



RULES FOR BUILDING AND CLASSING

STEEL VESSELS 2009

NOTICES AND GENERAL INFORMATION

**American Bureau of Shipping
Incorporated by Act of Legislature of
the State of New York 1862**

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Notices and General Information

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Notices and General Information

Introduction

1. The year 2009 edition of the *Rules for Building and Classing Steel Vessels* is a complete reprint of the 2008 edition, consisting of the eleven (11) booklets as shown in Table 1. In this regard, we would bring the following to the user's attention:
 - a) 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.
 - b) The purpose of the generic title *ABS Rules for Materials and Welding (Part 2)* of PART 2 is to emphasize the common applicability of the requirements to 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) The purpose of the generic title *ABS Rules for Survey After Construction (Part 7)* is to reflect the expanded contents of PART 7, as a result of including consolidated requirements for "Surveys After Construction" applicable to all types and sizes of vessels, barges and specific shipboard arrangements/systems, etc., as specified in Part 7, Chapter 1, Section 1.
2. The numbering system applied in the Rules is shown in Table 2.
3. The primary changes from the 2008 edition of the Rules are identified and listed in Table 3. The effective date of the indicated Rule Changes is 1 January 2009, 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
5. Until the next edition of the *Rules for Building and Classing Steel Vessels* is published, Rule Change Notices and/or Corrigenda, as necessary, will be published on the ABS website – www.eagle.org – only, and will be available free for downloading. It is not intended to publish hard copies of future Rule Change Notices and/or Corrigenda to existing Rules or Guides. The consolidated edition of the *Rules for Building and Classing Steel Vessels*, which includes Rule Change Notices and/or Corrigenda using different colors for easy recognition will be published on the ABS website only when RCN and/or Corrigenda are issued.
6. The listing of CLASSIFICATION SYMBOLS AND NOTATIONS is available from the ABS website <http://www.eagle.org/absdownloads/index.cfm> for download.
7. In association with the introduction of the Common Structural Rules for Double Hull Oil Tankers and Bulk Carriers, respectively, on 1 April 2006, Part 5 of the *Rules for Building and Classing Steel Vessels* was divided into three Sub-parts, 5A, 5B and 5C. The contents and application of each Part are as follows:

Contents

- Part 5A: Common Structural Rules for Double Hull Oil Tankers (*See note below)
- Part 5B: Common Structural Rules for Bulk Carriers (*See note below)
- Part 5C: This Part is divided into two separate booklets as follows:
- | | |
|-------------------|--|
| Chapters 1 to 6: | Tankers not covered by Part 5A, Bulk Carriers not covered by Part 5B and Container Carriers |
| Chapters 7 to 10: | Passenger Vessels, Liquefied Gas Carriers, Chemical Carriers and Vessels Intended to Carry Vehicles. |

* *Note:* In view of the effective date (1 July of each year) of the updated Common Structural Rules, the 2009 editions of Part 5A and Part 5B will be published in July 2009. Until the effective date of the 2009 editions, the following 2008 editions are applicable:

- | | |
|--------|--|
| Part 5 | Specific Vessel Types (Chapter 1), 2008
Common Structural Rules for Double Hull Oil Tankers
[including Corrigenda No. 1 (1 July 2008) and Rule Change Notice No. 2 (25 February 2008)] |
| Part 5 | Specific Vessel Types (Chapters 3 and 4), 2008
Common Structural Rules for Bulk Carriers
[including Rule Change Notice No. 2 (25 February 2008)] |

Application – Oil Tankers

The structural requirements in Part 5A of the Rules are applicable for double hull oil tankers of 150 m in length and upward, with structural arrangements as specified in Part 5A, Section 2.

For oil tankers with structural arrangements not covered by Part 5A, the requirements in Part 5C, Chapters 1 or 2, are to be complied with.

Application – Bulk Carriers

The structural requirements in Part 5B of the Rules are applicable for single side skin and double side skin bulk carriers of 90m in length and upward, with structural arrangements as specified in Part 5B, Chapter 1, Section 1.

For vessels intended to carry ore or bulk cargoes, other than the single side skin or double side skin bulk carriers of 90 m in length and upward with structural arrangements as specified in Part 5B, Chapter 1, Section 1, the requirements in Part 5C Chapters 3 or 4 are to be complied with.

