuel Diesel Engines covers a variety of engine sizes and areas of application, with an emphasis on the transportation sector. The book provides a state-of-the-art reference for engineering students, practicing engineers, and scientists alike.

The content of modern dual-fuel internal combustion engines for use in marine environments. It reviews the development of modern four-stroke marine engines, gas and gas-diesel engines and low-speed two-stroke crosshead engines, describing their application areas and providing readers with a useful snapshot of their technical features, e.g. their dimensions, weights, cylinder arrangements, cylinder capabilities, rotation speeds, and exhaust gas temperatures. For each marine engine, information is provided on the manufacturer, historical background, development and technical characteristics of the manufacturer's most popular models, and detailed drawings of the engine, depicting its main design features. This book offers a unique, self-contained reference guide for engineers and professionals involved in shipbuilding. At the same time, it is intended to support students at maritime academies and university students in naval architecture/marine engineering with their design projects at both master and graduate levels, thus filling an important gap in the literature.

This book focuses on natural gas and synthetic methane as contemporary and future energy sources. Following a historical overview, physical and chemical properties, occurrence, extraction, transportation and storage of natural gas are discussed. Sustainable production of natural gas and methane as well as production and storage of synthetic methane are scrutinized next. A substantial part of the book addresses construction of vehicles for natural and synthetic methane as well as large engines for industrial and maritime use. The last chapters present some perspectives on further uses of renewable liquid fuels as well as natural gas for industrial engines and gas power plants.

Maritime Technology and Engineering 3 is a collection of papers presented at the 3rd International Conference on Maritime Technology and Engineering (MARTECH 2016, Lisbon, Portugal, 4-6 July 2016). The MARTECH Conferences series evolved from biannual national conferences in Portugal, thus reflecting the internationalization of the maritime sector. The keynote lectures and the papers, making up nearly 150 contributions, came from an international group of authors focused on different subjects in a variety of fields: Maritime Transportation, Energy Efficiency, Ships in Ports, Ship Hydrodynamics, Ship Structures, Ship Design, Ship Machinery, Shipyard Technology, ately & Reliability, Fisheries, Oil & Gas, Marine Environment, Renewable Energy and Coastal Structures. This book will appeal to academics, engineers and professionals interested or involved in these fields.

Airplane Flying Handbook (FAA-H-8083-3A)

Select Proceedings of FLAME 2018

Modern Marine Internal Combustion Engines

Machinery and Energy Systems for the Hydrogen Economy

Cost, Effectiveness, and Deployment of Fuel Economy Technologies for Light-Duty Vehicles

Fairplay

Engineering mathematics is a branch of applied mathematics where mathematical methods and techniques are implemented for solving problems related to the engineering and industry. It also represents a multidisciplinary approach where theoretical and practical aspects are deeply merged with the aim at obtaining optimized solutions. In line with that, the present Special Issue, 'Engineering Mathematics in Ship Design', is focused, in particular, with the use of this sort of engineering science in the design of ships and vessels. Articles are welcome when applied science or computation science in ship design represent the core of the discussion.

Scores of talented and dedicated people serve the forensic science community, performing vitally important work. However, they are often constrained by lack of adequate resources, sound policies, and national support. It is clear that change and advancements, both systematic and scientific, are needed in a number of forensic science disciplines to ensure the reliability of work, establish enforceable standards, and promote best practices with consistent application. Strengthening Forensic Science in the United States: A Path Forward provides a detailed plan for addressing these needs and suggests the creation of a new government entity, the National Institute of Forensic Science, to establish and enforce standards within the forensic science community. The benefits of improving and regulating the forensic science disciplines are clear: assisting law enforcement officials, enhancing homeland security, and reducing the risk of wrongful conviction and exoneraton. Strengthening Forensic Science in the United States gives a full account of what is needed to advance the forensic science disciplines, including upgrading of systems and organizational structures, better training, widespread adoption of uniform and enforceable best practices, and mandatory certification and accreditation programs. While this book provides an essential call-to-action for congress and policy makers, it also serves as a vital tool for law enforcement agencies, criminal prosecutors and attorneys, and forensic science educators.

