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Hull Materials; Chapter 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 Web Sites; Part 3 Welding and Cutting; Chapter 9 Welding and Cutting Processes used in Shipbuilding; Gas Welding Electric Arc Welding Other Welding Processes; Cutting Processes; Further Reading; Some Useful Web Sites; Chapter 10 Welding Practice and Testing Welds; Welding Practice; Welding Automation; Welding Sequences; Testing Welds; Non-destructive Testing; Classification Society Weld Tests; Further Reading; Some Useful Web Sites; Part 4 Shipyard Practice; Chapter 11 Shipyard Layout; Further Reading; Some Useful Web Sites; Chapter 12 Ship Drawing Office, Loftwork and CAD/CAM; Ship Drawing Office; Loftwork Following Drawing Office; Computer Aided Design (CAD)/Computer Aided Manufacturing (CAM) Further Reading Some Useful Web Sites; Chapter 13 Plate and Section Preparation and Machining; Plate and Section Preparation; Plate and Section Machining; Frame Bending; Further Reading; Some Useful Web Sites; Chapter 14 Prefabrication; Sub-assemblies; Unit Fabrication; Outfit Modules; Unit Erection; Joining Ship Sections Afloat; Further Reading; Chapter 15 Launching; End Launches; Side Launches; Building Docks; Ship Lifts; Further Reading; Part 5 Ship Structure; Chapter 16 Bottom Structure; Keels; Single Bottom Structure; Double Bottom Structure; Machinery Seats; Chapter 17 Shell Plating and Framing

Sommario/riassunto

Ship Construction is a comprehensive text for students of naval architecture, ship building and construction, and for professional Naval Architects and Marine Engineers as a refresher on the latest developments in ship types, safety and shipyard practices. Beginning with an introduction to ship building and concluding with the finished product, the book enables the reader to follow the construction of a ship from start to finish. Eyres explores in depth, chapter by chapter, the development of ship types, materials and strengths of ships, welding and cutting, shipyard practice, ship structure
