Record Nr. UNINA9910813071803321 Autore Molland Anthony F Titolo Ship resistance and propulsion: practical estimation of ship propulsive power / / Anthony F. Molland, Stephen R. Turnock, Dominic A. Hudson Cambridge;; New York,: Cambridge University Press, 2011 Pubbl/distr/stampa **ISBN** 1-139-08873-4 1-107-21650-8 1-68015-678-0 1-139-09020-8 1-280-77596-3 1-139-09251-0 9786613686350 1-139-09111-5 1-139-09302-9 1-139-09200-6 0-511-97411-6 Edizione [1st ed.] Descrizione fisica 1 online resource (xxvi, 537 pages) : digital, PDF file(s) Classificazione TEC009070 Altri autori (Persone) TurnockStephen R HudsonDominic A Disciplina 623.8/12 Soggetti Ship resistance Ship resistance - Mathematical models Ship propulsion Ship propulsion - Mathematical models Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Title from publisher's bibliographic system (viewed on 05 Oct 2015). Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Machine generated contents note: 1. Introduction; 2. Propulsive power; 3. Components of ship resistance; 4. Model-ship extrapolation; 5. Model-ship correlation; 6. Restricted water depth and breadth; 7 Measurements of resistance components; 8. Wake and thrust deduction; 9. Numerical estimation of ship resistance; 10. Resistance design data; 11. Propuslor types; 12. Propeller characteristics; 13. Powering process: 14. Hull from design: 15. Numerical methods for propeller analysis; 16. Propulsor design data; 17. Applications.

Sommario/riassunto

Ship Resistance and Propulsion provides a comprehensive approach to evaluating ship resistance and propulsion. Informed by applied research, including experimental and CFD techniques, this book provides guidance for the practical estimation of ship propulsive power for a range of ship types. Published standard series data for hull resistance and propeller performance enables practitioners to make ship power predictions based on material and data contained within the book. Fully worked examples illustrate applications of the data and powering methodologies; these include cargo and container ships, tankers and bulk carriers, ferries, warships, patrol craft, work boats, planing craft and yachts. The book is aimed at a broad readership including practising naval architects and marine engineers, seagoing officers, small craft designers, undergraduate and postgraduate students. Also useful for those involved in transportation, transport efficiency and ecologistics who need to carry out reliable estimates of ship power requirements.