Application – SafeShip Construction Monitoring Program

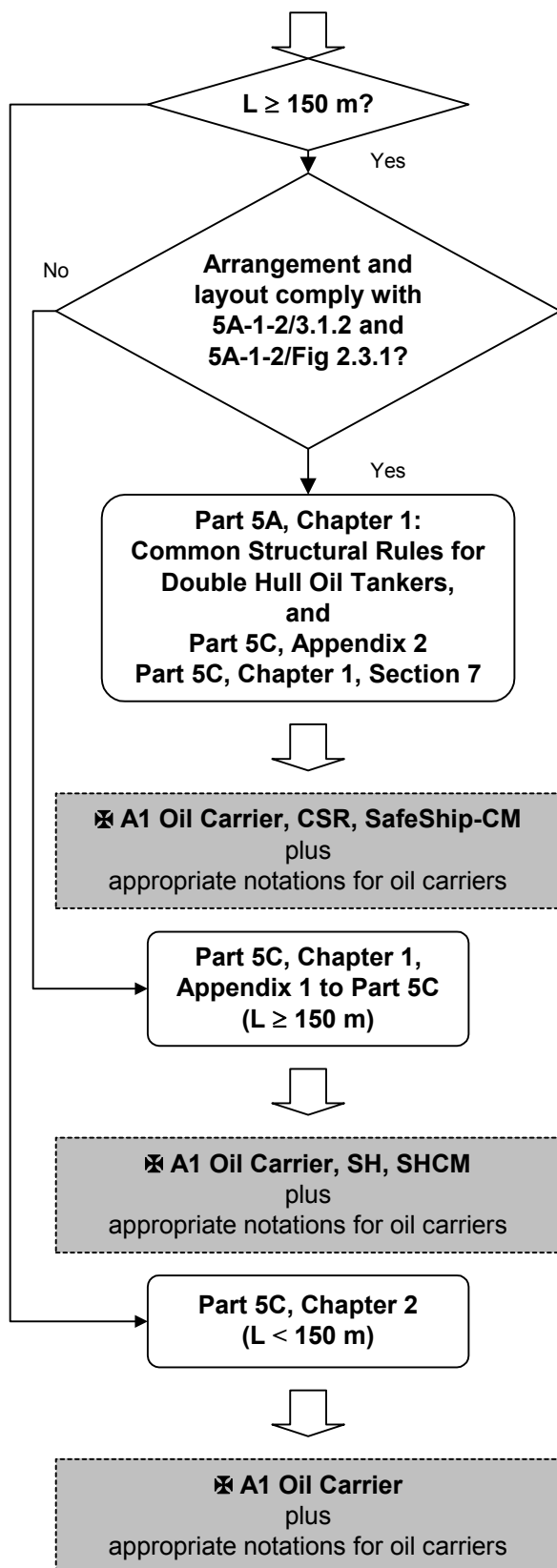
These compulsory requirements for **CSR** notation are specified in Part 5C, Appendix 2.

Application – Onboard Systems for Oil Tankers and Bulk Carriers

The onboard systems for all tankers are to comply with the requirements of Part 5C, Chapter 1, Section 7, and for all bulk carriers are to comply with the requirements of Part 5C, Chapter 3, Section 7 of the Rules.

The following flow chart indicates the application of the Rules and typical Class Notations for tanker and bulk carrier vessels, of which arrangements and scantlings are in full compliance with the Rules:

Vessels Intended to Carry Oil in Bulk



Vessels Intended to Carry Ore or Bulk Cargoes

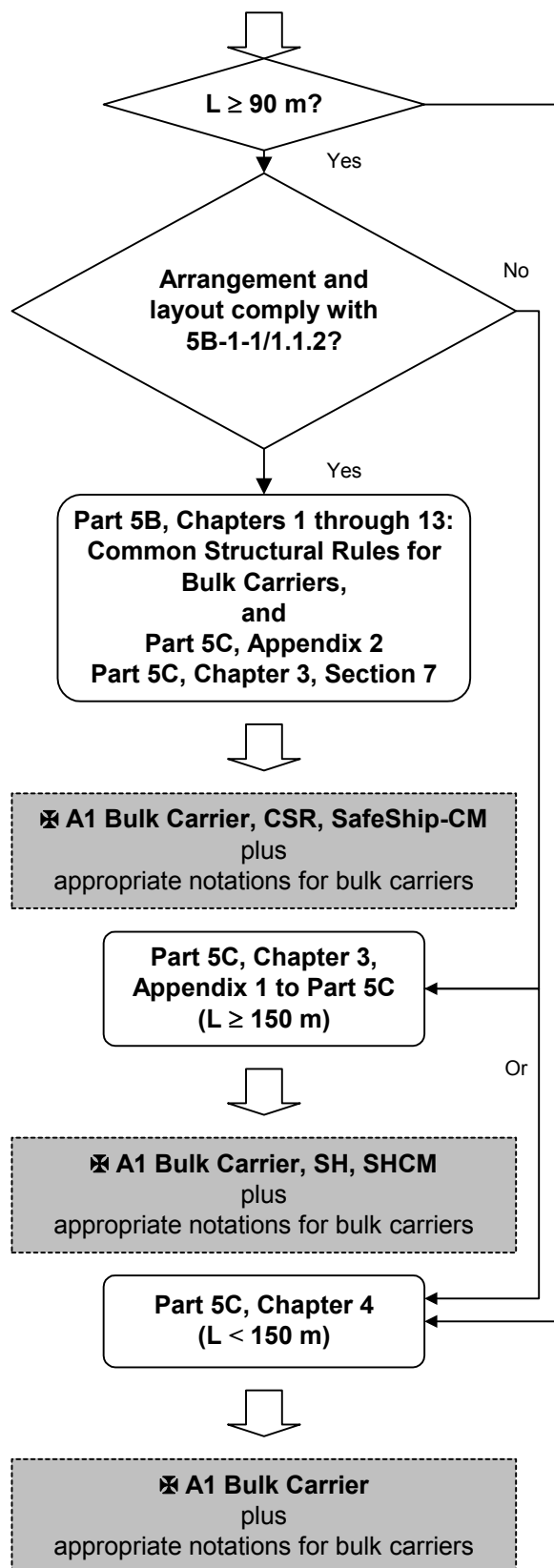


TABLE 1
Applicable Editions of Booklets Comprising 2009 Rules

Notices and General Information		2009
Part 1:	Rules for Conditions of Classification	2009
Part 2:	Rules for Materials and Welding Rules for Testing and Certification of Materials Rules for Welding and Fabrication	2009
Part 3:	Hull Construction and Equipment	2009
Part 4:	Vessel Systems and Machinery	2009
Part 5A: (Booklet 1)	Specific Vessel Types Chapter 1 Common Structural Rules for Double Hull Oil Tankers	2008 (on and after 1 July 2008)
Part 5B: (Booklet 2)	Specific Vessel Types Chapter 3 & 4 Common Structural Rules for Bulk Carriers	2008 (on and after 1 July 2008)
Part 5C: (Booklet 3)	Specific Vessel Types Chapter 1 & 2 Oil Carrier Chapter 3 & 4 Bulk Carrier Chapter 5 & 6 Container Carrier	2009
Part 5C: (Booklet 4)	Specific Vessel Types Chapter 7 Passenger Carrier Chapter 8 Liquefied Gas Carrier Chapter 9 Chemical Carrier Chapter 10 Vehicle Carrier	2009
Part 6:	Optional Items and Systems Chapter 1 Strengthening for Navigation in Ice Chapter 2 Refrigerated Cargo Vessels	2009
Part 7:	Rules for Surveys After Construction	2009

