

RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part R

Fire Protection, Detection and Extinction

Rules for the Survey and Construction of Steel Ships

Part R

2017 AMENDMENT NO.2

Guidance for the Survey and Construction of Steel Ships

Part R

2017 AMENDMENT NO.2

Rule No.92 / Notice No.96 25 December 2017

Resolved by Technical Committee on 26 July 2017

An asterisk (*) after the title of a requirement indicates that there is also relevant information in the corresponding Guidance.

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Part R

**Fire Protection, Detection and
Extinction**

RULES

2017 AMENDMENT NO.2

Rule No.92 25 December 2017

Resolved by Technical Committee on 26 July 2017

An asterisk (*) after the title of a requirement indicates that there is also relevant information in the corresponding Guidance.

AMENDMENT TO THE RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

“Rules for the survey and construction of steel ships” has been partly amended as follows:

Part R FIRE PROTECTION, DETECTION AND EXTINCTION

Chapter 4 PROBABILITY OF IGNITION

4.5 Cargo Areas of Tankers

4.5.7 Gas Measurement*

Sub-paragraphs (1) and (2) have been amended as follows.

The following measures are to be provided for gas measurement:

- (1) Tankers are to be equipped with ~~two at least one~~ portable instruments for measuring flammable vapour concentrations and ~~two at least one~~ portable instruments for measuring oxygen concentrations, together with a sufficient set of spares ~~suitable means for the calibration of such instruments~~. Suitable means are to be provided for the calibration of such instruments. These measuring instruments ~~for measuring flammable vapour concentrations~~ are to be deemed appropriate by the Society.
- (2) Arrangements of gas measurement in double hull and double bottom spaces, deemed appropriate by the Society, are to comply with the following requirements in (a) through (c).
 - (a) ~~At least two of~~ Suitable portable instruments for measuring oxygen and flammable vapour concentrations are to be provided. In selecting these instruments, due attention is to be given to their use in combination with the fixed gas - sampling - line systems referred to in (b) below.
 - (b) (Omitted)
 - (c) (Omitted)
- (3) (Omitted)

EFFECTIVE DATE AND APPLICATION

1. The effective date of the amendments is 25 December 2017.

GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part R

**Fire Protection, Detection and
Extinction**

GUIDANCE

2017 AMENDMENT NO.2

Notice No.96 25 December 2017

Resolved by Technical Committee on 26 July 2017

AMENDMENT TO THE GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

“Guidance for the survey and construction of steel ships” has been partly amended as follows:

Part R FIRE PROTECTION, DETECTION AND EXTINCTION

Amendment 2-1

R4 PROBABILITY OF IGNITION

R4.5 Cargo Areas of Tankers

R4.5.5 Inert Gas Systems

Sub-paragraph -5 has been amended as follows.

5 The wording “double hull spaces” specified in **4.5.5-3(1), Part R of the Rules** means all ballast tanks and void spaces of double hull and double bottom spaces adjacent to the cargo tanks, including the forepeak tank and any other tanks and spaces under the bulkhead deck adjacent to cargo tanks, except cargo pump-rooms and ballast pump rooms. The expressions “tanks” and “spaces” are in accordance with **R4.5.7-~~35~~** through **-~~57~~**.

R4.5.7 Gas Measurement

Sub-paragraphs -2 to -5 have been renumbered to Sub-paragraphs -4 to -7, and Sub-paragraphs -2 and -3 have been added as follows.

2 The wording “suitable means are to be provided for the calibration of such instruments” in **4.5.7(1), Part R of the Rules** refers to portable instruments for measuring flammable vapour and oxygen concentrations being calibrated on board or ashore in accordance with the manufacturer’s instructions together with corresponding calibration records being kept. In this regard, the calibration of portable instruments for measuring flammable vapour and oxygen concentrations does not include any pre-operational accuracy tests as recommended by the manufacturer.

3 The number of portable instruments for measuring flammable vapour and oxygen concentrations required by **4.5.7(1), Part R of the Rules** is a minimum of two instruments, including spares, in cases where each is capable of measuring both oxygen and flammable vapour concentrations. However, in cases where separate portable instruments are respectively used to measure such concentrations, at least two of each, including spares, are to be provided on board.

~~**24**~~ (Omitted)

~~**35**~~ (Omitted)

~~**46**~~ (Omitted)

~~**57**~~ (Omitted)

R4.5.10 Protection of Cargo Pump-rooms

Sub-paragraph -4 has been amended as follows.

4 The wording “as deemed appropriate by the Society” in **4.5.10(3)**, **Part R** of the Rules is to be followed as given in **R4.5.7-24**.

EFFECTIVE DATE AND APPLICATION (Amendment 2-1)

- 1.** The effective date of the amendments is 25 December 2017.

R28 AUTOMATIC SPRINKLER, FIRE DETECTION AND FIRE ALARM SYSTEMS

R28.2 Engineering Specifications

R28.2.1 General Requirements

Sub-paragraph -2 has been amended as follows.

2 An approved equivalent system specified in **28.2.1-2, Part R of the Rules** is to be approved by the Society or organizations deemed appropriate by the Society in accordance with the “*Revised Guidelines for approval of sprinkler systems equivalent to that referred to in SOLAS regulation II-2/12 (IMO Res. A.800(19))*”(including amendments made by *IMO Res. MSC.265(84)*) and “*Unified Interpretation of Chapter 8 of the FSS Code and the Revised Guidelines for Approval of Sprinkler Systems Equivalent to that referred to in SOLAS Regulation II-2/12 (Resolution A.800(19))*”, as amended by resolution MSC.265(84) (MSC.1/Circ.1556)”.

