INTERNATIONAL MARITIME ORGANIZATION

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4 ALBERT EMBANKMENT
LONDON SE1 7SR
Telephone: +44 (0)20 7735 7611 Fax: +44 (0)20 7587 3210

Circular Letter No.4560
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To: All IMO Members
Contracting Governments to the International Convention for the Safety of Life at Sea, 1974
Parties to the Protocol of 1978 Relating to the International Convention for the Safety of Life at Sea, 1974

Subject: **Amendments to the International Convention for the Safety of Life at Sea (SOLAS), 1974**

**Amendments to the Protocol of 1978 relating to the International Convention for the Safety of Life at Sea, 1974 (1978 SOLAS Protocol)**

**Amendments to the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code)**

**Amendments to the International Code of Safety for Ships Using Gases or other Low-Flashpoint Fuels (IGF Code)**

**Amendments to the International Code on the Enhanced Programme of Inspections during Surveys of Bulk Carriers and Oil Tankers, 2011 (2011 ESP Code)**

**Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)**

1 The Maritime Safety Committee, at its 105th session (20 to 29 April 2022), approved draft amendments to:

.1 chapter II-2 of the International Convention for the Safety of Life at Sea (SOLAS), 1974, and the draft new chapter XV (Safety measures for ships carrying industrial personnel), as set out in annex 1;

.2 the Protocol of 1978 relating to the International Convention for the Safety of Life at Sea, 1974 (1978 SOLAS Protocol), as set out in annex 2;

.3 the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code), as set out in annex 3;

.4 the International Code of Safety for Ships Using Gases or other Low-flashpoint Fuels (IGF Code), as set out in annex 4; and

.5 the International Code on the Enhanced Programme of Inspections during Surveys of Bulk Carriers and Oil Tankers, 2011 (2011 ESP Code), as set out in annex 5,

for circulation with a view to adoption at its 106th session, scheduled for 2 to 11 November 2022.

2 The Maritime Safety Committee, at its 102nd session (13 to 22 May 2020), had approved draft amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), as set out in annex 6, for circulation with a view to subsequent adoption subject to concurrent approval by the Marine Environment Protection Committee, which, at its seventy-seventh session (22 to 26 November 2021), approved those draft amendments with a view to adoption at MEPC 78 (6 to 10 June 2022) for entry into force on 1 July 2024.

3 The Secretary-General has the honour to transmit herewith, in accordance with article VIII(b)(i) of the International Convention for the Safety of Life at Sea, 1974, and article II of the 1978 SOLAS Protocol, as appropriate, the text of the aforementioned proposed amendments to the Convention, the 1978 SOLAS Protocol and the IGC, IGF, 2011 ESP and IBC Codes, set out in annexes 1 to 6, respectively, for consideration with a view to adoption by the Committee at its 106th session, in accordance with article VIII(b)(iv) of the Convention and article II of the Protocol, as appropriate.

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# ANNEX 1

## DRAFT AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974

## CHAPTER II-2
## Construction – Fire protection, fire detection and fire extinction

### Part A
### General

**Regulation 3**
*Definitions*

1 The following new paragraphs are added after existing paragraph 58, together with the associated footnotes:

"59 *Confirmed case (flashpoint)*: A confirmed case is when a representative sample analysed in accordance with standards acceptable to the Organization* by an accredited laboratory** reports the flash point as measured to be below 60°C.

* ISO 2719:2016- Determination of flash point - Pensky-Martens closed cup method, Procedure A (for Distillate Fuels) or Procedure B (for Residual Fuels).

** The laboratory is to be accredited to ISO/IEC 17025:2017 or an equivalent standard for the performance of the given flash point test ISO 2719:2016.

60 *Representative sample* is a product specimen having its physical and chemical characteristics identical to the average characteristics of the total volume being sampled.

61 *Oil fuel* is defined in regulation 1 of Annex 1 of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto."

### Part B
### Prevention of fire and explosion

**Regulation 4**
*Probability of ignition*

2 At the end of paragraph 2.1.4, the word "and" is deleted and at the end of paragraph 2.1.5, "." is replaced by ";".

3 The following new sub-paragraphs are added after existing paragraph 2.1.5, together with the associated footnotes:

".6 ships carrying oil fuel shall prior to bunkering be provided with a declaration signed and certified by the fuel oil supplier's representative that the oil fuel supplied is in conformity with regulation SOLAS II.2/4.2.1 and the test method used for determining the flashpoint. A bunker delivery note for the fuel delivered to the ship shall contain the flashpoint specified in accordance with standards acceptable to the Organization,* or a statement that flashpoint has been measured at or above 70ºC;**

* ISO 2719:2016, Determination of flash point – Pensky-Martens closed cup method, Procedure A (for Distillate Fuels) or Procedure B (for Residual Fuels).