TABLE 2
Division and Numbering of Rules

<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 (2009)

TABLE 3 Summary of Changes from the 2008 Rules

EFFECTIVE DATE 1 October 2007 – shown as (1 October 2007)

<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
PART 1	Rules for Conditions of Classification	
1-1-2/7.5	<No Title>	To provide for a procedural review of the status of the outstanding recommendation prior to suspension of Class, in line with IACS Procedural Requirement No. 1A "Procedures for Changing Classification Status, Part 1, Section A.2.1. (Incorporates Notice No. 1)
1-1-2/7.6 (New)	<No Title>	To provide for a procedural review of the status of the outstanding recommendation prior to suspension of Class, in line with IACS Procedural Requirement No. 1A "Procedures for Changing Classification Status, Part 1, Section A.2.1. (Incorporates Notice No. 1)

EFFECTIVE DATE 29 November 2007 – shown as (29 November 2007)

<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
PART 1	Rules for Conditions of Classification	
1-1-3/13	✕ AMS Notation	To make the class notation ✕ AMS mandatory for all self-propelled commercial vessels built to ✕ A1 class. (Incorporates Notice No. 2)

EFFECTIVE DATE 1 April 2008 – shown as (1 April 2008)

<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
PART 1	Rules for Conditions of Classification	
1-1-6/3 (New)	IACS Early Warning System	To facilitate the proper working of the IACS Early Warning System (EWS). (Incorporates Notice No. 3)

EFFECTIVE DATE 1 January 2009 – shown as (2009)
(based on the date of purchase order of the materials)

<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
PART 2	Rules for Materials and Welding	
2-1-1/16	Rolled Plates over 100 mm (4 in.) Thick	To clarify the intent of the Rules regarding transition curves.
2-1-1/23.6 (New)	<No Title>	To incorporate an inadvertently omitted paragraph which appears in the <i>ABS Guide for Vessels Intended to Carry Compressed Natural Gases</i> .
2-2-1/7.1.1	Proof Load Testing of Ordinary Anchors	To clarify that in addition to examining the anchors to locate defects, any defects found are to be removed, and if necessary repaired by welding, prior to the proof load test.
2-3-7/3.1.3	ASTM Designations	To change "Class" to "Grade" in line with revisions to ASTM A 291.

Notices and General Information

<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
2-3-16/5	Process of Manufacture	To clarify that pipe mill personnel (not the Surveyor) would generally carry out the inspections indicated, and the Surveyor would then attest that such inspections at the mill were carried out to the Surveyor's satisfaction.
2-3-17/1	Process of Manufacture	To clarify that pipe mill personnel (not the Surveyor) would generally carry out the inspections indicated, and the Surveyor would then attest that such inspections at the mill were carried out to the Surveyor's satisfaction.
2-3-18/5	Process of Manufacture	To clarify that pipe mill personnel (not the Surveyor) would generally carry out the inspections indicated, and the Surveyor would then attest that such inspections at the mill were carried out to the Surveyor's satisfaction.
2-4-1/1.7.2	Weld Metal Toughness – Criteria for ABS Grades of Steel	To include ABS grades of high strength quenched and tempered steels, in line with Part 2, Appendix 3.
2-4-4/5.7	Flange Attachment Welds	To allow the size of the external fillet weld to be equal to the thickness of the hub, if the hub thickness is less than 1.1 times the nominal thickness of the pipe, based on industry practice, and to limit the external fillet weld size for Class II and Class III flange joints to 13 mm (0.531 in.), in line with ASTM F-722 Figures 19, 20 and 21.
2-A2-1/9.3.2	Butt Weld Test and Fillet Weld Test	To allow added flexibility in material selection for filler metal tests and to provide consistency with the treatment of Y grade filler metals.
2-A2-1/13	Chemical Analysis	To clarify the requirements in line with IACS UR W17.5.3.2.5 and UR W23.2.2.
2-A2-1/Table 1	Tension Test Requirements	To incorporate the new grade 5Y400 in line with industry practice.
2-A2-1/Table 2	Impact Test Requirements	To incorporate the new grade 5Y400 in line with industry practice and to clarify the table.
2-A2-2/11.3	Higher-Strength Filler Metals	To incorporate the new grade 5Y400 in line with industry practice.
2-A2-3/Figure 3	But-Weld Test Assembly for Submerged Arc Welding – Two-run Technique	To incorporate the new grade 5Y400 in line with industry practice.
2-A2-4/5.1	Semi-automatic Test Assemblies	To align the requirements with IACS UR W17.
2-A2-4/7.3	Welding Procedure	To align the requirements with IACS UR W17.
2-A2-4/13.1.4	Higher Strength Wires	To incorporate the new grade 5Y400 in line with industry practice.
Appendix 3	Application of Filler Metals to ABS Steels	To permit the use of 5Y400 filler metals for welding XH40 steel.

