

SC 226

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IACS Unified Interpretations (UI) on the application of SOLAS regulations to conversions of Single-Hull Oil Tankers to Double-Hull Oil Tankers or Bulk Carriers

Reference table of the clarification of the applicability of SOLAS regulations

No.	Reg.	Title/Content	Note
1	II-1/1.3	Alterations and modifications of a major character	As amended by MSC.216(82)
2	II-1/3.2, 2 & 3.2, 4	Protective coatings of dedicated seawater ballast tanks in all types of ships and double-side skin spaces of bulk carriers	As amended by MSC.216(82)
3	II-1/3-6	Access to and within spaces in, and forward of, the cargo area of oil tankers and bulk carriers	As amended by MSC.194(80)
4	II-1/3-8	Towing and Mooring Equipment	As amended by MSC.194(80)
5	II-1/Part B & Part B-1	Subdivision and stability	As amended by MSC.216(82)
6	II-2/1.3	Repairs, alterations, modifications and outfitting	
7	III/1.4.2	Alterations and modifications of a major character	
8	III/31.1.8	Survival craft and rescue boats	
9	V/22	Navigation bridge visibility	
10	XII/4	Damage stability requirements applicable to bulk carriers	
	XII/5.1 & 5.2	Structural strength of bulk carriers	
	XII/6.1	Structural and other requirements for bulk carriers	
	XII/6.2	Structural and other requirements for bulk carriers	
	XII/6.3	Structural and other requirements for bulk carriers	As amended by MSC.216(82) Annex 1
	XII/6.4	Structural and other requirements for bulk carriers	As amended by MSC.216(82) Annex 1
	XII/7.1	Survey and maintenance of bulk carrier	
	XII/7.2	Survey and maintenance of bulk carrier	
	XII/8	Information on compliance with requirements for bulk carriers	
	XII/9	Requirements for bulk carriers not being capable of complying with regulation 4.3 due to the design configuration of their cargo holds	
	XII/10	Solid bulk cargo density declaration	
	XII/11	Loading instrument	
	XII/12	Hold, ballast and dry space water ingress alarms	
	XII/13	Availability of pumping systems	
	XII/14	Restrictions from sailing with any hold empty	

Note:

1. This UI is to be applied by IACS Societies when acting as recognized organizations, authorized by flag State Administrations to act on their behalf, unless otherwise advised, from 1 January 2014.

SC 226

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SC226.1 Alterations and modifications of a major character SOLAS Chapter II-1 Reg. 1.3 (as amended by MSC.216(82))

SOLAS Chapter II-1, Reg. 1 'Application':

"3 All ships which undergo repairs, alterations, modifications and outfitting related thereto shall continue to comply with at least the requirements previously applicable to these ships. Such ships, if constructed before the date on which any relevant amendments enter into force, shall, as a rule, comply with the requirements for ships constructed on or after that date to at least the same extent as they did before undergoing such repairs, alterations, modifications or outfitting. Repairs, alterations and modifications of a major character and outfitting related thereto shall meet the requirements for ships constructed on or after the date on which any relevant amendments enter into force, in so far as the Administration deems reasonable and practicable."

Interpretation

1. The date on which a conversion occurs for the purposes of determining the applicability of requirements for ships constructed on or after the date on which any relevant amendments enters into force is to be:
 - .1 the date on which the contract is placed for the conversion; or
 - .2 in the absence of a contract, the date on which the work identifiable with the specific conversion begins; or
 - .3 the completion date of the conversion, if that occurs more than three years after the date specified in subparagraph .1 above or 30 months after the date specified in subparagraph .2 above, either as applicable.

2. As for paragraph 1 above, the following applies:
 - .1 Where the completion date of the conversion has been subject to delay beyond the period referred to in paragraph 1.3 above due to unforeseen circumstances beyond the control of the builder and the owner, the date on which contract is placed for the conversion or, if applicable, the date on which the work identifiable with the specific conversion begins may be accepted by the Administration in lieu of the completion date of the conversion. The treatment of such ships is to be considered by the Administration on a case-by-case basis, bearing in mind the particular circumstances.
 - .2 It is important that ships accepted by the Administration under the provisions of subparagraph .1 above are also to be accepted as such by port States. In order to ensure this, the following practice is recommended to Administrations when considering an application for such a ship:
 - .1 the Administration should thoroughly consider applications on a case-by-case basis, bearing in mind the particular circumstances. In doing so in the case of a ship converted in a foreign country, the Administration may require a formal report from the authorities of the country in which the ship was converted, stating that the delay was due to unforeseen circumstances beyond the control of the builder and the owner;

