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Titolo	Basic Naval Architecture : Ship Stability / / by Philip A. Wilson
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ISBN	3-319-72805-9
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XXII, 203 p. 134 illus.)
Disciplina	623.8171
Soggetti	Mechanics Mechanics, Applied Engineering design Ocean engineering Fluid mechanics Solid Mechanics Engineering Design Offshore Engineering Engineering Fluid Dynamics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction to Naval Architecture -- Basic Properties -- Equilibrium and Stability Concepts for Floating Bodies -- Calculating Volumes and Centres of Buoyancy -- Further Comments on Displacement Volume and Centre of Buoyancy -- Numerical Integration Formulæ -- Problems Involving Changes of Draught and Trim -- Transverse Initial Stability Topics -- Wall Sided Formula and Applications -- Large Angle Stability -- Flooding Calculations -- End On Launching and Launching Calculations.
Sommario/riassunto	This textbook provides readers with an understanding of the basics of ship stability as it has been enacted in international law. The assessment of ship stability has evolved considerably since the first SOLAS convention after the sinking of the RMS Titanic, and this book enables readers to familiarise themselves with the most up-to-date modern day methodology, as well as looking ahead to the effects on

ship design over the next fifty years. The author not only explains the methodology of probabilistic ship damage as required by the International Maritime Organisation (IMO), but also details the new requirements to assess certain sizes and classes of ships to the seven second-generation ship stability requirements. Many textbooks that are currently used by undergraduates focus on the geometric-centric deterministic approach to the assessment of ship stability, whereas this book also includes material on the classes of ships that are now required to have probabilistic ship damage assessment, as has only recently been agreed by the IMO. Basic Naval Architecture: Ship Stability contains up-to-date information, making it ideal for university students studying ocean or marine engineering, as well as being of interest to students on naval architecture and ship science courses. Highly illustrated and including chapter studies for ease of learning, the book is an ideal one-volume textbook for students.
