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CONTROLLING NO_x EMISSIONS; WATER-BASED NO_x REDUCTION TECHNIQUES; SELECTIVE CATALYTIC REDUCTION; PARTICULATES, SOOT AND SMOKE; SUMMARY OF OPTIONS

Chapter 4 Fuels and Lubes: Chemistry and Treatment REFINERY PROCESSES; PROBLEMS WITH HEAVY FUELS; PROPERTIES OF FUEL OIL; FUEL OIL TREATMENT; GOOD BUNKERING PRACTICE; LUBRICATING OILS; CYLINDER LUBRICANT FEED RATES; LUBRICANT TESTING; MICROBIAL CONTAMINATION OF FUELS AND LUBRICANTS; LUBE OIL CONTAMINATION; Chapter 5 Performance; MAXIMUM RATING; EXHAUST TEMPERATURES; DERATING; MEAN EFFECTIVE PRESSURES; PROPELLER SLIP; PROPELLER LAW; FUEL COEFFICIENT; ADMIRALTY CONSTANT; APPARENT PROPELLER SLIP; PROPELLER PERFORMANCE; POWER BUILD-UP; TRAILING AND LOCKING OF PROPELLER; ASTERN RUNNING Chapter 6 Engine and Plant Selection DIESEL-MECHANICAL DRIVES; DIESEL-ELECTRIC DRIVE; Chapter 7 Pressure Charging; FOUR-STROKE ENGINES; TWO-STROKE ENGINES; CHARGE AIR COOLING; SCAVENGING; MATCHING OF TURBO-BLOWERS; TURBOCHARGER SURGING; TURBOCHARGING SYSTEMS; TURBOCHARGER CONSTRUCTION; TURBOCHARGER PERFORMANCE AND DEVELOPMENTS; TURBOCHARGING AND EMISSIONS/MILLER CYCLE; TWO-STAGE TURBOCHARGING; TURBOCHARGER CLEANING; BURST TESTS; TURBOCHARGER DESIGNERS; TPS SERIES; TPL SERIES; TPL-C SERIES; A100 SERIES; NAPIER TURBOCHARGERS; MAN DIESEL; MITSUBISHI HEAVY INDUSTRIES; KBB TURBOCHARGERS

Chapter 8 Fuel Injection INJECTION AND COMBUSTION; INJECTOR; FUEL LINE; PUMP; DEVELOPMENTS AND TRENDS; UNIT INJECTOR VERSUS PUMP/PIPE/INJECTOR; ELECTRONIC FUEL INJECTION; COMMON RAIL INJECTION SYSTEMS; MTU COMMON RAIL SYSTEM FOR HIGH-SPEED ENGINES; WARTSILA CR SYSTEM FOR MEDIUM-SPEED ENGINES; Chapter 9 Low-Speed Engines-Introduction; INTELLIGENT ENGINES; Chapter 10 MAN B&W Low-Speed Engines; MC ENGINE DESIGN FEATURES; PROGRAMME EXPANSION; LARGE BORE ENGINES; WATER MIST CATCHER; MC DESIGN REFINEMENTS; POST-1997 SERVICE EXPERIENCE; OPERATING ADVICE; ELECTRONICALLY CONTROLLED ME ENGINES; ME ENGINES IN SERVICE

Sommario/riassunto

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 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 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.
