

---

# **GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS**

**Part N**

**Ships Carrying Liquefied Gases in Bulk**

**GUIDANCE**

**2009      AMENDMENT NO.1**

Notice No.18      15th April 2009

Resolved by Technical Committee on 4th February 2009

Notice No.18 15th April 2009

## 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

#### N4 CARGO CONTAINMENT

##### N4.10 Construction and Testing

##### N4.10.14 Gas-trial and Cargo Full Loading Test

Table N4.10.14-2 has been amended as follows.

**Table N4.10.14-2 Survey Items of Full Loading Test**

	Survey items
1. At loading operation <sup>1)</sup>	<ul style="list-style-type: none"><li>• Continuous loading rate</li><li>• Proper operation of gas detection systems <sup>4)</sup></li><li>• Proper operation of cargo control and monitoring systems such as level gauging equipment, temperature sensors, pressure gauges, cargo pumps, compressors and cargo heat exchangers <sup>4)</sup></li><li>• Proper operation of over-flow control systems <sup>4)</sup></li><li>• Proper operation of nitrogen generating plants or inert gas generators and pressure control systems for insulation, interbarrier and annular spaces <sup>4)</sup></li><li>• Proper operation of cofferdam heating systems, if fitted <sup>4)</sup></li><li>• Proper operation of reliquefaction plants, if fitted <sup>4)</sup></li><li>• Proper operation of equipment fitted for the burning of cargo vapours <sup>4)</sup></li><li>• On-deck cargo piping system</li><li>• Topping off process for cargo tanks including proper operation of high level alarms</li></ul>
2. <del>Condition of cargo tanks and other cargo containment systems</del> After full loading or during voyage <sup>2)</sup>	<ul style="list-style-type: none"><li>• Cargo tanks and supports</li><li>• Hull adjacent to cargo tanks (cold spot)</li><li>• Insulation capacity of cargo tanks and supports (cold spot)</li><li>• Atmosphere in hold spaces</li><li>• <u>Capacity of pressure/temperature indicator</u></li></ul>
3. <del>During voyage</del> <sup>2)</sup>	<ul style="list-style-type: none"><li><del>• Insulation capacity of cargo tanks and supports (cold spot)</del></li><li><del>• Cold spot on the construction adjacent to cargo tanks</del></li><li><del>• Capacity of pressure/temperature indicator</del></li></ul>

43. At discharging operation <sup>3)</sup>	<ul style="list-style-type: none"> <li>• Emergency shutdown system testing prior to commencement of unloading</li> <li>• Discharging rate</li> <li>• Conditions of related installations such as those listed in 1.</li> <li>• On membrane vessels, verification that the readings of the cofferdam and inner hull temperature sensors are not below the allowable temperature for the selected grade of steel</li> <li>• On-deck cargo piping system</li> <li>• Other operation of discharging</li> <li>• Submission/Survey of related records such as cold spot examination records<sup>6)</sup>, cargo logs, operation logs of installations related to cargo operations and alarm reports where no attendance during the cargo loaded voyage of 22.</li> </ul>
--	--

Note:

- 1) Priority is to be given to latter stages of loading (approximately last 6 hours).
- 2) May be exempted from ~~witness~~ the presence of the Surveyors. In such cases, each survey item is to be recorded in order that the Surveyors can check this record.
- 3) Priority is to be given to the commencement of unloading (approximately first 4-6 hours).
- 4) Overall inspection may be accepted where an installation are not in operation.
- 5) In case where implementation is difficult, the verification of operation may be made by suitable other method.
- 6) Surveyors are to check the sampling of cold spot records, if possible.

## **N6 MATERIALS OF CONSTRUCTION**

### **N6.1 General**

Paragraph N6.1.4 has been added as follows.

#### **N6.1.4 Impact Test**

The wording “To be in accordance with Recognized Standard” referred to in the requirements given **6.1.4-1, Part N of the Rules** means to refer to **note (6) of Table K4.28.**

### **EFFECTIVE DATE AND APPLICATION**

1. The effective date of the amendments is 15 April 2009.