1. Record Nr. UNISALENTO991003238259707536

Autore	Barrass, C. B.
Titolo	Ship design and performance for masters and mates [e-book] / C.B. Barrass
Pubbl/distr/stampa	Oxford : Elsevier Butterworth-Heinemann, 2004
ISBN	9780750660006 0750660007
Descrizione fisica	xii, 252 p. : ill. ; 24 cm
Disciplina	623.81
Soggetti	Naval architecture Shipbuilding Electronic books.
Lingua di pubblicazione	Inglese
Formato	Risorsa elettronica
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references (p. [241]-242) and index
Nota di contenuto	Preface and introduction; Examples of modern ship-types and their general particulars; Ship design; Preliminary estimates; Design coefficients; Types of ship resistance; Types of ship speed; Types of power on ships; Power coefficients; Designing a ship's propeller; Ship performance; Ship trials; Details of maximum ship squats; The phenomena of interaction of ships in confined waters; Ship vibration; Mechanisms for improving ship handling; Damping devices; Improvements in power output; Reference centre; Formulae; Exam preparations; Index Pt. 1. Ship design. Preliminary estimates for new ships: main dimensions -- Preliminary estimates for group weights for a new ship -- Preliminary capacities for a new ship -- Approximate hydrostatic particulars -- Types of ship resistance -- Types of ship speed -- Types of power in ships -- Power coefficients on ships -- Preliminary design methods for a ship's propeller and rudder -- Nomenclature for ship design and performance -- Pt. 2. Ship performance. Modern merchant ships -- Ships of this millennium -- Ship trials: a typical 'diary of events' -- Ship trials: speed performance on the measured mile -- Ship trials: endurance and fuel consumption -- Ship trials: manoeuvring trials and stopping characteristics -- Ship trials: residual trials -- Ship squat in open water and in confined channels -- Reduced ship speed

and decreased propeller revolutions in shallow waters -- The phenomena of interaction of ships in confined waters -- Ship vibration -- Performance enhancement in ship-handling mechanisms -- Improvements in propeller performance -- Useful design and performance formulae -- Revision one-liners for student's examination preparation -- How to pass examinations in maritime studies

Sommario/riassunto

Students, professional trainees and marine engineers studying for their certificates of competency, as well as more experienced marine engineers on shore or at sea, will all welcome this quick to use, comprehensive reference that brings the key information needed to understand ship design and performance to their fingertips in one handy volume. The book does not assume detailed theoretical knowledge, but rather builds up the reader's understanding of how the elements of ship design influence and impact on its performance, and how the engineer, crew and operators can maximise the performance of their vessel in operation. For non-specialist vocational-level students (British NVQs, Certificates of Competency, plus other international Maritime Licences, such as the MMD in the US), Basic Elements of Ship Design and Performance is an accessible, single source of guidance. It presents key facts, backed up throughout by relevant theory, illustrations and photographs, and also includes valuable with key engineering data, facts and formulas, plus revision one-liners. Written by an experienced marine engineering consultant, author and lecturer, this essential introduction and reference for students and those newly at sea will appeal to anyone involved with ship design, marine engineering, naval architecture, as well as those engaged in the day-to-day operation of ships in port. * Accessible information on understanding and improving ship performance at your fingertips * Ideal for marine engineering students and those studying for certificates of competency * Covers all key aspects of ship design and performance, with exam revision one-liners