** This information may be included in the bunker delivery note according to MARPOL Annex VI/18.

.7 the Contracting Governments undertake to ensure that appropriate authorities designated by them inform the Organization for transmission to Contracting Governments and Member States of the Organization of all confirmed cases where oil fuel suppliers have failed to meet the requirements specified in SOLAS regulation II-2/4.2.1; and

.8 the Contracting Governments undertake to ensure that appropriate authorities designated by them take action as appropriate against oil fuel suppliers that have been found to deliver fuel that does not comply with SOLAS regulation II-2/4.2.1."

**CHAPTER XV**
**Safety measures for ships carrying industrial personnel**

4 The following new chapter XV (Safety measures for ships carrying industrial personnel) is added after the existing chapter XIV (Safety measures for ships operating in polar waters):

**"CHAPTER XV**
**Safety measures for ships carrying industrial personnel**

**Regulation 1**
*Definitions*

For the purpose of this chapter:

1 *Industrial Personnel (IP)* means all persons who are transported or accommodated on board for the purpose of offshore industrial activities performed on board other ships and/or offshore facilities.

2 *IP Code* means the International Code of Safety for Ships Carrying Industrial Personnel, as adopted by resolution MSC.[…]([…]), as may be amended, provided that amendments to the IP Code are adopted, brought into force and take effect in accordance with the provisions of article VIII of the present Convention concerning the amendment procedures applicable to the annex other than chapter I.

3 *Offshore industrial activities* mean the construction, maintenance, decommissioning, operation or servicing of offshore facilities related, but not limited, to exploration and exploitation of resources by the renewable or hydrocarbon energy sectors, aquaculture, ocean mining or similar activities.

4 *HSC Code* means the International Code of Safety for High-Speed Craft, 2000, adopted by the Maritime Safety Committee of the Organization by resolution MSC.97(73), as may be amended by the Organization, provided that such amendments are adopted, brought into force and take effect in accordance with the provisions of article VIII of the present Convention concerning the amendment procedures applicable to the annex other than chapter I.

**Regulation 2**
*General*

1 Wherever in the IP Code a reference is made to the passenger ship requirements, the corresponding cargo ship requirements are deemed to be complied with.

2 For the purpose of this chapter, industrial personnel shall not be treated or considered as passengers.

3 Wherever in this chapter, or in the IP Code, the number of industrial personnel appears as a parameter, it shall be the aggregate number of industrial personnel, special personnel[1] and passengers carried on board, where the number of passengers shall not exceed 12.

4 Notwithstanding the provisions of regulation 2.1 above, for high-speed craft to which chapter X applies and notwithstanding the provisions of chapters 2 to 12 and 18 of the HSC Code, a ship certified in accordance with the requirements of this chapter and the IP Code shall be deemed to have complied with the requirements of chapters 2 to 12 and 18 of the HSC Code.

**Regulation 3**
*Application*

1 Unless expressly provided otherwise, this chapter applies to cargo ships and high-speed cargo craft, of 500 gross tonnage and upwards, constructed on or after [date of entry into force] which carry more than 12 industrial personnel.

2 Cargo ships constructed before [date of entry into force], authorized by the Administration to carry more than 12 industrial personnel in accordance with the recommendations developed by the Organization,[2] shall comply with requirements III/1, III/2 (except for paragraph 2.1.7), IV/7 and IV/8 of the IP Code by the first intermediate or renewal survey, whichever occurs first, after [date of entry into force].

3 High-speed cargo craft constructed before [date of entry into force], authorized by the Administration to carry more than 12 industrial personnel in accordance with the recommendations developed by the Organization,[2] shall comply with the requirements III/1, III/2 (except for paragraph 2.1.7), V/7 and V/8 of the IP Code by the third periodical or first renewal survey, whichever occurs first, after [date of entry into force].

4 Cargo ships and high-speed cargo craft, irrespective of date of construction, which prior to the [date of entry into force] have not been authorized by the Administration to carry more than 12 industrial personnel based on the recommendations developed by the Organization,[2] shall comply and be certified in accordance with this chapter and the IP Code prior to the carriage of more than 12 industrial personnel on board.

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1 Refer to Code of Safety for Special Purpose Ships, 2008.

2 Refer to *Interim recommendations on the safe carriage of more than 12 industrial personnel on board vessels engaged on international voyages* (resolution MSC.418(97)).

**Regulation 4**
*Application of other chapters*

1 The regulations for cargo ships contained in the other chapters of the present Convention apply to ships described in regulation 3.1, except as modified by this chapter.

2 Notwithstanding the provisions of regulation 4.1 above, for high-speed craft to which the HSC Code apply, the regulations for cargo craft in that Code apply except as modified by this chapter.

**Regulation 5**
*Requirements*

1 Ships and high-speed craft shall:

.1 be certified as a cargo ship or high-speed cargo craft in accordance with either chapter I or chapter VIII or chapter X, as applicable;

.2 meet the requirements of the IP Code; and

.3 in addition to the requirements of regulations I/8, I/9 and I/10 or of sections 1.5 to 1.9 of the HSC Code, as applicable, be surveyed and certified, as provided for in the IP Code.