EFFECTIVE DATE 1 July 2008 – shown as (1 July 2008)
(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 3	Hull Construction and Equipment	
3-7-2/1	Anchor Windlass Trials	To specifically note the importance of confirmation that the anchor is properly seated and that adequate chain stoppers are provided. (Incorporates Notice No. 2)
PART 4	Vessel Systems and Machinery	
4-2-1A5/3ii)	<No Title>	To align the requirements with IACS UR M66 (Rev. 2, Corr. 1). (Incorporates Notice No. 1)
4-2-1A5/7	Test Facilities	To align the requirements with IACS UR M66 (Rev. 2, Corr. 1). (Incorporates Notice No. 1)
4-2-1A5/9	Explosion Test Process	To align the requirements with IACS UR M66 (Rev. 2, Corr. 1). (Incorporates Notice No. 1)

Notices and General Information

<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
4-2-1A5/13.1v)	<No Title>	To align the requirements with IACS UR M66 (Rev. 2, Corr. 1). (Incorporates Notice No. 1)
4-2-1A5/15iv)	<No Title>	To align the requirements with IACS UR M66 (Rev. 2, Corr. 1). (Incorporates Notice No. 1)
4-2-1A5/1vi)	<No Title>	To align the requirements with IACS UR M66 (Rev. 2, Corr. 1). (Incorporates Notice No. 1)
4-2-1A5/17.1	General	To align the requirements with IACS UR M66 (Rev. 2, Corr. 1). (Incorporates Notice No. 1)
4-2-1A5/17.3	Flame Arrester	To align the requirements with IACS UR M66 (Rev. 2, Corr. 1). (Incorporates Notice No. 1)
4-2-1A5/17.5.1	<No Title>	To align the requirements with IACS UR M66 (Rev. 2, Corr. 1). (Incorporates Notice No. 1)
4-2-1A5/17.5.2	<No Title>	To align the requirements with IACS UR M66 (Rev. 2, Corr. 1). (Incorporates Notice No. 1)
4-2-1A5/17.7.2	<No Title>	To align the requirements with IACS UR M66 (Rev. 2, Corr. 1). (Incorporates Notice No. 1)
4-5-1/1.5	Plans and Particulars to be Submitted	To identify the need to submit calculations if the load testing is not to be carried out as a unit at the manufacturer's shop, in line with the Rule Change to 4-5-1/7. (Incorporates Notice No. 2)
4-5-1/7	Shop Inspection and Testing	To incorporate recognized industry practice. (Incorporates Notice No. 2)
PART 5	Specific Vessel Types	
5C-1-1/1.5.1	Section Properties of Structural Members	To be consistent with the adjustment to the section modulus of inclined sections, the effective shear area is adjusted according to angle θ . (Incorporates Notice No. 1)
5C-1-3/Figure 15	Definition of Bow Geometry	To include the effects of flare angles less than 35° and to introduce the normal body plane angle, β_{ij} . (Incorporates Notice No. 1)
5C-1-3/13.5	Bowflare Slamming	To include the effects of flare angles less than 35° and to introduce the normal body plane angle, β_{ij} . (Incorporates Notice No. 1)
5C-1-3/13.5.1	Nominal Bowflare Slamming	To include the effects of flare angles less than 35° and to introduce the normal body plane angle, β_{ij} . (Incorporates Notice No. 1)
5C-1-6/7.3.3	Side Transverses and Side Stringers	To remove reduction factor of 0.85. (Incorporates Notice No. 1)
5C-3-1/1.7	Section Properties of Structural Members	To be consistent with the adjustment to the section modulus of inclined sections, the effective shear area is adjusted according to angle θ . (Incorporates Notice No. 1)
5C-3-3/Figure 7	Definition of Bow Geometry	To include the effects of flare angles less than 35° and to introduce the normal body plane angle, β_{ij} . (Incorporates Notice No. 1)
5C-3-3/11.3.1	Nominal Bowflare Slamming	To include the effects of flare angles less than 35° and to introduce the normal body plane angle, β_{ij} . (Incorporates Notice No. 1)
5C-3-6/13.5.3	Side Transverses and Side Stringers	To remove reduction factor of 0.85. (Incorporates Notice No. 1)
5C-5-1/3	Section Properties of Structural Members	To be consistent with the adjustment to the section modulus of inclined sections, the effective shear area is adjusted according to angle θ . (Incorporates Notice No. 1)
5C-5-3/Figure 11	Definition of Bow Geometry	To include the effects of flare angles less than 35° and to introduce the normal body plane angle, β_{ij} . (Incorporates Notice No. 1)
5C-5-3/11.3.1	Nominal Bowflare Slamming	To include the effects of flare angles less than 35° and to introduce the normal body plane angle, β_{ij} . (Incorporates Notice No. 1)
5C-5-4/1.5	Structural Details	To reflect service experience. (Incorporates Notice No. 1)
5C-5-6/23.3.3	Side Transverses and Side Stringers	To remove reduction factor of 0.85. (Incorporates Notice No. 1)
5C-5-6/23.3.3(a)i)	Longitudinally Framed Side Shell	To remove reduction factor of 0.85. (Incorporates Notice No. 1)
5C-5-6/Table 1	Coefficient c_2	To remove reduction factor of 0.85. (Incorporates Notice No. 1)

Notices and General Information

<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
5C-5-6/Table 2	Coefficient c_3	To remove reduction factor of 0.85. (Incorporates Notice No. 1)
5C-5-6/ 23.3.3(a)ii)	Transversely Framed Side Shell	To remove reduction factor of 0.85. (Incorporates Notice No. 1)
5C-5-6/ 23.3.3(b)i)	Longitudinally Framed Side Shell	To remove reduction factor of 0.85. (Incorporates Notice No. 1)
5C-5-6/Table 4	Coefficient c_1	To remove reduction factor of 0.85. (Incorporates Notice No. 1)
5C-5-6/ 23.3.3(b)ii)	Transversely Framed Side Shell	To remove reduction factor of 0.85. (Incorporates Notice No. 1)
5C-8-1/27.3 (New)	Secondary Barrier	To align the requirements with IACS UI GC 12 and UI GC 13. (Incorporates Notice No. 2.)
5C-8-1/27.5 (New)	First Loading (considered to be full loading)	To align the requirements with IACS UI GC 12 and UI GC 13. (Incorporates Notice No. 2.)
5C-8-1/27.7 (New)	First Unloading	To align the requirements with IACS UI GC 12 and UI GC 13. (Incorporates Notice No. 2.)