This book presents WHO guidelines for the protection of public health from risks due to a number of chemicals commonly present in indoor air. The substances considered in this review, i.e. benzene, carbon monoxide, formaldehyde, naphthalene, nitrogen dioxide, polycyclic aromatic hydrocarbons (especially benzo[a]pyrene), radon, trichloroethylene and tetrachloroethylene, have indoor sources, are known in respect of their hazardoussness to health and are often found indoors in concentrations of health concern. The guidelines are targeted at public health professionals involved in preventing health risks of environmental exposures, as well as specialists and authorities involved in the design and use of buildings, indoor materials and products. They provide a scientific basis for legally enforceable standards.

Liquefied natural gas (LNG) is a commercially attractive phase of the commodity that facilitates the efficient handling and transportation of natural gas around the world. The LNG industry, using technologies proven over decades of development, continues to expand its markets, diversify its supply chains and increase its share of the global natural gas trade. The Handbook of Liquefied Natural Gas is a timely book as the industry is currently developing new large sources of supply and the technologies have evolved in recent years to enable of shore infrastructure to develop and handle resources in more remote and harsher environments. It is the only book of its kind, covering the many aspects of the LNG supply chain from liquefaction to regasification by addressing the LNG industries' fundamentals and markets, as well as detailed engineering and design principles. A unique, well-documented, and forward-thinking work, this reference book provides an ideal platform for scientists, engineers, and other professionals involved in the LNG industry to gain a better understanding of the key basic and advanced topics relevant to LNG projects in operation and/or in planning and development. Highlights the developments in the natural gas liquefaction industries and the challenges in meeting environmental regulations Provides guidelines in utilizing the full potential of LNG assets Offers advice on LNG plant design and operation based on proven practices and design experience Emphasizes technology selection and innovation with focus on a "fit-for-purpose design Updates code and regulation, safety, and security requirements for LNG applications

Natural Gas and Renewable Methane for Powertrains

A Handbook

A Cross-Disciplinary View

Learning MySQL and MariaDB

WHO Guidelines for Indoor Air Quality

A Technical and Historical Overview

This book presents all the publicly available questions from the PISA surveys. Some of these questions were used in the PISA 2000, 2003 and 2006 surveys and others were used in developing and trying out the assessment.

Machinery and Energy Systems for the Hydrogen Economy covers all major machinery and heat engine types, designs and requirements for the hydrogen economy, from production through storage, distribution and consumption. Topics such as hydrogen in pipeline transport, for energy storage, and as a power plant fuel are covered in detail. Hydrogen machinery applications, their selection criteria, economics, safety aspects and operational limitations in different sectors of the hydrogen economy are also discussed. Although the book covers the hydrogen economy as a whole, its primary focus is on machinery and heat engine design and implementation within various production, transport, storage and usage applications. An invaluable resource for industry, academia and government, this book provides engineers, scientists and technical leaders with the knowledge they need to design and build the infrastructure of a hydrogen economy. Updates the award-winning first edition in all aspects of sequence stratigraphy, from underlying theory to practical applications includes broad coverage of topics, including sequence stratigraphic methodology, nomenclature, and classification, the role of modeling in sequence stratigraphy, the difference between modeling and methodology, and the issue of scale and stratigraphic resolution Presents the three-dimensional nature of stratigraphic architecture and the variability of stratigraphic sequences with the tectonic setting, depositional setting, and the climatic regime illustrated with numerous high-quality diagrams, outcrop photographs and subsurface borehole and seismic data

The light-duty vehicle fleet is expected to undergo substantial technological changes over the next several decades. New powertrain designs, alternative fuels, advanced materials and significant changes to the vehicle body are being driven by increasingly stringent fuel economy and greenhouse gas emission standards. By the end of the next decade, cars and light-duty trucks will be more fuel efficient, weigh less, emit less air pollutants, have more safety features, and will be more expensive to purchase relative to current vehicles. Though the gasoline-powered spark ignition engine will continue to be the dominant powertrain configuration even through 2030, such vehicles will be equipped with advanced technologies, materials, electronics and controls, and aerodynamics.

And by 2030, the deployment of alternative methods to propel and fuel vehicles and alternative modes of transportation, including autonomous vehicles, will be well underway. What are these new technologies - how will they work, and will some technologies be more effective than others? Written to inform The United States Department of Transportation's National Highway Traffic Safety Administration (NHTSA) and Environmental Protection Agency (EPA) Corporate Average Fuel Economy (CAFE) and greenhouse gas (GHG) emission standards, this new report from the National Research Council is a technical evaluation of costs, benefits, and implementation issues of fuel reduction technologies for next-generation light-duty vehicles. Cost, Effectiveness, and Deployment of Fuel Economy Technologies for Light-Duty Vehicles estimates the cost, potential efficiency improvements, and barriers to commercial deployment of technologies that might be employed from 2020 to 2030. This report describes these promising technologies and makes recommendations for their inclusion on the list of technologies applicable for the 2017-2025 CAFE standards.

