

Guide for Building and Classing

International Naval Ships

Notices and General Information



July 2023



GUIDE FOR BUILDING AND CLASSING

**INTERNATIONAL NAVAL SHIPS
JULY 2023**

**NOTICES AND
GENERAL INFORMATION**

**American Bureau of Shipping
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Notices and General Information

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Notices and General Information

Introduction

1. The year 2023 edition of the *Guide for Building and Classing International Naval Ships* consists of the Parts shown in Table 1. Content has been added as necessary to extend its applicability to military vessels and other Government owned vessels in non-commercial service. The following is provided for information regarding each Part:
 - a) *Part 1*: The purpose of the generic title *ABS Rules for Conditions of Classification (Part 1)* is to reflect the expanded contents of PART 1, as a result of including consolidated requirements for “Classification” applicable to all types of and sizes of vessels, barges and specific shipboard arrangements/systems, etc., except for those in offshore service, as specified in the Foreword to Part 1. Additional specific requirements are contained in Chapter 11 of Part 1.
 - b) *Part 2*: The purpose of the generic title *ABS Rules for Materials and Welding (Part 2)* is to reflect the common applicability of the requirements to all ABS-classed vessels, other marine structures and their associated machinery, and thereby make PART 2 more readily a common “PART” of various ABS Rules and Guides, as appropriate.
 - c) *Part 3*: The *ABS Guide for Building and Classing International Naval Ships (Part 3)* is based upon other existing ABS Rules and Guides to inherently incorporate baseline standards for hull design, construction, safety and environmental protection expected of all commercial vessels worldwide.
 - d) *Part 4*: The *ABS Guide for Building and Classing International Naval Ships (Part 4)* is based upon other existing ABS Rules and Guides to inherently incorporate baseline standards for machinery design, construction, safety and environmental protection expected of all commercial vessels worldwide.
 - e) *Part 5*: The *ABS Rules for Building and Classing Marine Vessels (Part 5A, 5B, 5C)* contains structural requirements for specific vessel types (tankers, bulk carriers, container carriers, liquefied gas carriers, passenger carriers, chemical carriers, and vessels intended to carry vehicles) that are normally classed in accordance with *ABS Rules for Building and Classing Marine Vessels*. The inclusion of this existing Part 5 in the *ABS Guide for Building and Classing International Naval Ships* is mainly for its potential application to certain naval ships (e.g., Oilers) and will require special consideration when applying its requirements since they were intended for application to commercial vessels and are therefore based heavily upon SOLAS and other IMO Convention standards; no modifications have been made to it at this time to tailor its applicability to military vessels or other Government-owned vessels in non-commercial service.
 - f) *Part 6*: The *ABS Guide for Building and Classing International Naval Ships (Part 6)* provides requirements regarding those optional notations offered by ABS that are most frequently requested and/or considered to be most applicable or unique to military vessels and other Government owned vessels in non-commercial service. A complete listing of available optional notations is on the ABS website (www.eagle.org). The requirements in Part 6 apply in addition to the basic requirements for Classification, but only apply for those optional notations that are requested.
 - g) *Part 7*: The purpose of the generic title *ABS Rules for Survey After Construction (Part 7)* is to reflect the common applicability of survey requirements to all ABS-classed vessels, other marine structures and their associated machinery.
2. The numbering system applied in the Guide is shown in Table 2.
3. The primary changes from the January 2023 Guide are identified and listed in Table 3. The effective date of the indicated Rule Changes is 1 July 2023, unless specifically indicated otherwise.

4. The effective date of each technical change since 1993 is shown in parenthesis at the end of the subsection/paragraph titles within the text of each Part. Unless a particular date and month are shown, the years in parentheses refer to the following effective dates:

(2000) and after	1 January 2000 (and subsequent years)	(1996)	9 May 1996
(1999)	12 May 1999	(1995)	15 May 1995
(1998)	13 May 1998	(1994)	9 May 1994
(1997)	19 May 1997	(1993)	11 May 1993

For certain changes that have a major impact on shipyards, designers and vendors, ABS has instituted a two-year Rule cycle to give the industry more time to prepare for these changes. The text of these changes will appear in a box along with the effective date just under the existing requirement.