EFFECTIVE DATE 1 January 2009 – shown as (2009)
(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 3	Hull Construction and Equipment	
3-2-13/7 (New)	Propeller Nozzles	To provide requirements for propeller nozzles.
Section 3-2-14	Rudders	To expand the requirements to include non-conventional rudder types (flap, fish-tail, and steering nozzles, etc.) and to clarify the existing requirements.
PART 4	Vessel Systems and Machinery	
4-2-1/7.2	Protection Against Crankcase Explosions	To revise title to include bearing temperature monitoring arrangements or other alternative arrangements that may be provided instead of oil mist detection. Subparagraphs are rearranged and renumbered to accommodate new Subparagraph 4-2-1/7.2.1 and 4-2-1/7.2.3.
4-2-1/7.2.1 (New)	General	To clarify where alarming arrangements are required.
4-2-1/7.2.2(b)ii)	<No Title>	To provide a requirement for monitoring of areas with open communication with the crankcase.
4-2-1/7.2.2(c)iv)	<No Title>	To provide clarification between 4-2-1/7.2 and the tables in Sections 4-9-4 and 4-8-2.
4-2-1/7.2.3 (New)	Bearing Temperature Monitoring Arrangements	To clarify that current ABS permits bearing temperature monitoring as a method of protection against crankcase explosion.
4-2-1/7.2.4	Alternative Arrangements	To clarify the requirements.
4-2-1/13.7.1	Application	To clarify that if an electronically controlled engine has been developed based upon a previously tested and approved conventional (non-electronically controlled) engine, and it can be determined that the results of required test would be similar for both the conventional and the electronically controlled engines, such tests may be waived for the electronically controlled engine, in line with IACS UR M50.5.3 (Rev. 3).
4-2-1/13.7.4(b)v) (New)	Integration Test	To provide requirements for the integration test and FMEA necessary to verify the fully assembled engine's functionality as designed, in line with IACS UR M50 (Rev. 3).
4-2-1/13.9.3 (Title Only)	Engines Driving Generators Dedicated for Propulsion Motors	To clarify the title to reflect that the requirements apply to dedicated propulsion generator engines.

Notices and General Information

<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
4-2-1/13.9.4	Engines Driving Other Generators and Machinery	To clarify that the consumers of auxiliary generator engines may be include propulsion motors, in line with IACS UR M51.2.1.4.
4-2-1/13.9.5 (New)	Electronically Controlled Engines	To introduce a requirement specific to electronically controlled engines, in line with IACS UR M51.1.5 (Rev. 3).
4-6-4/17.3.1	General	To align the requirements with MARPOL Reg. 12A.
4-6-4/17.3.2	Protective Location of Tanks	To align the requirements with MARPOL Reg. 12A and to add requirements for the probabilistic approach.
4-6-4/17.5	Class Notation – POT	To align the requirements with MARPOL Reg. 12A.
4-6-7/7.5.1(e) (New)	Flexible Hoses	To provide requirements governing the use of flexible hoses in fixed oxygen-acetylene systems.
4-8-2/3.1.3	Starting from Dead Ship Condition	To clarify that some sources of power are assumed not to be available and that the requirement would also be applicable to vessels with emergency batteries (with no emergency generator).
4-8-2/11.7.1	General Emergency Alarm System	To clarify the requirement for two separate feeders, to require an alarm when there is a loss of power in any one of the feeders, and to clarify an acceptable alternative arrangement when one feeder with a battery is provided.
4-8-2/Table 1	Alarms and Safeguards for Emergency Diesel Engines	To provide clarification between the requirements in 4-2-1/7.2, 4-8-2/Table 1, 4-9-4/Table 3A, 4-9-4/Table 3B, 4-9-4/Table 6B and 4-9-4/Table 8.
4-8-3/5.3.6	Internal Wiring	To align the requirements for terminal identification with current industry practice.
4-9-4/Table 3A	Instrumentation and Safety System Functions in Centralized Control Station – Slow Speed (Crosshead) Diesel Engines	To provide clarification between the requirements in 4-2-1/7.2, 4-8-2/Table 1, 4-9-4/Table 3A, 4-9-4/Table 3B, 4-9-4/Table 6B and 4-9-4/Table 8.
4-9-4/Table 3B	Instrumentation and Safety System Functions in Centralized Control Station – Medium and High Speed (Trunk Piston) Diesel Engines	To provide clarification between the requirements in 4-2-1/7.2, 4-8-2/Table 1, 4-9-4/Table 3A, 4-9-4/Table 3B, 4-9-4/Table 6B and 4-9-4/Table 8.
4-9-4/Table 6B	Instrumentation and Safety System Functions in Centralized Control Station – Generator Prime Mover for Electric Propulsion	To provide clarification between the requirements in 4-2-1/7.2, 4-8-2/Table 1, 4-9-4/Table 3A, 4-9-4/Table 3B, 4-9-4/Table 6B and 4-9-4/Table 8.
4-9-4/Table 8	Instrumentation and Safety System Functions in Centralized Control Station – Auxiliary Turbines and Diesel Engines	To provide clarification between the requirements in 4-2-1/7.2, 4-8-2/Table 1, 4-9-4/Table 3A, 4-9-4/Table 3B, 4-9-4/Table 6B and 4-9-4/Table 8.
PART 5		
Specific Vessel Types		
5C-9-11/1.1.4 (New)	<No title>	To align the requirements with the IMO International Bulk Chemical Code, As amended by IMO MSC Resolution 219(82).
5C-9-11/1.1.7 (New)	<No title>	To align the requirements with the IMO International Bulk Chemical Code, As amended by IMO MSC Resolution 219(82).
5C-9-11/1.1.8 (New)	<No title>	To align the requirements with the IMO International Bulk Chemical Code, As amended by IMO MSC Resolution 219(82).

