Amended Rules for the Classification of Steel Ships (Part 1 Classification and Surveys)



- Main Amendments -

- (1) Effective date: 1 Jan 2019 (Date of which application for survey is submitted)
 - To reflect IACS UR Z3(Rev. 7 Jan 2018)
 - To reflect IACS UR Z7.1(Rev.13, Aug 2017) & Z7/Z7.1/Z7.2(Rev. 46/14/13 Jan 2018)
 - To reflect IACS UR Z10.2/Z10.5(Rev. 34/17 Sep 2017) & Z10.1/Z10.2/Z10.3/Z10.4/Z10.5(Rev. 23/35/18/15/18 Jan 2018)
 - Annex 1-11 "Procedural Requirements for Service Suppliers" will be separated as a new Guidance
 - To reflect of the request for revision of Rules by Internal customers
 - To amend unreasonable contents disclosed while implementing the Rules
- (2) Effective date: 1 July 2019 (Date of which application for survey is submitted)
 - To clarify the meaning of "specially considered"
 - Annual survey of non-return device of inert gas system : addition of double block and bleed valve
 - To reflect of the request for revision of Rules by Internal customers
 - To amend unreasonable contents disclosed while implementing the Rules

(1) Effective date: 1 Jan 2019

(Date of which application for survey is submitted)

Present	Amendment		
CHAPTER 1 CLASSIFICATION <omitted></omitted>	CHAPTER 1 CLASSIFICATION <same as="" current="" rules=""></same>		
CHAPTER 2 PERIODICAL AND OTHER SURVEYS	CHAPTER 2 PERIODICAL AND OTHER SURVEYS		
Section 1 General	Section 1 General		
101. Definitions $ 1.~ 26. 27. Remote Inspection Techniques(RIT) (2017) Remote Inspection Technique is a means of survey / inspection that enables examination of any part of the structure without the need for direct physical access of the surveyor(refer to IACS Rec.42). $	101. Definitions <same as="" current="" rules=""> 1.~ 26. <same as="" current="" rules=""> 27. Remote Inspection Technique is a means of survey /-inspection that enables examination of any part of the structure without the need for direct physical access of the surveyor(refer to IACS Rec.42). <hereafter, as="" current="" rules="" same=""></hereafter,></same></same>		

109. Survey planning meeting and safety meetings (2018)

- **1**. <omitted>
- 2. Prior to the commencement of any part of the Special, Intermediate and Annual Survey, a survey planning meeting is to be held between the attending Surveyor(s), the Owner's representative in attendance, the thickness measurement company operator/other service suppliers(as applicable) and the master of the ship or an appropriately qualified representative appointed by the master or company for the purpose to ascertain that all the arrangements envisaged in the survey programme(ESP Vessel only) or regarding the related surveys are in place, so as to ensure the safe and efficient conduct of the survey work to be carried out. [See Guidance]
- **3.** The following is an indicative list of items that are to be addressed in the meeting.
 - (A) \sim (D) <omitted>
 - (E) Regarding thickness measurement (if applicable)
 - (a) provisions and arrangements for thickness measurements (i.e. access, cleaning/de-scaling, illumination, ventilation, personal safety)
 - (b) extends of thickness measurements
 - (c) acceptance criteria
 - (d) extent of Close-up Survey and thickness measurement considering the coating condition and suspect areas/areas of substantial corrosion
 - (e) execution of thickness measurements
 - (f) taking representative readings in general and where uneven corrosion/pitting is found
 - (g) mapping of areas of substantial corrosion
 - (h) communication between attending Surveyor(s) the thickness measurement <u>company</u> operator(s) and Owner representative(s) concerning findings
 - (F) other necessary items

Amendment

109. Survey planning meeting and safety meetings (2018)

- 1. <same as current Rules>
- 2. Prior to the commencement of any part of the Special, Intermediate and Annual Survey, a survey planning meeting is to be held between the attending Surveyor(s), the Owner's representative in attendance, the thickness measurement firm operator/other service suppliers(as applicable) and the master of the ship or an appropriately qualified representative appointed by the master or company for the purpose to ascertain that all the arrangements envisaged in the survey programme(ESP Vessel only) or regarding the related surveys are in place, so as to ensure the safe and efficient conduct of the survey work to be carried out. (2019) [See Guidance]
- **3.** The following is an indicative list of items that are to be addressed in the meeting.
 - (A) ~ (D) <same as current Rules>
 - (E) Regarding thickness measurement (if applicable)
 - (a) provisions and arrangements for thickness measurements (i.e. access, cleaning/de-scaling, illumination, ventilation, personal safety)
 - (b) extends of thickness measurements
 - (c) acceptance criteria
 - (d) extent of Close-up Survey and thickness measurement considering the coating condition and suspect areas/areas of substantial corrosion
 - (e) execution of thickness measurements
 - (f) taking representative readings in general and where uneven corrosion/pitting is found
 - (g) mapping of areas of substantial corrosion
 - (h) communication between attending Surveyor(s) the thickness measurement <u>firm</u> operator(s) and Owner representative(s) concerning findings (2019)
 - (F) other necessary items

Present **Amendment** 110. Procedures for thickness measurements [See Guidance]

1. <omitted>

2. Thickness measurement is normally to be carried out by means of ultrasonic test equipment. The accuracy of the equipment is to be proven to the Surveyor as required. Thickness measurements are to be carried out by a firm approved by the Society in accordance with Annex 1-11 of the Guidance, except that in respect of measurements on non-ESP ships less than 500 gross tonnage and all fishing vessels, the firm need not be so approved.