2 Ships and high-speed craft to which this chapter applies, holding a certificate issued pursuant to the provisions of paragraph 1 above, shall be subject to the control established in regulations I/19 or in XI-1/4 and section 1.10 of the HSC Code, as applicable. For this purpose, such certificates shall be treated as a certificate issued under regulations I/12 or I/13."

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# ANNEX 2

## DRAFT AMENDMENTS TO THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED

ANNEX

## MODIFICATIONS AND ADDITIONS TO THE ANNEX TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974

## APPENDIX

The existing form of the Cargo Ship Safety Equipment Certificate is replaced by the following:

***"FORM OF SAFETY EQUIPMENT CERTIFICATE FOR CARGO SHIPS***

**CARGO SHIP SAFETY EQUIPMENT CERTIFICATE**

This Certificate shall be supplemented by a Record of Equipment for Cargo Ship Safety (Form E)

(Official seal) (State)

Issued under the provisions of the
INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE
AT SEA, 1974, as modified by the Protocol of 1978 relating thereto

under the authority of the Government of

_____
(*name of the State*)

by _____
(*person or organization authorized*)

***Particulars of ship***[1]

Name of ship.....

Distinctive number or letters .....

Port of registry .....

Gross tonnage.....

Deadweight of ship (metric tons)[2].....

Length of ship (regulation III/3.12) .....

IMO number[3].....

Type of ship[4]

Bulk carrier
Oil tanker
Chemical tanker
Gas carrier
Cargo ship other than any of the above

Date on which keel was laid or ship was at a similar stage of construction or, where applicable, date on which work for a conversion or an alteration or modification of a major character was commenced .....

1 Alternatively, the particulars of the ship may be placed horizontally in boxes.

2 For oil tankers, chemical tankers and gas carriers only.

3 In accordance with the *IMO Ship Identification Number Scheme*, adopted by the Organization by resolution A.1117(30).

4 Delete as appropriate.

***THIS IS TO CERTIFY:***

1 That the ship has been surveyed in accordance with the requirements of regulation I/8 of the Convention, as modified by the 1978 Protocol.

2 That the survey showed that:

2.1 the ship complied with the requirements of the Convention as regards fire safety systems and appliances and fire control plans;

2.2 the life-saving appliances and the equipment of the lifeboats, liferafts and rescue boats were provided in accordance with the requirements of the Convention;

2.3 the ship was provided with a line-throwing appliance in accordance with the requirements of the Convention;

2.4 the ship complied with the requirements of the Convention as regards shipborne navigational equipment, means of embarkation for pilots and nautical publications;

2.5 the ship was provided with lights, shapes and means of making sound signals and distress signals in accordance with the requirements of the Convention and the International Regulations for Preventing Collisions at Sea in force;

2.6 in all other respects the ship complied with the relevant requirements of the Convention;

2.7 the ship was/was not[4] subjected to an alternative design and arrangements in pursuance of regulation(s) II-2/17 / III/38[4] of the Convention;

2.8 a Document of approval of alternative design and arrangements for fire protection/ life-saving appliances and arrangements[4] is/is not[4] appended to this Certificate.

3 That the ship operates in accordance with regulation III/26.1.1.1[5] within the limits of the trade area ……

4 That in implementing regulation I/6(b) the Government has instituted:

- mandatory annual surveys;
- unscheduled inspections.

5 That an Exemption Certificate has/has not[4] been issued.

[4] Delete as appropriate.

[5] Refer to the 1983 amendments to SOLAS (MSC.6(48)), applicable to ships constructed on or after 1 July 1986, but before 1 July 1998 in the case of self-righting partially enclosed lifeboat(s) on board.

***This certificate is valid until*** …….

Completion date of the survey on which this certificate is based: …….. *(dd/mm/yyyy)*

Issued at …….....
(Place of issue of certificate)

……..... …….....
(Date of issue) (Signature of authorized official issuing the certificate)

(Seal or stamp of the issuing authority, as appropriate)

**INTERMEDIATE SURVEY**

(for tankers of 10 years of age and over)

This is to certify that at an intermediate survey required by regulation I/8 of the Convention, as modified by the 1978 Protocol, this ship was found to comply with relevant provisions of the Convention.

Signed: ……..
(Signature of authorized official)

Place: …….

Date: ……..

(Seal or stamp of the Authority, as appropriate)

**MANDATORY ANNUAL SURVEYS OR UNSCHEDULED INSPECTIONS**

This is to certify that the ship has been surveyed in accordance with regulation I/6(b) of the Convention, as modified by the 1978 Protocol and the relevant recommendations of the Organization.[6]

mandatory annual survey[4] [7]

unscheduled inspection[4]

Signed: ……..……..…….

Place: ……..……..……..

Date: ……..……..…...

(Seal or stamp of the Authority as appropriate)

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Under the provisions of regulation I/14 of the Convention, as modified by the 1978 Protocol, the validity of this Certificate is extended until …….....

Signed: …….....

Place: ……..…

Date: …….

(Seal or stamp of the Authority as appropriate)"

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4 Delete as appropriate.