5. The listing of CLASSIFICATION SYMBOLS AND NOTATIONS is available from the ABS website www.eagle.org for download.

TABLE 1
Applicable Editions of Booklets Comprising July 2023 International Naval Ships Guide

Notices and General Information		July 2023
Part 1:	Rules for Conditions of Classification	July 2023*
Part 2:	Rules for Materials and Welding Rules for Testing and Certification of Materials Rules for Welding and Fabrication	July 2023*
Part 3:	Hull Construction and Equipment	January 2023
Part 4:	Vessel Systems and Machinery	July 2023
Part 5A: (Booklet 1)	Specific Vessel Types General Hull Requirements (IACS CSR Part 1)	July 2023* (on and after 1 July 2023)
Part 5B: (Booklet 1)	Specific Vessel Types Ship Types (IACS CSR Part 2)	July 2023* (on and after 1 July 2023)
Part 5C:	Specific Vessel Types Chapter 1 & 2 Oil Carrier Chapter 3 & 4 Bulk Carrier Chapter 5 & 6 Container Carrier	July 2023*
Part 5C:	Specific Vessel Types Chapter 7 Passenger Carrier Chapter 8 Liquefied Gas Carrier Chapter 9 Chemical Carrier Chapter 10 Vehicle Carrier Chapter 11 Water Carrier Chapter 12 Liquefied Gas Carrier with Membrane Tanks Chapter 13 Vessels Using Gases or other Low-Flashpoint Fuels Chapter 14 Fire Fighting Vessels Chapter 15 Oil Recovery Vessels Chapter 16 Escort Vessels Chapter 17 Vessels Under 90m (295 ft) Intended for Towing Chapter 18 Fishing Vessels Chapter 19 Vessels Intended to Carry Bulk Cargoes without Upper Wing Tanks and Lower Wing Tanks	July 2023*
Part 6:	Optional Notations Chapter 1 Strengthening for Navigation in Ice Chapter 2 Bridge Design Notations (NBL, NBLES, NIBS) Chapter 3 Hull Girder Ultimate Strength Assessment Chapter 4 Naval Ship Safety Certificate Chapter 5 Mission Threats Protection Chapter 6 Underway Replenishment	July 2023
Part 7:	Rules for Survey After Construction	July 2023*

* **Note:** The latest edition of these Rules is to be referred to. These Rules may be downloaded from the ABS website at www.eagle.org, Rules and Guides, Downloads or may be ordered separately from the ABS Publications online catalog at www.eagle.org, Rules and Guides, Catalog.

Parts 5A, 5B, and 5C are parts of the ABS *Rules for Building and Classing Marine Vessels*.

TABLE 2
Division and Numbering of Rules and Guides

<i>Division</i>	<i>Number</i>
Part	Part 1
Chapter	Part 1, Chapter 1
Section	Section 1-1-1
Subsection (see Note 1)	1-1-1/1
Paragraph (see Note 1)	1-1-1/1.1
Subparagraph	1-1-1/1.1.1
Item	1-1-1/1.1.1(a)
Subitem	1-1-1/1.1.1(a)i
Appendix	Appendix 1-1-A1 or Appendix 1-A1-1

Note:

1

An odd number (1, 3, 5, etc.) numbering system is used for the Rules. The purpose is to permit future insertions of even-numbered paragraphs (2, 4, 6, etc.) of text and to avoid the necessity of having to renumber the existing text and associated cross-references, as applicable, within the Rules and associated process instructions, check sheets, etc.

Change Notice (1 July 2023)

TABLE 3
Summary of Changes from the January 2023 Guide

EFFECTIVE DATE 1 July 2023 – shown as (1 July 2023)
(based on the contract date for new construction between builder and Owner)

