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Nota di contenuto	Front Cover; Ship Construction; Copyright; Contents; Preface; Acknowledgments; Part One - Introduction to Shipbuilding; 1 - Basic design of the ship; Preparation of the design; Information provided by design; Purchase of a new vessel; Ship contracts; Further reading; Some useful websites; 2 - Ship dimensions, form, size, or category; Oil tankers; Bulk carriers; Container ships; IMO oil tanker categories; Panama canal limits; Suez canal limits; Some useful websites; 3 - Development of ship types; Dry cargo ships; Bulk carriers; Car carriers; Oil tankers; Passenger ships; Further reading Part Two - Materials and Strength of Ships 4 - Classification societies; Rules and regulations; Lloyd's register; Classification of ships operating in ice; Structural design programs; Periodical surveys; Hull planned maintenance scheme; Damage repairs; Further reading; Some useful websites; 5 - Steels; Manufacture of steels; Heat treatment of steels; Steel sections; Shipbuilding steels; High tensile steels; Corrosion-resistant steels; Steel sandwich panels; Steel castings; Steel forgings; Further reading; Some useful websites; 6 - Other shipbuilding materials; Aluminum alloy Production of aluminum Aluminum alloy sandwich panels; Fire

protection; Fiber-reinforced composites (FRCs); Some useful websites; 7 - Testing of materials; Classification society tests for hull materials; 8 - Stresses to which a ship is subject; Vertical shear and longitudinal bending in still water; Bending moments in a seaway; Longitudinal shear forces; Bending stresses; Transverse stresses; Local stresses; Brittle fracture; Fatigue failures; Buckling; Monitoring ship stresses at sea; Further reading; Some useful websites; Part Three - Welding and Cutting

9 - Welding and cutting processes used in shipbuilding Gas welding; Electric arc welding; Other welding processes; Cutting processes; Further reading; Some useful websites; 10 - Welding practice and testing welds; Welding practice; Welding automation; Welding distortion; Welding sequences; Testing welds; Nondestructive testing; Classification society weld tests; Further reading; Some useful websites; Part Four - Shipyard Practice; 11 - Shipyard layout; Further reading; Some useful websites; 12 - Design information for production; Ship drawing office; Loftwork following drawing office Computer-aided design (CAD)/computer-aided manufacturing (CAM) Further reading; Some useful websites; 13 - Plate and section preparation and machining; Plate and section preparation; Plate and section part preparation; Frame bending; Further reading; Some useful websites; 14 - Assembly of ship structure; Assembly; Subassemblies; Unit assembly; Block assembly; Outfit modules; Unit erection; Joining ship sections afloat; Further reading; Some useful websites; 15 - Launching; End launches; Side launches; Building docks; Ship lifts; Floating docks; Marine railways; Further reading Some useful websites

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#### Sommario/riassunto

Ship Construction is the market leading text for the professional shipbuilding and naval architecture sector. Acting as both a reference on the latest developments in construction techniques, safety and shipyard practice for professionals and a comprehensive text for students of naval architecture, the book covers the complete construction process, from ship specification to completed vessel. Covering each core operation and providing detailed understanding of the key ship construction steps and techniques, this new edition includes the latest developments in computer-aided design and

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