6 Reference is made to the *Guidelines on surveys required by the 1978 SOLAS Protocol, the International Bulk Chemical Code and the International Gas Carrier Code*, adopted by the Organization by resolution A.560(14), as amended by MSC.84(70), and applicable parts of the *Survey Guidelines under the Harmonized System of Survey and Certification (HSSC), 2011*, as may be amended, adopted by the Organization by resolution A.1053(27).

7 An intermediate survey, but not an unscheduled inspection, may take the place of a mandatory annual survey.

**ANNEX 3**

**DRAFT AMENDMENTS TO THE INTERNATIONAL CODE FOR THE CONSTRUCTION AND EQUIPMENT OF SHIPS CARRYING LIQUEFIED GASES IN BULK (IGC Code)**

**CHAPTER 6**
**MATERIALS OF CONSTRUCTION AND QUALITY CONTROL**

## 6.4 Requirements for metallic materials

### 6.4.1 General requirements for metallic materials

Table 6.3 is replaced in its entirety, as follows:

"**Table 6.3**

| **PLATES, SECTIONS AND FORGINGS See note 1 FOR CARGO TANKS, SECONDARY BARRIERS AND PROCESS PRESSURE VESSELS FOR DESIGN TEMPERATURES BELOW -55°C AND DOWN TO -165°C See note 2 Maximum thickness 25 mm See notes 3 and 4** | | |
|---|---|---|
| Minimum design temperature (°C) | Chemical composition See note 5 and heat treatment | Impact test temperature (°C) |
| -60 | 1.5% nickel steel – normalized or normalized and tempered or quenched and tempered or TMCP. See note 6 | -65 |
| -65 | 2.25% nickel steel – normalized or normalized and tempered or quenched and tempered or TMCP. See notes 6 and 7 | -70 |
| -90 | 3.5% nickel steel – normalized or normalized and tempered or quenched and tempered or TMCP. See notes 6 and 7 | -95 |
| -105 | 5% nickel steel – normalized or normalized and tempered or quenched and tempered. See notes 6, 7 and 8 | -110 |
| -165 | 9% nickel steel – double normalized and tempered or quenched and tempered. See note 6 | -196 |
| -165 | Austenitic steels, such as types 304, 304L, 316, 316L, 321 and 347 solution treated See note 9 | -196 |
| -165 | High manganese austenitic steel – hot rolling and controlled cooling. See notes 10 and 11 | -196 |
| -165 | Aluminium alloys; such as type 5083 annealed | Not required |
| -165 | Austenitic Fe-Ni alloy (36% nickel). Heat treatment as agreed | Not required |
| **TENSILE AND TOUGHNESS (IMPACT) TEST REQUIREMENTS** | | |
| **Sampling frequency** | | |
| ◆ Plates | Each "piece" to be tested | |
| ◆ Sections and forgings | Each "batch" to be tested | |
| Toughness (Charpy V-notch test) | | |
| ◆ Plates | Transverse test pieces. Minimum average energy value (KV) 27J | |
| ◆ Sections and forgings | Longitudinal test pieces. Minimum average energy (KV) 41J | |

***Notes***

1 The impact test required for forgings used in critical applications shall be subject to special consideration by the Administration.

2 The requirements for design temperatures below -165°C shall be specially agreed with the Administration.

3 For materials 1.5% Ni, 2.25% Ni, 3.5% Ni and 5% Ni, with thicknesses greater than 25 mm, the impact tests shall be conducted as follows:

| Material thickness (mm) | Test temperature (°C) |
|---|---|
| 25 < t ≤ 30 | 10°C below design temperature |
| 30 < t ≤ 35 | 15°C below design temperature |
| 35 < t ≤ 40 | 20°C below design temperature |

The energy value shall be in accordance with the table for the applicable type of test specimen. For material thickness of more than 40 mm, the Charpy V-notch values shall be specially considered.

4 For 9% Ni steels, austenitic stainless steels, high manganese austenitic steels and aluminium alloys, thickness greater than 25 mm may be used.

5 The chemical composition limits shall be in accordance with recognized standards.

6 TMCP nickel steels will be subject to acceptance by the Administration.

7 A lower minimum design temperature for quenched and tempered steels may be specially agreed with the Administration.

8 A specially heat-treated 5% nickel steel, for example triple heat-treated 5% nickel steel, may be used down to -165°C, provided that the impact tests are carried out at -196°C.

9 The impact test may be omitted, subject to agreement with the Administration.

10 The use of the material shall be subject to the required conditions specified in the Guidelines developed by the Organization. *

11 The impact test may not be omitted for high manganese austenitic steel.

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* Refer to the *Guidelines on the application of high manganese austenitic steel for cryogenic service* (MSC.1/Circ.1599/Rev.1).