**SC
226**
(cont)

- .2 when a ship is accepted by the Administration under the provisions of subparagraph .1 above, information on the conversion date annotated on the relevant certificates is to be footnoted to indicate that the ship is accepted by the Administration under the unforeseen delay in completion of the conversion provisions of this interpretation; and
- .3 the Administration should report to the Organization on the identity of the ship and the grounds on which the ship has been accepted under the unforeseen delay in the completion of the conversion provisions of this interpretation.

For conversions of single-hull oil tankers to double-hull oil tankers or bulk carriers, the following is to apply:

- .1 Conversions of single-hull oil tankers to double-hull oil tankers or bulk carriers is to be regarded as modifications of a major character for the purposes of SOLAS chapter II-1.
- .2 Repairs, alterations and modifications of a major character include:
 - .1 Substantial alteration of the dimensions of a ship, for example lengthening of a ship by adding a new midbody. The new midbody is to comply with SOLAS chapter II-1.
 - .2 A change of ship type, for example an oil tanker converted to a bulk carrier. Any structure, machinery and systems that are added or modified is to comply with SOLAS chapter II-1, taking into account the interpretation of SOLAS chapter II-1 regulations as contained herein.

**SC226.2 Protective coatings of dedicated seawater ballast tanks in all types of ships and double-side skin spaces of bulk carriers
SOLAS Chapter II-1 Reg. 3-2, 2 and Reg. 3-2, 4 (as amended by MSC.216(82))****SOLAS Chapter II-1, Reg. 3-2:**

“2 All dedicated seawater ballast tanks arranged in ships and double-side skin spaces arranged in bulk carriers of 150 m in length and upwards shall be coated during construction in accordance with the Performance standard for protective coatings for dedicated seawater ballast tanks in all types of ships and double-side skin spaces of bulk carriers, adopted by the Maritime Safety Committee by resolution MSC.215(82), 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.”

and

“4 Maintenance of the protective coating system shall be included in the overall ship’s maintenance scheme. The effectiveness of the protective coating system shall be verified during the life of a ship by the Administration or an organization recognized by the Administration, based on the guidelines developed by the Organization.”*

Interpretation

1. For single-hull oil tanker conversion into double-hull oil tanker, SOLAS regulation II-1/3-2 as adopted by resolution MSC.216(82) is to apply to dedicated water ballast tanks if constructed with all structural members being entirely new. If converting existing spaces into water ballast tanks with part of the existing structural members remaining in place, revised SOLAS regulation II-1/3-2 (MSC.216(82)) need not be applied. However, dedicated sea water ballast tanks are to have an efficient corrosion prevention system such as hard protective coatings or equivalent and be of light colour.
2. For single-hull oil tanker conversion into bulk carrier, SOLAS regulation II-1/3-2 as adopted by resolution MSC.216(82) is to apply to dedicated water ballast tanks and double-side skin spaces of bulk carriers if constructed with all structural members being entirely new. If converting existing spaces into dedicated water ballast tanks or double-side skin space of bulk carriers with part of the existing structural members remaining in place, revised SOLAS regulation II-1/3-2 (MSC.216(82)) need not be applied. However, dedicated sea water ballast tanks are to have an efficient corrosion prevention system such as hard protective coatings or equivalent and be of light colour.

**SC
226**

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**SC226.3 Access to and within spaces in, and forward of, the cargo area of oil tankers and bulk carriers
SOLAS Chapter II-1 Reg. 3-6 (as amended by MSC.194(80))***Regulation texts are not inserted here.***Interpretation****1. For single-hull oil tanker conversion into double-hull oil tanker**

- 1.1 Permanent means of access contained in table 1 of the Technical provisions for means of access for inspections (resolution MSC.158(78)) need not apply. However, if, in the course of conversion, substantial new structures are added, these new structures are to comply with the regulation.
- 1.2 The term "substantial new structures" means hull structures that are entirely renewed or augmented by new double bottom and/or double-side construction (e.g., replacing the entire structure within cargo area or adding a new double bottom and/or double-side section to the existing cargo area).
- 1.3 Additionally, an approved Ship Structure Access Manual is to be provided.