Since its first appearance in 1950, Pounder's Marine Diesel Engines has served seagoing engineers, students of the Certificates of Competency examinations and the marine engineering industry throughout the world. Each new edition has noted the changes in engine design and the influence of new technology and economic needs on the marine diesel engine. Now in its ninth edition, Pounder's retains the directness of approach and attention to essential detail that characterized its predecessors. There are new chapters on monitoring control and HIMSEN engines as well as information on developments in electronic-controlled fuel injection. It is fully updated to cover new legislation including that on emissions and provides details on enhancing overall efficiency and cutting CO2 emissions. After working as a seagoing engineer with the British India Steam Navigation Company, Doug Woodyard held editorial positions with the Institution of Mechanical Engineers and the Institute of Marine Engineers. He subsequently edited The Motor Ship journal for eight years before becoming a freelance editor specializing in shipping, shipbuilding and marine engineering. He is currently technical editor of Marine Propulsion and Auxiliary Machinery, a contributing editor to Speed at Sea, Shipping World and Shipbuilder and a technical press consultant to Rolls-Royce Commercial Marine. * Helps engineers to understand the latest changes to marine diesel engines * Careful organisation of the new edition enables readers to access the information they require *

Brand new chapters focus on monitoring control systems and HIMSEN engines. * Over 270 high quality, clearly labelled illustrations and figures to aid understanding and help engineers quickly identify what they need to know.

Cooking for Geeks

Pounder's Marine Diesel Engines

Real Science, Great Hacks, and Good Food

New Ship Construction

Shipping World & Shipbuilder

Proceedings of the 3rd International Conference on Maritime Technology and Engineering (MARTECH 2016, Lisbon, Portugal, 4-6 July 2016)

Propulsion SystemsPounder's Marine Diesel Engines and Gas TurbinesButterworth-Heinemann

This book is intended to serve as a comprehensive reference on the design and development of diesel engines. It talks about combustion and gas exchange processes with important references to emissions and fuel consumption and descriptions of the design of various parts of an engine, its coolants and lubricants, and emission control and optimization techniques. Some of the topics covered are turbocharging and supercharging, noise and vibrational control, emission and combustion control, and the future of heavy duty diesel engines. This volume will be of interest to researchers and professionals working in this area.

This exciting new book highlights and discusses new concepts for enhanced efficiency of ships and how they are operated, primarily resting on reducing the environmental footprints and operational expenses. An overview of technological and regulatory developments and drivers for the challenges described above is provided. Readers learn about sustainable energies and power for propulsion, particularly maritime electrification. The book includes shore-to-ship electrification as a sustainable energy solution for propulsion arrangements using renewable energy technologies are presented with examples on ships representing several categories of energies and power. Energy solutions that enable future digital and automated concepts for safe, secure, and cost-effective sustainable shipping are discussed, as well as the concept of autonomous ships as part of maritime electrification and all the possibilities. The development of renewable energies and the concept of autonomous ships provide glimpses for the development of future sustainable maritime transport solutions. Lessons learned and existing knowledge are important elements for successful transmission towards future concepts for safe, secure, and efficient maritime environmentally friendly and low-cost solutions to our sustainable power and energy challenges that lie ahead. The book discusses the work ahead and provides future thoughts on this issue.

div>** This book covers different aspects related to utilization of alcohol fuels in internal combustion (IC) engines with a focus on combustion, performance and emission investigations. The focal point of this book is to present engine combustion, performance and emission characteristics of IC engines fueled by alcohol blended fuels such as methanol, ethanol and butanol. The contents also highlight the importance of alcohol fuel for reducing emission levels. Possibility of alcohol fuels for marine applications has also been discussed. This book is a useful guide for researchers, academics and scientists. ^

The History of Aircraft Gas Turbine Engine Development in the United States

Report of the Presidential Commission on the Space Shuttle Challenger Accident

A Path Forward

A Tradition of Excellence

Sustainable Power, Autonomous Ships, and Cleaner Energy For Future Shipping

Pounder's Marine Diesel Engines and Gas Turbines

This book presents select proceedings of the International Conference on Future Learning Aspects of Mechanical Engineering (FLAME 2018). The book discusses interdisciplinary areas such as automobile engineering, mechatronics, applied and structural mechanics, bio-mechanics, biomedical instrumentation, ergonomics, biodynamic modeling, nuclear engineering, agriculture engineering, and farm machineries. The contents of the book will benefit both researchers and professionals.

