

SNAME Book Review:

"Ship Design and Construction"

SNAME publishes many good textbooks on naval architecture. All the more we can welcome the completely revised new edition of "Ship Design and Construction" published by the Society of Naval Architects and Marine Engineers.

In 1980, the "Taggart" (editor) third edition became quickly a standard reference for naval architects. Now, with three years delay, a new edition is available, compiled and edited by Professor Thomas Lamb of the University of Michigan. The purpose of the book, as summed up by Lamb in his introduction chapter, is to assist ship designers and ship-builders make better design decisions by providing the required knowledge in one relatively easily accessible source, provide a book that can be used by naval architecture students to learn about ship design and construction, and serve as a reference when they enter the marine industry.

Lamb succeeded marvelously in this endeavor. Differing from the earlier editions, this time a pool of international experts was compiled to write the book. Although naturally the majority of authors are from the U.S., contributions by internationally renowned authors from Australia, Belgium, Canada, Denmark, Finland, France, Germany, Great Britain, Italy, Japan, Korea, and Norway add competence and experience in a wide range of aspects.

the industry (its interaction between customers and suppliers), design methodology and relevant elements and tools. Ship hydrodynamics are virtually excluded which can be accepted in view of existing textbooks dedicated to ship hydrodynamics and its interaction with design. Chapter 14 covers the integration of design and production, preparing the ground for the subsequent chapters 17 to 26, which cover various aspects of ship structural design and construction. Chapters 27 to 55, i.e. half of the book, are dedicated to the design of individual ship types, from tankers and bulk carriers to fishing vessels and dredgers. The descriptions gives historical development and typical general arrangement plans, sometimes even lines, of the various ship types, but falls short of supplying individual design estimation formula, perhaps in view of the increasingly advocated and described first-principle design. Also Chapter 10, Parametric Ship Design provides such formulae, which can be adapted to the different ship types.

In sum, we have here a compact textbook closing internationally a gap for modern ship design and construction of commercial and naval ships. Literature references (again usually reflecting modern state of the art) in the individual chapters allow dedicated further studies of the individual aspects covered.

Thomas Lamb and the chapter authors, are to be congratulated for a job well done. The book should be on every naval architect's

Ship Design and Construction Contents

- Chapter 1 : Introduction (Thomas Lamb)
- Chapter 2 : The Marine Environment (Guy Meadows, Lorelle Meadows)
- Chapter 3 : The Marine Industry (Tim Colton)
- Chapter 4 : The Ship Acquisition Process (Charles Cushing)
- Chapter 5 : The Ship Design Process (Peter Gale)
- Chapter 6 : Engineering Economics (Harry Benford)
- Chapter 7 : Mission and Owner's Requirements (Mark Buetzow, Philipp Koenig)
- Chapter 8 : Classification and Regulatory Requirements (Glenn Ashe, Jeffrey Lantz)
- Chapter 9 : Contracts and Specifications (Kenneth Fisher)
- Chapter 10 : Cost Estimating (Laurent Deschamps, John Trumbule)
- Chapter 11 : Parametric Design (Michael Parsons)
- Chapter 12 : Mass Properties (William Boze)
- Chapter 13 : Computer-based Tools (Jonathan Ross)
- Chapter 14 : Design/Production Integration (Thomas Lamb)
- Chapter 15 : Human Factors in Ship Design (Scott Calhoun, Sam Stevens)
- Chapter 16 : Safety (Robert Markle et al.)
- Chapter 17 : Structural Arrangement and Component Design (Bart Boon)
- Chapter 18 : Analysis and Design of Ship Structure (Philippe Rigo, Enrico Rizzuto)
- Chapter 19 : Reliability-based Structural Design (Bilal Ayyub, Ibrahim Assakkaf)
- Chapter 20 : Hull Materials and Welding (Volker Bertram, Thomas Lamb)
- Chapter 21 : Composites (Albert Horsmon)
- Chapter 22 : General Arrangement Design, Hull Outfit and Equipment (Hans Hofmann, Thomas Lamb)
- Chapter 23 : Ship Preservation (Miles Kikuta, Michael Shimko)
- Chapter 24 : Machinery Considerations (Alan Rowen)
- Chapter 25 : The Shipbuilding Process (Mark Spicknall)
- Chapter 26 : Shipyard Layout and Equipment (Thomas Lamb)
- Chapter 27 : Multipurpose Cargo Ships (Horst Linde)
- Chapter 28 : Reefer ships (Allan Friis)
- Chapter 29 : Oil tankers (Keith Michel, Michael Osborne)
- Chapter 30 : Floating Production Storage and Offloading (FPSO) vessels (Peter Ridley)
- Chapter 31 : Chemical Tankers ()
- Chapter 32 : Liquefied Gas Carriers (Hirohilo Emi, Takashi Fujitani, Akinori Abe)
- Chapter 33 : Bulk Carriers (Hang Sub Urm, Jong Gye Shin)
- Chapter 34 : Car Carriers (Y. Torii, H. Hohga, K. Nishimura, M. Uetani)
- Chapter 35 : Roll On/Roll Off Ships (Markuu Kaverna)
- Chapter 36 : Container Ships (Peter Zink, Edward Van Rynbach)
- Chapter 37 : Passenger Ships (Kai Levander)
- Chapter 38 : Ferries (Jennifer Knox)
- Chapter 39 : Inland and Lake Vessels (Joseph Fisher, Edward Shearer)
- Chapter 40 : Ice-capable Ships (Brian Veitch et al.)
- Chapter 41 : Fishing Vessels (Jakob Pinkster)
- Chapter 42 : Offshore Support Vessels (Richard White)
- Chapter 43 : Offshore Drilling and Production Vessels (Paul Geiger)
- Chapter 44 : Advanced Marine Surface Craft (Philippe Goubault, John Allison) HIPER
- Chapter 45 : Catamarans (Tony Armstrong) HIPER
- Chapter 46 : Multi-hulled Vessels (David Andrews) HIPER
- Chapter 47 : Wing in Ground (WIG) Craft (Karsten Fach, et al.)
- Chapter 48 : Tugs and Towboats (Robert Allan)
- Chapter 49 : Small Workboats (Robert Allan, Ken Harford)
- Chapter 50 : Dredgers (William J. Vlasblom, Jakob Pinkster)
- Chapter 51 : Heavy-lift Ships (Frank van Hoon)
- Chapter 52 : Forest Product Carriers (Thomas Lamb)
- Chapter 53 : Oceanographic Research Ships (John C. Daidola)
- Chapter 54 : Naval Surface Ships (Barry Tibbitts)
- Chapter 55 : Naval Submarines (Paul Sullivan, Barry Tibbitts)

"Ship Design and Construction"
(4th Edition, Ed. Thomas Lamb)
Volker Bertram

The list price for the two-volume set is \$260, and the members' price, \$200, plus shipping. The student price is \$150, plus shipping.

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http://www.sname.org/publications_sale.htm or contact **Rich Mouk** at rmouk@sname.org.