2. For single-hull oil tanker conversion into bulk carrier

- 2.1 Permanent means of access contained in table 2 of the Technical provisions for means of access for inspections (resolution MSC.158(78)) need not apply. However, if, in the course of conversion, substantial new structures are added, these new structures are to comply with the regulation.
- 2.2 The term "substantial new structures" means hull structures that are entirely renewed or augmented by new double bottom and/or double-side skin construction (e.g., replacing the entire structure within cargo area or adding a new double bottom and/or double-side section to the existing cargo area).
- 2.3 Additionally, an approved Ship Structure Access Manual is to be provided.

SC
226
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SC226.4 Towing and Mooring Equipment
SOLAS Chapter II-1 Reg. 3-8 (as amended by MSC.194(80))

Regulation texts are not inserted here.

Interpretation

For single-hull oil tanker conversion into double-hull oil tanker or bulk carrier

This regulation is to be applied when equipment and fittings for mooring/towing are replaced, modified or the safe working load of the existing equipment and fittings is known. Where the latter cannot be ascertained, alternative compliance with SOLAS regulation II-1/3-8 is to be sought (e.g., the equipment is to be replaced, tested or modified).

**SC
226**

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**SC226.5 Subdivision and stability
SOLAS Chapter II-1 Part B and Part B-1 (as amended by
MSC.216(82))**

Regulation texts are not inserted here.

Interpretation**1. For single-hull oil tanker conversion into double-hull oil tanker**

Oil tankers complying with damage stability requirements contained in Annex I to MARPOL 73/78 (except for combination carriers with type B freeboards) may be excluded from the damage stability requirements contained in SOLAS chapter II-1, part B-1.

2. For single-hull oil tanker conversion into bulk carrier

2.1 A bulk carrier which is assigned a B reduced freeboard complying with damage stability requirements contained in regulation 27 of the 1966 Load Line Convention, and resolutions A.320(IX) and A.514(13); or regulation 27 of the 1988 Load Line Protocol, may be excluded from the damage stability requirements contained in SOLAS chapter II-1, part B-1.

2.2 For a bulk carrier which is assigned a B freeboard, SOLAS chapter II-1, Parts B and B-1 are to be applied.

**SC226.6 Repairs, alterations, modifications and outfitting
SOLAS Chapter II-2 Reg. 1.3****SOLAS Chapter II-2, Reg. 1.3 ‘Repairs, alterations, modifications and outfitting’:**

“3.1 All ships which undergo repairs, alterations, modifications and outfitting related thereto shall continue to comply with at least the requirements previously applicable to these ships. Such ships, if constructed before 1 July 2002, shall, as a rule, comply with the requirements for ships constructed on or after that date to at least the same extent as they did before undergoing such repairs, alterations, modifications or outfitting.

3.2 Repairs, alterations and modifications which substantially alter the dimensions of a ship or the passenger accommodation spaces, or substantially increase a ship’s service life and outfitting related thereto shall meet the requirements for ships constructed on or after 1 July 2002 in so far as the Administration deems reasonable and practicable.”

Interpretation

For single-hull oil tanker conversion into double-hull oil tanker or bulk carrier, new and converted parts are to comply with the latest applicable requirements.

**SC
226**
(cont)**SC226.7 Alterations and modifications of a major character
SOLAS Chapter III Reg. 1.4.2****SOLAS Chapter III, Reg. 1 'Application':**

"4 For ships constructed before 1 July 1998, the Administration shall:

.1; and

.2 *ensure that when life-saving appliances or arrangements on such ships are replaced or such ships undergo repairs, alterations or modifications of a major character which involve replacement of, or any addition to, their existing life-saving appliances or arrangements, such life-saving appliances or arrangements, in so far as is reasonable and practicable, comply with the requirements of this chapter. However, if a survival craft other than an inflatable liferaft is replaced without replacing its launching appliance, or vice versa, the survival craft or launching appliance may be of the same type as that replaced."*

Interpretation

For single-hull oil tanker conversion into double-hull oil tanker or bulk carrier, this to be considered as an alteration or modification of a major character.

