

# GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

## Part N

## **Ships Carrying Liquefied Gases in Bulk**

**Guidance for the Survey and Construction of Steel Ships**

**Part N**

**2022 AMENDMENT NO.2**

Notice No.64      27 December 2022

Resolved by Technical Committee on 27 July 2022

**ClassNK**  
NIPPON KAIJI KYOKAI

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 N SHIPS CARRYING LIQUEFIED GASES IN BULK**

**N5 PROCESS PRESSURE VESSELS AND LIQUID, VAPOUR, AND PRESSURE PIPING SYSTEMS**

**N5.6 Cargo Transfer Arrangements**

**N5.6.5 Cargo Sampling Connections**

Sub-paragraph -3 has been added as follows.

**1** The requirements of **5.6.5, Part N of the Rules** are only applicable in cases where a sampling system is fitted on board. Connections used for controlling the atmosphere in cargo tanks during inerting or gassing up, however, are not considered to be cargo sampling connections.

**2** For the purpose of **5.6.5, Part N of the Rules**, two valves on the sample inlet are, in general, to be located at least 500 mm apart from each other, except where a smaller distance is permitted by the Society.

**3** In cases where gas sampling systems are connected to cargo transfer lines and where two valves are provided in accordance with **5.6.5, Part N of the Rules**, the relief valves specified in **5.5.6, Part N of the Rules** are to be provided. However, in the cases where measures are taken to prevent the retention of cargo liquid between such valves and where the following is complied with, the fitting of relief valves may be omitted.

- (1) Caution plates that show the procedures for gas sampling including how to operate both valves are to be provided at the operation position for gas sampling.
- (2) Confirmation whether both valves are open or closed are to be taken at the operation position for gas sampling.

## N9 CARGO CONTAINMENT SYSTEM ATMOSPHERE CONTROL

### N9.1 Atmosphere Control within the Containment Systems

Paragraph N9.1.4 has been amended as follows.

#### N9.1.4 Monitoring of Atmosphere Change

Gas sampling points referred to in **9.1.4, Part N of the Rules** are to be in accordance with the following requirements:

**1** The arrangement of gas sampling points in cargo tanks is to be determined according to cargo properties, cargo tank construction and capacity as well as the abilities of gas freeing and purging systems; moreover, in cases where appropriate, the adequacy of the arrangement of gas sampling points is to be verified by performance tests. The locations of gas sampling points are, as standard, to be at the upper, middle and lower spaces of the cargo tank.

~~**2** At least two valves are to be used to isolate a gas sampling point. However, in cases where only gas (not liquid) is sampled at the sampling point, just a single valve may be acceptable.~~

~~**3** In cases where gas sampling systems are connected to cargo transfer lines and where two valves are provided in accordance with ~~2~~ above, the relief valves specified in **5.5.6, Part N of the Rules** are to be provided. However, in the cases where measures are taken to prevent the retention of cargo liquid between such valves and where the following is complied with, the fitting of relief valves may be omitted.~~

~~(1) Caution plates that show the procedures for gas sampling including how to operate both valves are to be provided at the operation position for gas sampling.~~

~~(2) Confirmation whether both valves are open or closed are to be taken at the operation position for gas sampling.~~

**42** For ships which **Column f of Table N19.1 of the Rules** is applied according to the type of products to be carried and which are required to install toxic vapour detectors, the gas sampling system is to be of a closed-loop design to prevent cargo vapour from venting to the atmosphere.

~~**53**~~ The closed-loop designed gas sampling systems specified in ~~-42~~ above is to be provided with two valves respectively on both the sample inlet side and return side.

## EFFECTIVE DATE AND APPLICATION

1. The effective date of the amendments is 1 January 2023.
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.