# ANNEX 4

## DRAFT AMENDMENTS TO THE INTERNATIONAL CODE OF SAFETY FOR SHIPS USING GASES OR OTHER LOW-FLASHPOINT FUELS (IGF CODE)

## PART A-1
## SPECIFIC REQUIREMENTS FOR SHIPS USING NATURAL GAS AS FUEL

### 7 – Material and general pipe design

### 7.4 Regulations for materials

### 7.4.1 Metallic materials

Table 7.3 is replaced in its entirety, as follows:

"**Table 7.3**

| **PLATES, SECTIONS AND FORGINGS see note 1 FOR FUEL TANKS, SECONDARY BARRIERS AND PROCESS PRESSURE VESSELS FOR DESIGN TEMPERATURES BELOW MINUS 55°C AND DOWN TO MINUS 165°C see note 2 Maximum thickness 25 mm see note 3, 4** | | |
|---|---|---|
| Minimum design temp. (°C) | Chemical composition see note 5 and heat treatment | Impact test temp. (°C) |
| -60 | 1.5% nickel steel – normalized or normalized and tempered or quenched and tempered or TMCP see note 6 | -65 |
| -65 | 2.25% nickel steel – normalized or normalized and tempered or quenched and tempered or TMCP see note 6, 7 | -70 |
| -90 | 3.5% nickel steel – normalized or normalized and tempered or quenched and tempered or TMCP see note 6, 7 | -95 |
| -105 | 5% nickel steel – normalized or normalized and tempered or quenched and tempered see note 6, 7 and 8 | -110 |
| -165 | 9% nickel steel – double normalized and tempered or quenched and tempered[6] | -196 |
| -165 | Austenitic steels, such as types 304, 304L, 316, 316L, 321 and 347 solution treated[9] | -196 |
| -165 | High manganese austenitic steel – hot rolling and controlled cooling See notes 10 and 11 | -196 |
| -165 | Aluminium alloys; such as type 5083 annealed | Not required |
| -165 | Austenitic Fe-Ni alloy (36% nickel). Heat treatment as agreed | Not required |
| TENSILE AND TOUGHNESS (IMPACT) TEST REGULATIONS | | |
| Sampling frequency | | |
| ◆ Plates | Each "piece" to be tested | |
| ◆ Sections and forgings | Each "batch" to be tested | |
| Toughness (Charpy V-notch test) | | |
| ◆ Plates | Transverse test pieces. Minimum average energy value (KV) 27J | |
| ◆ Sections and forgings | Longitudinal test pieces. Minimum average energy (KV) 41J | |

***Notes***

1. The impact test required for forgings used in critical applications shall be subject to special consideration by the Administration.

2. The regulations for design temperatures below -165°C shall be specially agreed with the Administration.

3. For materials 1.5% Ni, 2.25% Ni, 3.5% Ni and 5% Ni, with thicknesses greater than 25 mm, the impact tests shall be conducted as follows:

| Material thickness (mm) | Test temperature (°C) |
|---|---|
| 25 < t ≤ 30 | 10°C below design temperature |
| 30 < t ≤ 35 | 15°C below design temperature |
| 35 < t ≤ 40 | 20°C below design temperature |

   The energy value shall be in accordance with the table for the applicable type of test specimen. For material thickness of more than 40 mm, the Charpy V-notch values shall be specially considered.

4. For 9% Ni steels, austenitic stainless steels, high manganese austenitic steels and aluminium alloys, thickness greater than 25 mm may be used.

5. The chemical composition limits shall be in accordance with recognized standards.

6. Thermo-mechanical controlled processing (TMCP) nickel steels will be subject to acceptance by the Administration.

7. A lower minimum design temperature for quenched and tempered steels may be specially agreed with the Administration.

8. A specially heat-treated 5% nickel steel, for example triple heat-treated 5% nickel steel, may be used down to -165°C, provided that the impact tests are carried out at -196°C.

9. The impact test may be omitted subject to agreement with the Administration.

10 The use of the material shall be subject to the required conditions specified in the Guidelines developed by the Organization. *

11. The impact test may not be omitted for high manganese austenitic steel.

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* Refer to the *Guidelines on the application of high manganese austenitic steel for cryogenic service* (MSC.1/Circ.1599/Rev.1).

# ANNEX 5

# DRAFT AMENDMENTS TO THE INTERNATIONAL CODE ON THE ENHANCED PROGRAMME OF INSPECTIONS DURING SURVEYS OF BULK CARRIERS AND OIL TANKERS, 2011 (2011 ESP CODE)

## ANNEX A

## CODE ON THE ENHANCED PROGRAMME OF INSPECTIONS DURING THE SURVEYS OF BULK CARRIERS

### Part A

### Code on the enhanced programme of inspections during surveys of bulk carriers having single-side skin construction

**2 Renewal survey**

***2.3 Space protection***

1 The existing text of paragraph 2.3.1 is replaced by the following:

"2.3.1 Where provided, the condition of the corrosion prevention system of ballast tanks should be examined. For ballast tanks excluding double-bottom tanks, where a hard protective coating is found to be in less than GOOD condition as defined in 1.2.11, and it is not renewed, or where a soft or semi-hard coating has been applied, or where a hard protective coating has not been applied from the time of construction, the tanks in question should be examined at annual intervals. Thickness measurements should be carried out as deemed necessary by the surveyor. When such breakdown of hard protective coating is found in water ballast double-bottom tanks and it is not renewed, where a soft or semi-hard coating has been applied or where a hard protective coating has not been applied from the time of construction, the tanks in question may be examined at annual intervals. When considered necessary by the surveyor, or where extensive corrosion exists, thickness measurement should be carried out."

