



RULES FOR BUILDING AND CLASSING

STEEL VESSELS UNDER 90 METERS (295 FEET) IN LENGTH 2006

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 2006 edition of the *Rules for Building and Classing Steel Vessels Under 90 meters (295 feet) in Length* is a complete reprint of the 2001 edition, consisting of the **eight (8)** booklets as shown in Table 1. With regard to **three** booklets, **Part 1**, Part 2, and Part 7:
 - 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. Additional specific requirements are contained in Part 1 of these *Rules for Building and Classing Steel Vessels Under 90 meters (295 feet) in Length*
 - b) The purpose of the generic title *ABS Rules for Materials and Welding* 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. Rule Change Notice No. 9, as per Table 3, with an effective date of 1 January 2006, has been incorporated into the 2006 *Rules for Building and Classing Steel Vessels Under 90 meters (295 feet) in Length*. In addition, the Rule Changes contained in the previously published Notices 1 through 8 to the 2001 *Rules for Building and Classing Steel Vessels Under 90 meters (295 feet) in Length* (together with Corrigenda items) have also been incorporated into the text of the 2006 *Rules for Building and Classing Steel Vessels Under 90 meters (295 feet) in Length*.
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 Under 90 meters (295 feet) in Length* 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 Under 90 meters (295 feet) in Length*, 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 www.eagle.org/rules/downloads.html for download.

TABLE 1
Applicable Editions of Booklets Comprising 2006 Rules

Notices and General Information		2006
Part 1:	Rules for Conditions of Classification*	2008
Part 1:	Conditions of Classification (<i>Supplement to the ABS Rules for Conditions of Classification</i>)*	2006
Part 2:	Rules for Materials and Welding Rules for Testing and Certification of Materials Rules for Welding and Fabrication	2006
Part 3:	Hull Construction and Equipment	2006
Part 4:	Vessel Systems and Machinery	2006
Part 5:	Specialized Vessels and Services Chapter 8 Vessels Intended for Towing Chapter 9 Fire Fighting Vessels Chapter 10 Vessels Intended for Support Services to Offshore Installations Chapter 11 Oil Recovery Vessels Chapter 12 Safety Standby Service Vessels Chapter 13 Escort Vessels Chapter 14 Fishing Vessels	2006
Part 7:	Rules for Surveys After Construction	2006

Note: The requirements for conditions of classification are contained in the separate, generic *ABS Rules for Conditions of Classification (Part 1)*. Additional specific requirements are contained in Part 1 of these Rules.

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:

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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.

Rule Change Notice No. 9 (2006)

TABLE 3 Summary of Changes for the 2006 Rules

EFFECTIVE DATE 1 January 2006 – shown as (2006)
(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	
3-2-7/1.1	Openings and Penetrations	To specify the requirements for ventilation penetrations through watertight bulkheads
3-5-1/13.3.1	Operating Loads	For consistency with 4-5-1/5.1.1(a) of the <i>Rules for Building and Classing Steel Vessels</i> for windlass design with the cable stopper attached to the windlass structure.
3-7-1/Table 1	Testing Requirements for Tanks and Boundaries	To align the requirements with IACS UR S14 (Rev. 2) and to clarify that “top of hatch” means “top of hatch coaming” for the purpose of measuring hydrostatic testing head.
PART 4	Vessel Systems and Machinery	
4-2-1/13.1	Starting Air Systems	To align the requirements with the <i>Rules for Building and Classing Steel Vessels</i> .
4-2-1/13.3.2	Diesel-electric Propulsion	To redefine the parameter “ <i>G</i> ” of the equation for “ <i>S</i> ”, total number of consecutive starts.
4-3-1/19.1	Fitted Bolts	To clarify that the shaft diameter <i>D</i> is to be the as-built diameter.
4-3-3/11.9.8	Hydraulic Lock	To provide requirements for the use of an independent steering failure alarm for follow-up control systems in lieu of a hydraulic lock alarm.
4-4-1/9.17.3 (New)	Tanks	To align the requirements for installation of level gauges throughout the ABS Rules.
4-4-1/9.19 (New)	Flexible Hoses	To align the requirements with the <i>Rules for Building and Classing Steel Vessels</i> and industry practice.
4-4-2/19.1	Installation	To clarify that use of threaded connections outboard of the shell valve is not acceptable.
4-4-2/21.1	Valves Required	To require that materials readily rendered ineffective by heat are not to be used for the connection at the shell.
4-4-2/25.5	Non-integral Keel Cooler Installations	To align the requirements with the <i>Rules for Building and Classing Steel Vessels</i> and industry practice.
4-4-3/13.5	Gauge Glasses	To align the requirements for installation of level gauges throughout the ABS Rules.
4-4-8/1.5.1(c)	Design Pressure	To better align the required design pressure with available industrial equipment.
4-4-8/1.7	Testing	To better align the required design pressure with available industrial equipment.
4-4-8/13	Liquid Mud Cargo Tanks	To specify requirements for liquid mud cargo tanks.
4-6-5/7.1	General	To clarify that electrical plants of less than 75 kW are not required to have a split bus arrangement.