Now in its fourth edition, this textbook remains the indispensable text to guide readers through automotive or mechanical engineering, both at university and beyond. Thoroughly updated, clear, comprehensive and well-illustrated, with a wealth of worked examples and problems, its combination of theory and applied practice aids in the understanding of internal combustion engines, from thermodynamics and combustion to fluid mechanics and materials science. This textbook is aimed at third year undergraduate or postgraduate students on mechanical or automotive engineering degrees. New to this edition - Fully updated for changes in technology in this fast-moving area - New material on direct injection spark engines, supercharging and renewable fuels - Solutions manual online for lecturers

In 1988, IARC classified diesel exhaust as probably carcinogenic to humans (Group 2A). An Advisory Group which reviews and recommends future priorities for the IARC Monographs Program had recommended diesel exhaust as a high priority for re-evaluation since 1998. There has been mounting concern about the cancer-causing potential of diesel exhaust, particularly based on findings in epidemiological studies of workers exposed in various settings. This was re-emphasized by the publication in March 2012 of the results of a large US National Cancer Institute/National Institute for Occupational Safety and Health study of occupational exposure to such emissions in underground miners, which showed an increased risk of death from lung cancer in exposed workers. The scientific evidence was reviewed thoroughly by the Working Group and overall it was concluded that there was sufficient evidence in humans for the carcinogenicity of diesel exhaust. The Working Group found that diesel exhaust is a cause of lung cancer (sufficient evidence) and also noted a positive association (limited evidence) with an increased risk of bladder cancer (Group 1). The Working Group concluded that gasoline exhaust was possibly carcinogenic to humans (Group 2B), a finding unchanged from the previous evaluation in 1989.

"With an easy, step-by-step approach, this guide shows beginners how to install, use, and maintain the world's most popular open source database. MySQL. You'll learn through real-world examples and many practical tips, including information on how to improve database performance. Database systems such as MySQL help data handling for organizations large and small handle data, providing robust and efficient access in ways not offered by spreadsheets and other types of data stores. This book is also useful for web developers and programmers interested in adding MySQL to their skill sets. Topics include: Installation and basic administration ; Introduction to databases and SQL ; Functions, subqueries, and other query enhancements ; Improving database performance ; Accessing MySQL from popular languages"--

and Gas Turbines

Proceedings of the ... Fall Technical Conference of the ASME Internal Combustion Engine Division

Dual-Fuel Diesel Engines

Effizienz und Emissionen 12. Internationale MTZ-Fachtagung

Sustainable Shipping

Engineering Mathematics in Ship Design

International shipping is currently at a crossroads. The decision of the International Maritime Organization (IMO) in April 2018 to adopt an Initial Strategy so as to achieve by 2050 a reduction of at least 50% in maritime greenhouse gas (GHG) emissions vis-à-vis 2008 levels epitomizes the last among a series of recent developments as regards sustainable shipping. It also sets the scene on what may happen in the future. Even though many experts and industry circles believe that the IMO decision is in line with the COP21 climate change agreement in Paris in 2015, others disagree, either on the ground that the target is not ambitious enough, or on the ground that no clear pathway to reach the target is currently visible. This book takes a cross-disciplinary view of the various dimensions of the maritime transportation sustainability problem. “Cross-disciplinary” means that a variety of angles are used to examine the book topics, and these mainly include the technological angle, the economics angle, the logistics angle, and the environmental angle. The book reviews models that can be used to evaluate decisions, policy alternatives and trade-offs. For sustainable shipping, a spectrum of technical, logistics-based and market based measures are being contemplated. All may have important side-effects as regards the economics and logistics of the maritime supply chain, including ports and hinterland connections. The objective to attain an acceptable environmental performance, while at the same time respecting traditional economic performance criteria so that shipping remains viable, is and is likely to be a central goal for both industry and policy-makers in the years ahead. At the same time, policy fragmentation is likely to create distortions of competition and sub-optimal solutions. This book attempts to address these issues and identify better solutions. /divSustainable Shipping: A Cross-Disciplinary View includes chapters that cover many relevant topics. These include a general view of maritime transport sustainability, green ship technologies, information and communication technologies (ICTs) for sustainable shipping, green ramp ship routing and scheduling, green liner network design and speed optimization. Market based measures, oil pollution, ship recycling, sulphur emissions, ballast water management, alternative fuels and green ports are also covered. The book concludes by discussing prospects for the future, with a focus on the IMO Initial Strategy. “This book contains a unique wealth of information on sustainable shipping. The knowledge it provides is rigorous, complete, and well supported by statistics, technical reports, and scientific references. The treatment of the various topics is not only informative but also analytical and critical.”—Gilbert Laporte, Maritime Economics & Logistics (12 May, 2020)