**4 Intermediate survey**

***4.2 Bulk carriers 5 to 10 years of age***

2 The existing text of paragraphs 4.2.1.2 and 4.2.1.3 are replaced by the following:

"4.2.1.2 Where a hard coating is found to be in less than GOOD condition, corrosion or other defects are found in water ballast tanks or where hard protective coating was not applied from the time of construction, the examination should be extended to other ballast tanks of the same type.

4.2.1.3 In ballast tanks other than double-bottom tanks, where a hard protective coating is found to be in less than GOOD condition and it is not renewed, or where soft or semi-hard coating has been applied, or where a hard protective coating was not applied from the time of construction, the tanks in question should be examined and thickness measurements carried out as considered necessary at annual intervals. When such breakdown of hard protective coating is found in ballast double-bottom tanks, where a soft or semi-hard coating has been applied, or where a hard protective

coating has not been applied, the tanks in question may be examined at annual intervals. When considered necessary by the surveyor, or where extensive corrosion exists, thickness measurements should be carried out."

ANNEX 7

**CONDITION EVALUATION REPORT (EXECUTIVE HULL SUMMARY REPORT)**

***Contents of condition evaluation report (executive hull summary report)***

3 The existing Part 8 (Memoranda) is replaced by the following:

"Part 8 – Memoranda
- Acceptable defects
- Any points of attention for future surveys, e.g. for suspect areas
- Examination of ballast tanks at annual surveys due to coating breakdown

For ballast tanks, if coating condition less than GOOD is given, tanks shall be examined at annual surveys. This shall be noted in part 8 of the Contents of condition evaluation report (executive hull summary report)."

ANNEX 9

**GUIDELINES FOR TECHNICAL ASSESSMENT IN CONJUNCTION WITH THE PLANNING OF ENHANCED SURVEYS FOR SINGLE-SIDE SKIN BULK CARRIERS – RENEWAL SURVEY HULL**

***References***

4 The existing reference no 3 (IACS) is replaced by the following:

"3 IACS Recommendation 76, Guidelines for Surveys, Assessment and Repair of Hull Structure - Bulk Carriers, 2007"

**Part B**

**Code on the enhanced programme of inspections during surveys of bulk carriers having double-side skin construction**

**2 Renewal survey**

***2.3 Space protection***

5 The existing text of paragraph 2.3.1 is replaced by the following:

"2.3.1 Where provided, the condition of the corrosion prevention system of ballast tanks should be examined. For ballast tanks, excluding double-bottom tanks, where a hard protective coating is found to be in less than GOOD condition as defined in 1.2.11, and it is not renewed, or where a soft or semi-hard coating has been applied, or where a hard protective coating has not been applied from the time of construction, the tanks in question should be examined at annual intervals. Thickness measurements should be carried out as deemed necessary by the surveyor. When such breakdown of hard

protective coating is found in water ballast double-bottom tanks and it is not renewed, where a soft or semi-hard coating has been applied or where a hard protective coating has not been applied from the time of construction, the tanks in question may be examined at annual intervals. When considered necessary by the surveyor, or where extensive corrosion exists, thickness measurement should be carried out."

6 A new paragraph 2.3.4 is added after existing paragraph 2.3.3, as follows:

"2.3.4 For double-side skin void spaces bounding cargo holds for bulk carriers exceeding 20 years of age and of 150 m in length and upwards, where provided, the condition of the corrosion prevention system of void spaces shall be examined. Where a hard protective coating is found to be in POOR condition as defined in 1.2.11, and it is not renewed, or where a soft or semi-hard coating has been applied, or where a hard protective coating has not been applied from the time of construction, the void spaces in question shall be examined at annual intervals. Thickness measurements shall be carried out as deemed necessary by the surveyor."

## 3 Annual survey

7 A new paragraph 3.7 is added after existing paragraph 3.6.2, as follows:

"**3.7 Examination of double-side skin void spaces for bulk carriers exceeding 20 years of age and of 150 m in length and upwards**

Examination of double-side skin void spaces, for bulk carriers exceeding 20 years of age and of 150 m in length and upwards, should be carried out when required as a consequence of the results of the renewal survey and intermediate survey. When considered necessary by the Administration, or when extensive corrosion exists, thickness measurements should be carried out. If the results of these thickness measurements indicate that substantial corrosion is found, the extent of thickness measurements should be increased in accordance with annex 10. These extended thickness measurements should be carried out before the survey is credited as completed. Suspect areas identified at previous surveys should be examined. Areas of substantial corrosion identified at previous surveys should have thickness measurements taken. For bulk carriers built under the IACS Common Structural Rules, the annual thickness gauging may be omitted where a protective coating has been applied in accordance with the coating manufacturer's requirements and is maintained in good condition."