<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
PART 4	Vessel Systems and Machinery	
4-2-1/13.2.1	Diesel Engines	To update 4-2-1/13.2.1 to include specific reference to include engine fluid system cleaning and flushing items to the quality plan.
4-2-1/TABLE 1	Diesel Engines	To remove redundant text “The FMEA reports required will not be explicitly approved by ABS”, in line with IACS UR M44 Rev.10 Corr.1.
4-3-4/13.1.9	Steering Gears	To specify that a system response without manual intervention is not mandatory for mechanical failures such as hydraulic locking, in line with IACS UR E25 Rev.2.
4-3-5/3.3.3	Thrusters	To add the requirements for Certification Under Quality Assurance Assessment to be applied for thrusters in PQA program.
4-3-6/1, 3, 5, 9, 13	Propulsion Redundancy	To provide requirements for R2-N Notation and to add requirements for Operation Manual to include (Engineering Operation Sequencing System (EOSS).
4-6-3/1, 5.11, 5.11.5, 21	Plastic Piping	To clarify “existing fire endurance”, provide requirements for test specimens and onboard testing, in line with IACS UR P4 Rev.7.
4-6-7/1, 11	Other Piping Systems	To add requirements for refrigeration plants for HVAC application which are not addressed in Part 6 Chapter 2 as they are only intended for Cargo Refrigeration.
4-7-3/11.3.1(f), (h)	Fire-extinguishing Systems and Equipment	To specify requirements for isolator modules on ship cabin balconies, in line with IMO Res. MSC.484(103).
4-8-1/5.5.1(a)	General Provisions	To expand and clarify document submission requirements for rotating machinery.
4-8-3/3.15.5, 3.15.10, 3.17, Table 3	Electrical Equipment	To prevent incidents of generator failures by adding additional requirements for factory testing.

Definition of Terms Used Throughout the Guide

Naval Vessel: This term is used to broadly refer to Government owned vessels in non-commercial service; primarily vessels whose purpose is for safety, security and/or defense. As such, it applies to vessels of the Navy, the Coast Guard, or other Government agency of a country; the main differences from commercial vessels being: (1) such vessels are not required by law to comply with national or international codes or standards with which commercial vessels must comply, and (2) in many cases such vessels are equipped and outfitted for combat or related military missions which requires vessel systems, functions, and capabilities to address operational scenarios not encountered by commercial vessels.

The criteria in this Guide was developed around the following features/characteristics/assumptions with regard to the vessels to which this Guide applies: surface vessels, non-nuclear, welded steel construction, welded aluminum construction, areas of composite structure (other than primary structure), mono-hull, displacement type (however, the Guide does address dynamically supported vessels), no restrictions on length, IMO/SOLAS not mandatory (if invoked in whole or in part it is invoked by choice/policy of the Naval Administration), unrestricted service (but criteria is included to allow for lesser service routes), fitted with systems that support aircraft operations, combat operations, or other military-unique missions.

Naval Administration: The department, directorate, bureau or command to whom the National Government has delegated authority over the acquisition, acceptance, maintenance and technical requirements of naval vessels, and who acts on the Government's behalf in all matters relating to the procurement and support of the vessels. In the case where these authorities are invested in separate departments within the naval organization, the term "Naval Administration" means the ensemble of departments having those authorities, or the command that overarches these departments.

Special Consideration: Where the term "special consideration" is used in this Guide, it is intended to indicate that ABS will consider a particular specified arrangement, detail, or proposed alternative or equivalency, or that application of the criteria in the Guide may require modification from what is prescribed in order to satisfy the intent of the requirements. Arrangements, details and proposed alternatives or equivalency determinations that require special consideration for ABS classification will be reviewed in conjunction with submitted calculations and other supporting documentation in accordance with sound engineering practice.

Recognized Standard: A document developed and maintained by an organization whose functions include the development and maintenance of specifications and standards, and designated as applicable for use in marine applications or made suitable by the addition of supplemental criteria. Acceptance of a recognized standard and any required supplemental criteria are subject to review and approval by ABS.

HM&E System: Hull, mechanical and electrical (HM&E) systems are those systems relating to the safety of vessel and crew in the basic operation and navigation of the vessel (i.e., aspects of the platform other than mission systems and mission-related or military-unique aspects that are the domain of other designated authorities).

Mission System: The systems, subsystems and individual equipment directly dedicated to carrying out the mission of the ship as opposed to those systems needed for crew and vessel safety regarding basic operation and navigation of the vessel. Mission systems include combat systems (weapons and sensors), C4ISR systems (including information security), and those systems and features related to military-unique aspects that are required for operation in a military environment (aspects such as signatures, shock, survivability, weapons effects, etc.).