Part 7 “Rules for Survey After Construction”

The reference date which is indicated in the parentheses following the title of the requirement in this Part is the date that the requirement becomes effective [e.g., 7-1-1/3.59 “Spaces” (1 July 2008) is to apply for vessels undergoing survey on or after 1 July 2008].

EFFECTIVE DATE 13 November 2007 – shown as (13 November 2007)

<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
PART 7	Rules for Survey After Construction	
7-3-2/1.7.2(c) (New)	For Vessels Age > 25 Years and Over 100,000 DWT	To provide survey requirements for cargo holds of bulk carriers greater than 25 years of age and over 100,000 DWT. (Incorporates Notice No. 1)

EFFECTIVE DATE 1 July 2008 – shown as (1 July 2008)

<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
PART 7	Rules for Survey After Construction	
7-1-1/3.59	Spaces	To align the requirements with IACS UR Z10.2 (Rev. 23) para. 1.2.4 and Z10.5 (Rev. 5) para. 1.2.3. (Incorporates Notice No. 2)
7-2-1/3	Intermediate Surveys	To align the requirements with IACS UR Z7 (Rev. 15), Z7.1 (Rev. 5), Z7.2 (Rev. 1), Z10.1 (Rev. 15), Z10.2 (Rev. 26), Z10.3 (Rev. 9), Z10.4 (Rev. 6) and Z10.5 (Rev. 8). (Incorporates Notice No. 2)
7-2-1/5	Special Periodical Surveys	To align the requirements with IACS UR Z7 (Rev. 15), Z7.1 (Rev. 5), Z7.2 (Rev. 1), Z10.1 (Rev. 15), Z10.2 (Rev. 26), Z10.3 (Rev. 9), Z10.4 (Rev. 6) and Z10.5 (Rev. 8). (Incorporates Notice No. 2)
7-2-1/17.5	Auxiliary Boiler	To harmonize auxiliary boiler survey intervals with dry dock survey requirements for vessels on Continuous Survey – Hull. (Incorporates Notice No. 2)
7-3-1/9.9	<No Title>	To align the requirements with IACS UR Z10.5 (Rev. 5) para. 5.5.3. (Incorporates Notice No. 2)
7-3-2/1.7.1	Weather Decks, Hatch Covers and Coamings	To align the requirements with IACS UR Z10.2 (Rev. 23) para. 3.2.3 and 3.2.4.1. (Incorporates Notice No. 2)
7-3-2/1.7.2(a)iv (New)	Piping and Penetrations	To align the requirements with IACS UR Z10.2 (Rev. 23) para. 3.2.3 and 3.2.4.1. (Incorporates Notice No. 2)
7-3-2/1.13.2	Cargo and Other Piping Systems	To harmonize text of Annual Survey requirements with Intermediate Survey requirements. (Incorporates Notice No. 2)
7-3-2/1.13.5 (New)	Oil Tank Barges	To specifically indicate that the inert gas system on oil tank barges is to be examined at each Annual Survey. (Incorporates Notice No. 2)
7-3-2/1.13.6	Tankers ESP – Ballast Tanks and Combined Cargo/Ballast Tanks	To align the requirements with IACS UR Z10.1 (Rev. 14) para. 3.2.5.1. (Incorporates Notice No. 2)
7-3-2/1.13.8	Liquefied Gas Carriers and Liquefied Gas Tank Barges	To align the requirements with IACS UR Z16 (Rev. 2) para. 3.5.2. (Incorporates Notice No. 2)
7-3-2/1.19.1	Weather Decks, Hatch Covers and Coamings	To align the requirements with IACS UR Z10.2 (Rev. 23) para. 3.2.3 and 3.2.4.1. (Incorporates Notice No. 2)
7-3-2/1.19.2(a)iii (New)	Piping and Penetrations	To align the requirements with IACS UR Z10.2 (Rev. 23) para. 3.2.3 and 3.2.4.1. (Incorporates Notice No. 2)
7-3-2/3.15.3 (New)	Liquefied Gas Carriers Close-up Survey Requirements	To align the requirements with IACS UR Z7.2 Table III. (Incorporates Notice No. 2)
7-3-2/3.17.3(a)	For Vessels 5 < Age ≤ 10 years	To align the requirements with IACS UR Z10.1 (Rev. 14) para. 4.2.2.2e. (Incorporates Notice No. 2)