Behandler udviklingen af fly-gasturbinemotorer i USA

Since its first appearance in 1950, Pounder's Marine Diesel Engines has served seagoing engineers, students of the Certificates of Competency examinations and the marine engineering industry throughout the world. Each new edition has noted the changes in engine design and the influence of new technology and economic needs on the marine diesel engine. This eighth edition retains the directness of approach and attention to essential detail that characterized its predecessors. There are new chapters on monitoring control systems and governor systems, gas turbines and safety aspects of engine operation. Important developments such as the latest diesel-electric LNG carriers that will soon be in operation. After experience as a seagoing engineer with the British India Steam Navigation Company, Doug Woodyard held editorial positions with the Institution of Mechanical Engineers and the Institute of Marine Engineers. He subsequently edited The Motor Ship journal for eight years before becoming a freelance editor specializing in shipping, shipbuilding and marine engineering. He is currently technical editor of Seatrade, a contributing editor to Speed at Sea, Shipping World and Shipbuilder and a technical press consultant to Rolls-Royce Commercial Marine. * Designed to reflect the recent changes to SQA/Marine and Coastguard Agency Certificate of Competency exams. Careful organisation of the new edition enables readers to access the information they require * Brand new chapters focus on monitoring control systems and governor systems, gas turbines and safety aspects of engine operation * High quality, clearly labelled illustrations and figures

Pounder's Marine Diesel Engines and Gas Turbines, Tenth Edition, gives engineering cadets, marine engineers, ship operators and managers insights into currently available engines and auxiliary equipment and trends for the future. This new edition introduces new engine models that will be most commonly installed in ships over the next decade, as well as the latest legislation and pollutant emissions procedures. Since publication of the last edition in 2009, a number of emission control areas (ECAs) have been established by the International Maritime Organization (IMO) in which exhaust emissions are subject to even more stringent controls. In addition, there are now rules that affect new ships and their emission of CO2 measured as a product of cargo carried. Provides the latest emission control technologies, such as SCR and water scrubbers Contains complete updates of legislation and pollutant emission procedures Includes the latest emission control technologies and expands upon remote monitoring and control of engines

Marine Propulsion & Auxiliary Machinery

Introduction to Internal Combustion Engines

Marine Design XIII, Volume 1

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Heavy-Duty, On- und Off-Highway-Motoren 2017

Heading in the Right Direction with MySQL and MariaDB

Presents recipes ranging in difficulty with the science and technology-minded cook in mind, providing the science behind cooking, the physiology of taste, and the techniques of molecular gastronomy.

This is volume 1 of a 2-volume set. Marine Design XIII collects the contributions to the 13th International Marine Design Conference (IMDC 2018, Espoo, Finland, 10-14 June 2018). The aim of this IMDC series of conferences is to promote all aspects of marine design as an engineering discipline. The focus is on key design challenges and opportunities in the area of current maritime technologies and markets, with special emphasis on:
• Challenges in merging ship design and marine applications of experience-based industrial design
• Digitalisation as technological enabler for stronger link between efficient design, operations and maintenance in future
• Emerging technologies and their impact on future designs
• Cruise ship and icebreaker designs including fleet compositions to meet new market demands
To reflect on the conference focus, Marine Design XIII covers the following research topic series:
•State of art ship design principles – education, design methodology, structural design, hydrodynamic design;
•Cutting edge ship designs and operations – ship concept design, risk and safety, arctic design, autonomous ships;
•Energy efficiency and propulsions – energy efficiency, hull form design, propulsion equipment design;
•Wider marine designs and practices – navy ships, offshore and wind farms and production.
Marine Design XIII contains 2 state-of-the-art reports on design methodologies and cruise ships design, and 4 keynote papers on new directions for vessel design practices and tools; digital maritime traffic, naval ship designs, and new tanker design for arctic. Marine Design XIII will be of interest to academics and professionals in maritime technologies and marine design.