## 4 Intermediate survey

### *4.2 Double-side bulk carriers 5 to 10 years of age*

4.2.1 Ballast tanks

8 The existing text of paragraphs 4.2.1.2 and 4.2.1.3 are replaced by the following:

"4.2.1.2 Where a hard coating is found to be in less than GOOD condition, corrosion or other defects are found in water ballast tanks or where hard protective coating was not applied from the time of construction, the examination should be extended to other ballast tanks of the same type.

4.2.1.3 In ballast tanks other than double-bottom tanks, where a hard protective coating is found to be in less than GOOD condition and it is not renewed, or where soft

or semi-hard coating has been applied, or where a hard protective coating was not applied from the time of construction, the tanks in question should be examined and thickness measurements carried out as considered necessary at annual intervals. When such breakdown of hard protective coating is found in ballast double-bottom tanks, where a soft or semi-hard coating has been applied, or where a hard protective coating has not been applied, the tanks in question may be examined at annual intervals. When considered necessary by the surveyor, or where extensive corrosion exists, thickness measurements should be carried out."

ANNEX 7

## CONDITION EVALUATION REPORT (EXECUTIVE HULL SUMMARY REPORT)

***Contents of condition evaluation report (executive hull summary report)***

9 The existing Parts 5 (Tank/hold corrosion prevention system) and 8 (Memoranda) are replaced by the following:

| | |
|---|---|
| "Part 5 – Tank/ hold/ double-side skin void space corrosion prevention system | - Separate form indicating:<br>- location of coating<br>- condition of coating (if applicable) |
| Part 8 – Memoranda | - Acceptable defects<br>- Any points of attention for future surveys, e.g. for suspect areas<br>- Examination of ballast tanks and double-side skin void spaces at annual surveys due to coating breakdown" |

***Tank/hold corrosion prevention system***

10 The existing chapeau of "Tank/hold corrosion prevention system", including the table and the text underneath, are replaced by the following:

**"Tank/hold/ double-side skin void space corrosion prevention system**

| **Tank/hold/void Nos.[1]** | **Tank/hold/void corrosion prevention system[2]** | **Coating condition[3]** | **Remarks** |
|---|---|---|---|
| | | | |

*Notes:*

1 All ballast tanks, cargo holds and double-skin void spaces shall be listed.
2 C = Coating
NP = No protection
3 Coating condition according to the following standard:

GOOD condition with only minor spot rusting.

FAIR condition with local breakdown of coating at edges of stiffeners and weld connections and/or light rusting over 20% or more of areas under consideration, but less than as defined for POOR condition.

POOR condition with general breakdown of coating over 20% or more of areas or hard scale at 10% or more of areas under consideration.

For ballast tanks, if coating condition less than GOOD is given, tanks shall be examined at annual surveys. This shall be noted in part 8 of the Contents of condition evaluation report (executive hull summary report).

For double-side skin void spaces on bulk carriers exceeding 20 years of age and of 150 m in length and upwards, if coating condition POOR is given, those voids shall be examined at annual surveys. This shall be noted in part 8 of the Contents of condition evaluation report (executive hull summary report)."

ANNEX 9

**GUIDELINES FOR TECHNICAL ASSESSMENT IN CONJUNCTION WITH PLANNING FOR ENHANCED SURVEYS OF DOUBLE-SIDE SKIN BULK CARRIERS – RENEWAL SURVEY HULL**

***References***

11 The existing references are replaced by the following:

"1 IACS, Recommendation 76: Guidelines for Surveys, Assessment and Repair of Hull Structure - Bulk Carriers, 2007

2 TSCF, Guidelines for the Inspection and Maintenance of Double Hull Tanker Structures, 1995

3 TSCF, Guidelines Manual for Tanker Structures, 1997"

**ANNEX B**

**CODE ON THE ENHANCED PROGRAMME OF INSPECTIONS DURING SURVEYS OF OIL CARRIERS**

**Part A**

**Code on the enhanced programme of inspections during surveys of double-hull oil tankers**

**1.2 Definitions**

12 The existing text of paragraph 1.2.1 is replaced by the following:

"1.2.1 *Double-hull oil tanker* is a ship which is constructed primarily for the carriage of oil in bulk, which has cargo tanks forming an integral part of the ship's hull and protected by a double-hull which extends for the entire length of the cargo area, consisting of double sides and double-bottom spaces for the carriage of water ballast or void spaces."

**2.6 Extent of tank pressure testing**

13 The existing text of paragraph 2.6.1 is replaced by the following:

"2.6.1 The minimum requirements for ballast tank pressure testing at the renewal survey are given in 2.6.3 and in annex 3.

The minimum requirements for cargo tank testing at the renewal survey are given in 2.6.4 and annex 3.