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<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
7-3-2/3.18.3(a)	For Vessels 5 < Age ≤ 10 years	To align the requirements with IACS UR Z10.1 (Rev. 14) para. 4.2.2.2e and Z10.4 (Rev. 5) para. 4.2.2.2. (Incorporates Notice No. 2)
7-3-2/3.23.3(a)	For Vessels 5 < Age ≤ 10 years	To align the requirements with IACS UR Z10.1 (Rev. 14) para. 4.2.2.2e and Z10.3 (Corr. 1) para. 4.2.2.2. (Incorporates Notice No. 2)
7-3-2/5.1.11	Hatch Covers and Coamings	To require inspection of the hatch coaming structure where higher-strength steel plates are used. (Incorporates Notice No. 2)
7-3-2/5.1.15(b)i)	Special Periodical Survey No. 1 (Age ≤ 5 Years)	To align the requirements with IACS UR Z7.2 Table II. (Incorporates Notice No. 2)
7-3-2/5.1.15(b)iii)	Special Periodical Survey No. 3 (10 < Age ≤ 15 Years)	To align the requirements with IACS UR Z7.2 Table II. (Incorporates Notice No. 2)
7-3-2/5.1.15(b)iv)	Special Periodical Survey No. 4 and Subsequent special Periodical Surveys (Age > 15 Years)	To align the requirements with IACS UR Z7.2 Table II. (Incorporates Notice No. 2)
7-3-2/5.7.3	Overall Survey Requirements	To align the requirements with IACS UR Z10.2 (Rev. 23) para. 2.2.4.1. (Incorporates Notice No. 2)
7-3-2/5.11.1(i)	Secondary Barriers	To align the requirements with IACS UR Z16 (Rev. 2) para. 2.2.6.3 and UI GC12. (Incorporates Notice No. 2)
7-3-2/5.11.2(a)	Cargo Tanks	To eliminate the requirement for nondestructive examination of membrane tanks for Special Periodical Survey – Hull No. 3 and subsequent Special Periodical Surveys. Incorporates Notice No. 2)
7-3-2/5.11.3 (New)	Special Periodical Surveys Close-up Survey Requirements	To align the requirements with IACS UR Z7.2 Table I. (Incorporates Notice No. 2)
7-3-2/5.11.4 (New)	Drydocking Requirements	To align the requirements with IACS UR Z7.2 Table I. (Incorporates Notice No. 2)
7-3-2/5.13.3(b)	Ballast Tanks and Combined Cargo/Ballast Tanks	To align the requirements with IACS UR Z10.1 (Rev. 14) para. 2.2.3.1e. (Incorporates Notice No. 2)
7-3-2/5.14.3(b)	Ballast Tanks and Combined Cargo/Ballast Tanks	To align the requirements with IACS UR Z10.1 (Rev. 14) para. 2.2.3.1e and Z10.4 (Rev. 5) para. 2.2.3.1. (Incorporates Notice No. 2)
7-3-2/5.19.3(a)	Hatch Covers and Coamings	To align the requirements with IACS UR Z10.5 (Rev. 5) para. 2.2.4.1. (Incorporates Notice No. 2)
7-3-2/5.19.4	Close-up Survey Requirements	To align the requirements with IACS UR Z10.5 (Rev. 6) para. 2.2.3. (Incorporates Notice No. 2)
7-3-2/5.19.5(b)iv) (New)	<No Title>	To align the requirements with IACS UR Z10.5 (Rev. 7) Table II. (Incorporates Notice No. 2)
7-3-2/5.21.3(b)	Ballast Tanks	To align the requirements with IACS UR Z10.1 (Rev. 14) para. 2.2.3.1e and Z10.3 (Corr. 1) para. 2.2.3.1. (Incorporates Notice No. 2)
7-3-2/9.1.1	<No Title>	To align the requirements with IACS UR Z10.1 (Rev. 14) para. 5.1, Z10.2 (Rev. 23) para. 5.1, Z10.4 (Rev. 5) para. 5.1 and Z10.5 (Rev. 5) para. 5.1. (Incorporates Notice No. 2)
7-3-2/9.2	Survey Planning Meeting	To align the requirements with IACS UR Z10.1 (Rev. 14) para. 5.6, Z10.2 (Rev. 23) para. 5.6, Z10.4 (Rev. 5) para. 5.6 and Z10.5 (Rev. 5) para. 5.6. (Incorporates Notice No. 2)
7-3-2/9.3.4	<No Title>	To align the requirements with IACS UR Z10.1 (Rev. 14) para. 5.5.4, Z10.2 (Rev. 23) para. 5.5.4, Z10.4 (Rev. 5) para. 5.5.4 and Z10.5 (Rev. 5) para. 5.5.4. (Incorporates Notice No. 2)
7-3-2/9.7 (New)	Conditions for Survey	To align the requirements with IACS UR Z10.5 (Rev. 5) para. 5.2. (Incorporates Notice No. 2)
7-3-2/9.9 (New)	Equipment for Survey	To align the requirements with IACS UR Z10.1 (Rev. 14) para. 5.4, Z10.2 (Rev. 23) para. 5.4, Z10.4 (Rev. 5) para. 5.4 and Z10.5 (Rev. 5) para. 5.4. (Incorporates Notice No. 2)
7-3-2/11.1	General	To align the requirements with IACS UR Z10.1 (Rev. 14) para. 6.1.1, Z10.2 (Rev. 23) para. 6.1.1, Z10.4 (Rev. 5) para. 6.1.1 and Z10.5 (Rev. 5) para. 6.1.1. (Incorporates Notice No. 2)

