

RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part D

Machinery Installations

Rules for the Survey and Construction of Steel Ships

Part D

2013 AMENDMENT NO.1

Guidance for the Survey and Construction of Steel Ships

Part D

2013 AMENDMENT NO.2

Rule No.80 / Notice No.69 27th December 2013

Resolved by Technical Committee on 29th July 2013

Approved by Board of Directors on 24th September 2013

ClassNK
NIPPON KAIJI KYOKAI

RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part D

Machinery Installations

RULES

2013 AMENDMENT NO.1

Rule No.80 27th December 2013

Resolved by Technical Committee on 29th July 2013

Approved by Board of Directors on 24th September 2013

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

Part D MACHINERY INSTALLATIONS

Chapter 14 PIPING SYSTEMS FOR TANKERS

14.2 Cargo Oil Pumps, Cargo Oil Piping Systems, Piping in Cargo Oil Tanks, etc.

Paragraph 14.2.2 has been amended as follows.

14.2.2 Arrangement of Cargo Oil Piping Systems

1 Cargo oil pipes are classified as Group III pipes, except in cases where considered necessary by the Society.

2 Cargo oil tanks are to be provided with cargo oil suction pipes arranged so that cargo unloading can be carried out in cases where one of the cargo oil pumps is out of use.

3 Cargo oil pipes are to be arranged so as to be capable of loading cargo oil to cargo oil tanks without passing through cargo oil pumps.

In cases where loading pipes are led directly into tanks from above deck, the opening ends of these pipes are to be led into the lower parts of tanks as far as practicable in order to prevent any accidents caused by static electricity.

4 In cases where sea suction pipes for ballast purposes are connected to cargo oil pipes, stop valves are to be provided between sea suction valves and cargo piping.

5 Slip-on joints used in cargo oil pipes are to comply with the requirements specified in **12.3.3**.

6 Sea suction pipes and the discharge pipes for permanent ballast tanks are not to be connected to sea suction pipes and the discharge pipes for cargo oil tanks.

7 ~~Earthing between independent cargo oil tanks and hull structures is to be required.~~ All cargo oil tanks and cargo piping systems (~~cargo oil pipes, vent pipes, tank washing pipelines, etc.~~) are to be electrically bonded to hull structures by suitable methods such as metal-to-metal contact using welding or bolts, or bonding straps, etc.

8 The bonding straps specified in -7 above are to comply with the following requirements:

(1) Clearly visible so that any shortcomings can be clearly detected;

(2) Designed and sited so that they are protected against mechanical damage and that they are not affected by high resistivity contamination (e.g., corrosive products or paint); and

(3) Easy to install and replace.

EFFECTIVE DATE AND APPLICATION

1. The effective date of the amendments is 1 January 2014.
2. Notwithstanding the amendments to the Rules, the current requirements may 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.

GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part D

Machinery Installations

GUIDANCE

2013 AMENDMENT NO.2

Notice No.69 27th December 2013

Resolved by Technical Committee on 29th July 2013

Notice No.69 27th December 2013

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 D MACHINERY INSTALLATIONS

D14 PIPING SYSTEMS FOR TANKERS

D14.2 Cargo Oil Pumps, Cargo Oil Piping Systems, Piping in Cargo Oil Tanks, etc.

Paragraph D14.2.2 has been amended as follows.

D14.2.2 Arrangement of Cargo Oil Piping Systems

1 “All cargo oil tanks and cargo piping systems” in 14.2.2-7, Part D of the Rules includes the following tanks and cargo oil piping systems:

- (1) Cargo oil pipes, vent pipes, tank washing pipes, etc.;
- (2) Cargo tanks which are electrically separated from the hull of the ship (e.g., independent cargo oil tanks);
- (3) Pipe connections arranged for the removal (e.g., spool pieces); and
- (4) Wafer-style valves with non-conductive (e.g., PTFE) gaskets or seals.

2 For the purpose of the requirements in 14.2.2-7, Part D of the Rules, earthing is to conform to the requirements of 2.1.4, Part H of the Rules and the resistance between cargo oil tanks/cargo piping systems (cargo oil pipes, vent pipes, tank washing pipelines, etc.) and the hull is to be not greater than $1M\Omega$.

EFFECTIVE DATE AND APPLICATION

1. The effective date of the amendments is 1 January 2014.
2. Notwithstanding the amendments to the Guidance, the current requirements may 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.