Record Nr. UNINA9910299759303321 Autore Papanikolaou Apostolos Titolo Ship Design: Methodologies of Preliminary Design / / by Apostolos Papanikolaou Dordrecht:,: Springer Netherlands:,: Imprint: Springer,, 2014 Pubbl/distr/stampa **ISBN** 94-017-8751-4 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (635 p.) Disciplina 388 620 620.0042 629 Soggetti Engineering design **Transportation Engines** Machinery **Engineering Design Engine Technology** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references and index. Nota di bibliografia Nota di contenuto 1 General on Ship Design -- 2 Selection of Main Dimensions and Calculation of Basic Ship Design Values -- 3 Ship's Hull Form -- 4 Naval Architectural Drawings and Plans -- 5 Machinery Installation, Propulsion and Steering Devices -- 6 Estimation of Building Cost --Appendix A: Diagrams of Regression Analysis of Basic Design Values for Merchant Ships -- Appendix B: Systematic Hull Form - Model Series -- Appendix C: Determination of Ship's Displacement with the Relational Method of Normand -- Appendix D: Historical Evolution of Shipbuilding -- Appendix E: Subdivision and Damage Stability of Ships - Historical Developments and the Way Ahead. Sommario/riassunto This book deals with ship design and in particular with

methodologies of the preliminary design of ships. The book is

complemented by a basic bibliography and five appendices with useful updated charts for the selection of the main dimensions and other basic characteristics of different types of ships (Appendix A), the

determination of hull form from the data of systematic hull form series (Appendix B), the detailed description of the relational method for the preliminary estimation of ship weights (Appendix C), a brief review of the historical evolution of shipbuilding science and technology from the prehistoric era to date (Appendix D) and finally a historical review of regulatory developments of ship's damage stability to date (Appendix E). The book can be used as textbook for ship design courses or as additional reading for university or college students of naval architecture courses and related disciplines; it may also serve as a reference book for naval architects, practicing engineers of related disciplines and ship officers, who like to enter the ship design field systematically or to use practical methodologies for the estimation of ship's main dimensions and of other ship main properties and elements of ship design.