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7-3-2/13.1	General	To align the requirements IACS UR Z10.5 (Rev. 5) para. 7.1.4. (Incorporates Notice No. 2)
7-9-6/1.1	Annual Surveys	To identify appropriate survey requirements for the PAS and APS notations. (Incorporates Notice No. 2)
7-9-18/1.1	Annual Survey	To clarify the requirements for commercial yachts. (Incorporates Notice No. 2)
7-11-2/5	Year of Grace	To reflect current survey practice. (Incorporates Notice No. 2)
7-A-8/1	Sample Survey Plan for Intermediate and Special Periodical Surveys for ESDC Vessels	To align the requirements with IACS UR Z10.1 (Rev. 14) Annex IV, Z10.2 (Rev. 23) Annex VI, Z10.4 (Rev. 5) Annex IV and Z10.5 (Rev. 5) Annex III. (Incorporates Notice No. 2)
7-A-8/7 (New)	ESP Survey Program – Double Skin Bulk Carriers	To align the requirements with IACS UR Z10.5 (Rev. 5) Annex IIIA. (Incorporates Notice No. 2)
7-A-8/9 (New)	ESP Survey Planning Questionnaire – Double Skin Bulk Carriers	To align the requirements with IACS UR Z10.5 (Rev. 5) Annex IIIB. (Incorporates Notice No. 2)
7-A-8/11 (New)	ESP Survey Program – Non Double Skin Bulk Carriers	To align the requirements with IACS UR Z10.2 (Rev. 23) Annex VIA. (Incorporates Notice No. 2)
7-A-8/13 (New)	ESP Survey Planning Questionnaire – Non Double Skin Bulk Carriers	To align the requirements with IACS UR Z10.2 (Rev. 23) Annex VIB. (Incorporates Notice No. 2)
7-A-8/15 (New)	ESP Survey Program – Double Hull Oil Tankers	To align the requirements with IACS UR Z10.4 (Rev. 5) Annex IVA. (Incorporates Notice No. 2)
7-A-8/17 (New)	ESP Survey Planning Questionnaire – Double Hull Oil Tankers	To align the requirements with IACS UR Z10.4 (Rev. 5) Annex IVB. (Incorporates Notice No. 2)
7-A-8/19 (New)	ESP Survey Program – Non Double Hull Oil Tankers	To align the requirements with IACS UR Z10.1 (Rev. 14) Annex IVA. (Incorporates Notice No. 2)
7-A-8/21 (New)	ESP Survey Planning Questionnaire – Non Double Hull Oil Tankers	To align the requirements with IACS UR Z10.1 (Rev. 14) Annex IVB. (Incorporates Notice No. 2)
7-A-9/7	Actions Taken with Respect to Findings	To align the requirements with IACS UR Z10.5 (Rev. 5) Table VI 4.2. (Incorporates Notice No. 2)
7-A-14/3.7	Computerized System	To reflect current ABS practice. (Incorporates Notice No. 2)
7-A-14/3.9	Implementation Surveys	To reflect current ABS practice. (Incorporates Notice No. 2)
7-A-14/3.11	Program Implementation	To reflect current ABS practice. (Incorporates Notice No. 2)
7-A-14/5.1	Program Description	To reflect current ABS practice. (Incorporates Notice No. 2)
7-A-16/Table 2	Thickness Measurement Requirements at Special Periodical Surveys for Vessels without ESP and ESDC Notations – Non ESP Tankers. Gas and Independent Tank Carriers 90 meters (295 feet) and over in Length	To align the requirements with IACS UR Z7.2 Table II. (Incorporates Notice No. 2)
7-A-16/Table 14	Thickness Measurement Requirements at Special Periodical Surveys – Bulk Carriers – Double Skin ESP and Bulk Carrier Features of Combination Carriers – Double Skin ESP	To align the requirements with IACS UR Z10.5 (Rev. 7) Table II. (Incorporates Notice No. 2)
7-A-16/Table 18 (New)	Minimum Requirements for CLOSE-UP Examination at Special Periodical Surveys – Ore Carriers	To align the requirements with IACS UR Z10.5 (Rev. 6) Table I Sheet 2. (Incorporates Notice No. 2)

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PART 7	Rules for Survey After Construction	
7-3-2/5.5.1(g)ii)	Oil Tank Barges, Fuel Oil Tank Barges and Chemical Tank Barges Under 122 meters (400 feet) in Length	To clarify the tank testing requirements for tank barges
7-3-2/5.5.1(g)iii) (New)	<No Title>	To clarify the tank testing requirements for tank barges
7-7-1/13	Annual Examination	To clarify the survey requirements for waste heat boilers
7-A-10/1.5.5(b)	Severity Zones	To clarify the requirements for post weld heat treatment of Type 4 (NiAl bronze) alloy.
7-A-10/1.7.2(a)	General	To align the requirements for thickness of test plates with 7-A-10/Figure 10 (previously updated in line with IACS UR W27 (Rev. 1) Figure).
7-A-10/3.3.3	Tensile Properties	To add Alloy CB-6, in line with previous changes to Appendix 7-A-10.
7-A-10/3.7.2(a)	General	To align the requirements for thickness of test plates with 7-A-10/Figure 10 (previously updated in line with IACS UR W27 (Rev. 1) Figure).
7-A-10/3.9.2(b)	Grade CA-6NM, CA-15, and CB-6 Stainless Steel	To add Alloy CB-6, in line with previous changes to Appendix 7-A-10.
7-A-10/3.11.3(b)	Grade CA-6NM, CA-15, and CB-6 Stainless Steel	To add Alloy CB-6, in line with previous changes to Appendix 7-A-10.
7-A-10/Figure 10	Welding Qualification Test Plate Location of Test Specimens	To clarify that HV5 (Vickers) is not the only method of hardness testing that can accurately determine the hardness of small areas on the specimen.
7-A-10/Figure 11	Reduced-section Tension Specimen	To align the requirements for thickness of test plates with 7-A-10/Figure 10 (previously updated in line with IACS UR W27 (Rev. 1) Figure).
7-A-11/Figure 7	Weld Procedure Test Specimens for Shafts with Built-up Stainless Steel or Carbon Steel Cladding	Title revised to include carbon steel cladding and “stainless steel weld” revised to “weld metal” accordingly.
7-A-11/Figure 8	Welder Qualification Test Cladding	To clarify that the direction is welding torch travel, not how the torch is indexed in the bead-to-bead sequence for cladding.

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