<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
4-6-2/5.17 (New)	Alarms and Safeguards for Emergency Diesel Engines	To incorporate the requirements of IACS UR M63.
4-6-2/Table 1 (New)	Alarms and Safeguards for Emergency Diesel Engines	To incorporate the requirements of IACS UR M63.
4-6-2/7.1.4	Motor Control Center	To clarify the requirements for permitting feeder cables to motor control centers with a current carrying capacity of less than 100% of the sum of the rated currents of all the connected motors.
4-6-2/7.9 (New)	Harmonics	To incorporate requirements for harmonics, in line with IEEE 519 and 2.8.2.2 of IEC 60092-101.
4-6-2/9.5.2(b)	Reverse Power Protection	To establish acceptance criteria in the case where setting the reverse power protection device in the range of 8% to 15% would be detrimental to the engine
4-6-2/9.15.2	Parallel Operation	To require the automatic opening of the disconnecting device for secondary side of the transformer when the primary side disconnecting device opens due to any reason.
4-6-2/13.1.3(a)	Machinery Spaces and Accommodation Spaces	To clarify that the requirement applies to Category A machinery spaces and that stairways leading to boat decks include stair towers and escape trunks.
4-6-2/15.9.4 (New)	Public Address System	To clarify the requirements where a single system serves for both public address and general emergency alarm.
4-6-2/17.3	Engineers' Alarm	To clarify the location at which the Engineers' alarm is to be audible and to specify the sound pressure level within the cabin.
4-6-3/3.1.1	Equipment Location	To incorporate the requirements of IACS UR E20.
4-6-3/Figure 1 (New)	An Example of Protected Area, Adjacent Area of Direct Spray and Adjacent Area Where Water May Extend	To incorporate the requirements of IACS UR E20.
4-6-3/Table 1	Minimum Degree of Protection	To incorporate the requirements of IACS UR E20.
4-6-3/5.1.7 (New)	Paint on Cables	To clarify the requirements where it is specifically intended to paint or apply any other coating on electric cables.
4-6-3/5.1.8 (New)	Cable Installation above High Voltage Switchgear and Control-gear	To require that cables are not to be installed near and above a pressure relief flap for high voltage switchgear and control-gear.
4-6-3/11.1.1	General	To clarify that fans for ventilation in any hazardous area are required to be non-sparking.
4-6-3/11.1.3	Cables Installation	To clarify that non-armored cables can be permitted for intrinsically safe circuits where such cables are protected from mechanical damage.
4-6-4/3.13.2	Shafts and Couplings	To address requirements for propulsion systems with directly coupled diesel engine-propeller, where shaft generators and shaft motors are an integral part of the propulsion shafting.

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<i>Part/Para. No.</i>	<i>Title/Subject</i>	<i>Status/Remarks</i>
4-6-4/13.1.3	Fire Resistant Property	To incorporate the requirements of IACS UR E15.1 (Rev. 1).
4-7-4/31.1	General	To clarify the required locations for the alarm monitoring stations.
4-7-4/Table 4B	Instrumentation and Safety System Functions in Centralized Control Station – Medium and High Speed (Trunk Piston) Diesel Engines	To clarify that bearing temperature detection in lieu of oil mist detection is acceptable. To add the provision of accepting an equivalent device to oil mist detection.
4-7-4/Table 6B	Instrumentation and Safety System Functions in Centralized Control Station – Generator Prime Mover for Electric Propulsion	To clarify that bearing temperature detection in lieu of oil mist detection is acceptable. To add the provision of accepting an equivalent device to oil mist detection.
PART 5	Specialized Vessels and Services	
5-8-A2/3.27	<No Title>	To reflect ABS survey practice for new construction

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