Reviews the circumstances surrounding the Challenger accident to establish the probable cause or causes of the accident. Develops recommendations for corrective or other action based upon the Commission's findings and determinations. Color photos, charts and tables.

Die inhaltlichen Schwerpunkte des Tagungsbands zur ATZlive-Veranstaltung Heavy-Duty-, On- und Off-Highway-Motoren 2017 liegen unter anderem auf Gasmotorenentwicklung, Komponenten, Ventiltrieb und Zylinderabschaltung. Die Berichte der Konferenz zeigen aktuelle und künftige Entwicklungen bei schweren Diesel- und Gasmotoren für verschiedene Anwendungen auf. Die Konferenz ist eine unverzichtbare Plattform für den internationalen Erfahrungsaustausch der Großmotoren-Experten. Die Steigerung der Effizienz bei gleichzeitiger Reduzierung der Schadstoffe und des Kraftstoffes sind weiterhin wichtige Zielsetzungen bei der Entwicklung neuer Motoren. Hierfür benötigt man einerseits neue, innovative Konzepte und Lösungen, andererseits muss aber auch das Zusammenspiel bestehender einzelner Systeme und Komponenten genau analysiert werden.

The Killing of Cynthia Sykes

Presented at ... Fall Technical Conference of the ASME Internal Combustion Engine Division

Handbuch Dieselmotoren

Ship Turbine Power Plants

Maritime Technology and Engineering III

The Federal Aviation Administration's Airplane Flying Handbook provides pilots, student pi-lots, aviation instructors, and aviation specialists with information on every topic needed to qualify for and excel in the field of aviation. Topics covered include: ground operations, cockpit management, the four fundamentals of flying, integrated flight control, slow flights, stalls, spins, takeoff, ground reference maneuvers, night operations, and much more. The Airplane Flying Handbook is a great study guide for current pilots and for potential pilots who are interested in applying for their first license. It is also the perfect gift for any aircraft or aeronautical buff.

It starts with a provocative Philadelphia detective who is assigned to investigate the murder of a rich business woman. He is a veteran of twenty years as a detective and is considered very good at his job. During the course of his investigation he interviews a person of interest who is the vice president of the victims company. He interviews her for a second time and there starts a romantic connection between the two. The antagonist in this book is a Russian operative named Jason who is tasked to acquire secrets from a high level American diplomat. The romantic interest in this novel name is Susan Conway and she is the vice president of the Sykes Empire. Cynthia Sykes is the victim in this novel.

Die 4. Auflage dieses maßgeblichen Nachschlagewerkes informiert umfassend über den aktuellen Stand und die neuesten Entwicklungen der inzwischen 120 Jahre alten Dieseltechnologie. Mehr als 90 Experten aus Industrie und Wissenschaft zeigen zentrale sowie zukunftsweisende Innovationen zur Verbesserung der CO2- und Schadstoffemissionen, des Betriebsverhaltens, der Kosten, der Zuverlässigkeit und Robustheit des Dieselantriebs. Aktuelle Entwicklungen berücksichtigt das Werk mit Erweiterungen um Inhalte zu alternativen Kraftstoffen, insbesondere zu Gasanwendungen, sowie zur Einbindung des Dieselmotors in hybride Antriebskonzepte für Pkw und Nutzfahrzeuge. Nach wie vor steht im Fokus der Entwicklungsanstrengungen, den Dieselmotor hinsichtlich seiner NOx- und Partikelemissionen zu verbessern, um auch künftigen gesetzlichen Grenzwerten zu entsprechen. Das Buch befasst sich mit der Theorie, der Konstruktion und der Anwendung des Dieselmotors für alle möglichen Einsatzarten, vom Antrieb für Pkw über SUVs und Pick-ups bis hin zu den schwersten Nutzfahrzeugen und Lokomotiven, für stationäre und mobile Arbeitsmaschinen sowie für nahezu alle Schiffsgrößen.

Considers legislation to establish a subsidy program for Great Lakes bulk cargo shippers to promote the construction of new ore transport vessels.

Proceedings of the 13th International Marine Design Conference (IMDC 2018), June 10-14, 2018, Helsinki, Finland

Design and Development of Heavy Duty Diesel Engines

Propulsion Systems

Fundamentals of Thermodynamical Cycles

PISA Take the Test Sample Questions from OECD's PISA Assessments

Future Strategies for a Climate-Neutral Mobility