**SC
226**
(cont)**SC226.8 Survival craft and rescue boats
SOLAS Chapter III Reg. 31.1.8****SOLAS Chapter III, Reg. 31 'Survival craft and rescue boats':**

"1.2 In lieu of meeting the requirements of paragraph 1.1, cargo ships may carry:

- .1 one or more free-fall lifeboats, complying with the requirements of section 4.7 of the Code, capable of being free-fall launched over the stern of the ship of such aggregate capacity as will accommodate the total number of persons on board; and*
- .2 in addition, one or more inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code, on each side of the ship, of such aggregate capacity as will accommodate the total number of persons on board. The liferafts on at least one side of the ship shall be served by launching appliances."*

and

"1.8 Notwithstanding the requirements of paragraph 1.1, bulk carriers as defined in regulation IX/1.6 constructed on or after 1 July 2006 shall comply with the requirements of paragraph 1.2."

Interpretation

1. For single-hull oil tanker conversion into double-hull oil tanker, this regulation is not relevant.
2. For single-hull oil tanker conversion into bulk carrier, SOLAS regulation III/31.1.8 is to be met as for new ships, except where the space available for fitting and/or launching a free-fall lifeboat in accordance with regulation III/31.1.2.1 is not adequate, in which case the Administration is to be contacted to determine whether or not existing arrangement may be accepted.

**SC
226**
(cont)**SC226.9 Navigation bridge visibility
SOLAS Chapter V Reg. 22**

Regulation text is not inserted here.

Interpretation

For single-hull oil tanker conversion into double-hull oil tanker or bulk carrier, the level of visibility possessed by the ship prior to the conversion at the ballast loading condition is to be maintained after the conversion. Where a conversion involves the modification of structural arrangements used to establish minimum bridge visibility, the provisions of SOLAS regulation V/22 is to apply.

**SC
226**
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SC226.10 Damage stability requirements applicable to bulk carriers SOLAS regulation XII/4, structural strength of bulk carriers SOLAS regulation XII/5.1 and 5.2, structural and other requirements for bulk carriers SOLAS regulation XII/6.1, XII/6.2, XII/6.3 (MSC.216(82) Annex 1) and XII/6.4 (MSC.216(82) Annex 1), survey and maintenance of bulk carriers SOLAS regulation XII/7.1 and XII/7.2, information on compliance with requirements for bulk carriers SOLAS regulation XII/8, Requirements for bulk carriers not being capable of complying with regulation 4.3 due to the design configuration of their cargo holds SOLAS regulation XII/9, Solid bulk cargo density declaration SOLAS regulation XII/10, Loading instrument SOLAS regulation XII/11, Hold, ballast and dry space water ingress alarms SOLAS regulation XII/12, Availability of pumping systems SOLAS regulation XII/13, Restrictions from sailing with any hold empty SOLAS regulation XII/14

Regulation texts are not inserted here.

Interpretation

1. For single-hull oil tanker conversion into double-hull oil tanker, these regulations are not relevant.
2. For single-hull oil tanker conversion into bulk carrier, the provisions of chapter XII applicable for ships constructed on or after the date on which conversion occurs, are to be applied as for a new ship to the entire bulk carrier, i.e. all new and existing parts and spaces, as indicated in the table below.

**SC
226**
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Table of application of the Regulations of SOLAS Chapter XII to the conversions of Single Hull Tankers to Bulk Carriers/Ore Carriers

Regulation	Applicability	Note
4.1	Apply	
4.2	Apply, based on the Unified interpretations of SOLAS regulations XII/4.2 and XII/5.2 (MSC.1/Circ.1178).	
4.3	NA	
4.4	NA	This regulation is referred to within regulations 4.1 and 4.2
4.5	NA	
4.6	Apply	
4.7	Apply	
5.1	Apply	
5.2	Apply, based on the Unified interpretations of SOLAS regulations XII/4.2 and XII/5.2 (MSC.1/Circ.1178).	
6.1	NA	
6.2	Apply	
6.3	Apply	
6.4	Apply	
7.1	NA. However, SOLAS regulation XI-1/2 is applicable.	
7.2	Apply	
8.1	Apply	
8.2	NA	
8.3	NA	
9	NA	
10.1	Apply	
10.2	NA	
11.1	Apply	
11.2	NA	
11.3	Apply	
12.1	Apply	
12.2	Apply	
12.3	NA	
13.1	Apply	
13.2	NA	
14	NA	

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