EFFECTIVE DATE AND APPLICATION (Amendment 2-2)

- 1.** The effective date of the amendments is 25 December 2017.
- 2.** Notwithstanding the amendments to the Guidance, the current requirements apply to ships the keels of which were laid or which were at *a similar stage of construction* before the effective date.
(Note) The term “*a similar stage of construction*” means the stage at which the construction identifiable with a specific ship begins and the assembly of that ship has commenced comprising at least 50 tonnes or 1% of the estimated mass of all structural material, whichever is the less.

R9 CONTAINMENT OF FIRE

R9.2 Thermal and Structural Boundaries

Paragraph R9.2.3 has been amended as follows.

R9.2.3 Bulkheads and Decks

1 Where spaces are classified for the application of the standards of fire integrity, the requirements specified in **(1) to (11) of 9.2.3-2, Part R of the Rules** and further the requirements given in **Table R9.2.3-1** are also to be complied with. With respect to the provisions of **9.2.3-2, Part R of the Rules**, the wording “smaller, enclosed room” means a room having no entrance to corridors but only therefrom and where someone may occupy during a significant time (*e.g.*, a bed room in a cabin), and the wording “less than 30% communicating openings” means that the total area of the entrance mentioned above is less than 30% of the area of separating bulkheads or divisions. In this connection, ~~locker rooms, store rooms,~~ lavatories for control stations, ~~etc.~~, only having entrance therefrom, whose area is less than 30% of the area of divisions, may be regarded as an integral part of such spaces.

(-2 to -16 are omitted.)

17 With respect to the requirements of **9.2.3-2, Part R of the Rules**, a navigation locker that can only be accessed from the wheelhouse is to be considered as a control station, and Note e of **Table R9.1, Part R of the Rules**, may be applied.

Table R9.2.3-1 has been amended as follows.

Table R9.2.3-1

Control stations	Spaces containing navigational apparatus (steering stand, compass and radar equipment) Electric rooms (where charging/discharging panels or battery charges are located), battery rooms, motor-generator rooms for navigational apparatus, radio or inverter rooms Spaces containing control systems and storage rooms of fire-extinguishing medium for fixed fire extinguishing systems (See Note (1) below) <u>Navigation lockers that can only be accessed from the wheelhouse</u>
(Omitted)	

R9.2.4 Tankers

Sub-paragraph -4 has been added as follows.

4 With respect to the requirements of **9.2.4-2, Part R of the Rules**, a navigation locker that can only be accessed from the wheelhouse is to be considered as a control station, and Note c of **Table R9.3, Part R of the Rules**, may be applied.

EFFECTIVE DATE AND APPLICATION (Amendment 2-3)

1. The effective date of the amendments is 1 January 2018.
2. Notwithstanding the amendments to the Guidance, the current requirements apply to ships the keels of which were laid or which were at *a similar stage of construction* before the effective date.

(Note) The term “*a similar stage of construction*” means the stage at which the construction identifiable with a specific ship begins and the assembly of that ship has commenced comprising at least 50 *tonnes* or 1% of the estimated mass of all structural material, whichever is the less.

R13 MEANS OF ESCAPE

R13.4 Means of Escape from Machinery Spaces

R13.4.2 Dispensation from Two Means of Escape

Sub-paragraph -5 has been amended as follows.

5 With respect to the requirements of **13.4.2, Part R of the Rules**, escape routes that pass only through stairways and/or corridors ~~that have fire integrity protection equivalent to steering gear spaces~~ are considered as providing a “direct access to the open deck” specified in **13.4.2, Part R of the Rules**, provided that the escape routes from the steering gear spaces have fire integrity protection equivalent to:

- (1) the steering gear spaces; or
- (2) the stairways / corridors, whichever is more stringent.

EFFECTIVE DATE AND APPLICATION (Amendment 2-4)

1. The effective date of the amendments is 1 January 2018.
2. Notwithstanding the amendments to the Guidance, the current requirements apply to ships for which the date of contract for construction* is before the effective date.
* “contract for construction” is defined in the latest version of IACS Procedural Requirement (PR) No.29.

IACS PR No.29 (Rev.0, July 2009)

1. The date of “contract for construction” of a vessel is the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding.
2. The date of “contract for construction” of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder. For the purpose of this Procedural Requirement, vessels built under a single contract for construction are considered a “series of vessels” if they are built to the same approved plans for classification purposes. However, vessels within a series may have design alterations from the original design provided:
 - (1) such alterations do not affect matters related to classification, or
 - (2) If the alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the alterations are submitted to the Society for approval.The optional vessels will be considered part of the same series of vessels if the option is exercised not later than 1 year after the contract to build the series was signed.
3. If a contract for construction is later amended to include additional vessels or additional options, the date of “contract for construction” for such vessels is the date on which the amendment to the contract, is signed between the prospective owner and the shipbuilder. The amendment to the contract is to be considered as a “new contract” to which **1.** and **2.** above apply.
4. If a contract for construction is amended to change the ship type, the date of “contract for construction” of this modified vessel, or vessels, is the date on which revised contract or new contract is signed between the Owner, or Owners, and the shipbuilder.

Note:

This Procedural Requirement applies from 1 July 2009.