Cargo tank testing carried out by the ship's crew under the direction of the master may be accepted by the surveyor, provided the following conditions are complied with:

.1 a tank testing procedure, specifying fill heights, tanks being filled and bulkheads being tested, has been submitted by the owner and reviewed by the Administration prior to the testing being carried out;

.2 the tank testing is carried out prior to overall survey or close-up survey;

.3 the tank testing is carried out within the special survey window and not more than three months prior to the date on which the overall or close-up survey is completed;

.4 the tank testing has been satisfactorily carried out and there is no record of leakage, distortion or substantial corrosion that would affect the structural integrity of the tank;

.5 the satisfactory results of the testing are recorded in the vessel's logbook; and

.6 the internal and external condition of the tanks and associated structure are found satisfactory by the surveyor at the time of the overall and close-up survey."

ANNEX 10

**CONDITION EVALUATION REPORT (EXECUTIVE HULL SUMMARY REPORT)**

***Contents of condition evaluation report (executive hull summary report)***

14 The existing Part 9 (Memoranda) is replaced by the following:

"Part 9 – Memoranda
- Acceptable defects
- Any points of attention for future surveys, e.g. for suspect areas
- Examination of ballast tanks at annual surveys due to coating breakdown

For ballast tanks, if coating condition less than GOOD is given, tanks shall be examined at annual surveys. This shall be noted in part 9 of the Contents of condition evaluation report (executive hull summary report)."

ANNEX 12

## GUIDELINES FOR TECHNICAL ASSESSMENT IN CONJUNCTION WITH THE PLANNING OF ENHANCED SURVEYS FOR OIL TANKERS

***References***

15 The existing references are replaced by the following:

"1 IACS, Recommendation 96: Double Hull Oil Tankers – Guidelines for Surveys, Assessment and Repair of Hull Structures, 2019

2 TSCF, Guidelines for the Inspection and Maintenance of Double Hull Tanker Structures, 1995

3 TSCF, Guidelines Manual for Tanker Structures, 1997"

### Part B

### Code on the enhanced programme of inspections during surveys of oil tankers other than double-hull oil tankers

**1.2 Definitions**

16 The existing text of paragraph 1.2.1 is replaced by the following:

"1.2.1 *Oil tanker* is a ship which is constructed primarily to carry oil in bulk in cargo tanks forming an integral part of the ship's hull, which includes ship types such as combination carriers (ore/oil ships, etc.) but excludes ships carrying oil in independent tanks not part of ship's hull such as, for instance, asphalt carriers."

**2.6 Extent of tank pressure testing**

17 The existing text of paragraph 2.6.1 is replaced by the following:

"2.6.1 The minimum requirements for ballast tank pressure testing at the renewal survey are given in 2.6.3 and in annex 3.

The minimum requirements for cargo tank testing at the renewal survey are given in 2.6.4 and annex 3.

Cargo tank testing carried out by the ship's crew under the direction of the master may be accepted by the surveyor, provided the following conditions are complied with:

.1 a tank testing procedure, specifying fill heights, tanks being filled and bulkheads being tested, has been submitted by the owner and reviewed by the Administration prior to the testing being carried out;

.2 the tank testing is carried out prior to overall survey or close-up survey;

.3 the tank testing is carried out within the special survey window and not more than three months prior to the date on which the overall or close-up survey is completed;

.4 the tank testing has been satisfactorily carried out and there is no record of leakage, distortion or substantial corrosion that would affect the structural integrity of the tank;

.5 the satisfactory results of the testing are recorded in the vessel's logbook; and

.6 the internal and external condition of the tanks and associated structure are found satisfactory by the surveyor at the time of the overall and close-up survey."

ANNEX 9

**CONDITION EVALUATION REPORT (EXECUTIVE HULL SUYMMARY REPORT)**

***Contents of condition evaluation report (executive hull summary report)***

18 The existing Part 9 (Memoranda) is replaced by the following:

"Part 9 – Memoranda
- Acceptable defects
- Any points of attention for future surveys, e.g. for suspect areas
- Examination of ballast tanks at annual surveys due to coating breakdown

For ballast tanks, if coating condition less than GOOD is given, tanks shall be examined at annual surveys. This shall be noted in part 9 of the Contents of condition evaluation report (executive hull summary report)."

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# ANNEX 6

# DRAFT AMENDMENTS TO THE INTERNATIONAL CODE FOR THE CONSTRUCTION AND EQUIPMENT OF SHIPS CARRYING DANGEROUS CHEMICALS IN BULK (IBC CODE)

## CHAPTER 2

## SHIP SURVIVAL CAPABILITY AND LOCATION OF CARGO TANKS

### 2.9 Survival requirements

Paragraph 2.9.2.1 is replaced by the following:

".1 the waterline, taking into account sinkage, heel and trim, shall be below the lower edge of any opening through which progressive flooding or downflooding may take place. Such openings shall include air pipes and openings which are closed by means of weathertight doors or hatch covers and may exclude those openings closed by means of watertight manhole covers and watertight flush scuttles, small watertight cargo tank hatch covers which maintain the high integrity of the deck, remotely operated sliding watertight doors, hinged watertight access doors with open/closed indication locally and at the navigation bridge, of the quick-acting or single-action type that are normally closed at sea, hinged watertight doors that are permanently closed at sea, and sidescuttles of the non-opening type;"