3. Thickness measurements and Close-up Surveys

In any kind of survey, i.e. Special, Intermediate, Annual or other Surveys having the scope of the foregoing ones, thickness measurements, when required by Table 1.2.4 1, Table 1.2.9, Table 1.2.11, Table 1.3.2, Table 1.3.5, Table 1.3.8, Table 1.3.11 or Table 1.3.14 of structures in areas where Close-up Surveys are required shall be carried out simultaneously with Close-up Surveys.

Consideration may be given by the attending Surveyor to allow use of Remote Inspection Techniques (RIT) as an alternative to close-up survey. Surveys conducted using a RIT are to be completed to the satisfaction of the attending Surveyor. (2017)

<newly added>

<hereafter, omitted>

110. Procedures for thickness measurements [See Guidance]

- 1. <same as current Rules>
- **2.** Thickness measurement is normally to be carried out by means of ultrasonic test equipment. The accuracy of the equipment is to be proven to the Surveyor as required. Thickness measurements are to be carried out by a firm approved by the Society in accordance with Guidance for Approval of Service Suppliers Annex 1-11 of the Guidance, except that in respect of measurements on non-ESP ships less than 500 gross tonnage and all fishing vessels, the firm need not be so approved. (2019)

3. Thickness measurements and Close-up Surveys

In any kind of survey, i.e. Special, Intermediate, Annual or other Surveys having the scope of the foregoing ones, thickness measurements, when required by Table 1.2.4 1, Table 1.2.9, Table 1.2.11, Table 1.3.2, Table 1.3.5, Table 1.3.8, Table 1.3.11 or Table 1.3.14 of structures in areas where Close-up Surveys are required shall be carried out simultaneously with Close-up Surveys. (2019)

Consideration may be given by the attending Surveyor to allow use of Remote Inspection Techniques (RIT) as an alternative to close-up survey. Surveys conducted using a RIT are to be completed to the satisfaction of the attending Surveyor. (2017)

When RIT is used for a close-up survey, temporary means of access for the corresponding thickness measurements as specified in Table 1.2.9, Table 1.2.11, Table 1.3.2, Table 1.3.5, Table 1.3.8, Table 1.3.11 or Table 1.3.14 is to be provided unless such RIT is also able to carry out the required thickness measurements. (2019)

Present	Amendment
<newly added=""></newly>	The acceptance criteria for thickness measurements are according to the Rules of the individual Classification Society and/or specific IACS URs depending on ship's age and structural elements concerned, e.g. UR S21A(UR S21A applies for ships contracted for construction on or after 1 July 2012, Rev.1 of UR S21A applies for ships contracted for construction on or after 1 July 2016.) for all cargo hatch covers and coamings on exposed decks
111. Remote Inspection Techniques (RIT) (2017)	112. Remote Inspection Techniques (RIT) (2019)
1. The RIT is to provide the information normally obtained from a close-up survey. RIT surveys are to be carried out in accordance with the requirements of IACS Recommendation 42 "Guidelines for Use of Remote Inspection Techniques for surveys". These considerations are to be included in the proposals for use of a RIT which are to be submitted in advance of the survey so that satisfactory arrangements can be agreed with the Classification Society.	 The RIT is to provide the information normally obtained from a close-up survey. RIT surveys are to be carried out in accordance with the requirements given here-in and the requirements of IACS Recommendation 42 'Guidelines for Use of Remote Inspection Techniques for surveys'. These considerations are to be included in the proposals for use of a RIT which are to be submitted in advance of the survey so that satisfactory arrangements can be agreed with the Society. The equipment and procedure for observing and reporting the survey using a RIT are to be discussed and agreed with the parties involved prior to the RIT survey, and suitable time is to be allowed to set-up, calibrate and test all equipment beforehand. When using a RIT as an alternative to close-up survey, if not carried out by the Society itself, it is to be conducted by a firm approved as a service supplier according to Guidance for Approval of Service Suppliers and is to be witnessed by an attending surveyor of the Society. The structure to be examined using a RIT is to be sufficiently clean to permit meaningful examination. Visibility is to be sufficient to allow for a meaningful examination. The Society is to be satisfied with the methods of orientation on the structure.

Present	Amendment
Present 112. Preparations for survey (2017) 1. <omitted> 2. Access to structures (1) ~ (2) <omitted> (3) For Surveys conducted by use of a remote inspection technique, one or more of the following means for access, acceptable to the Surveyor, is to be provided: (2018) (A) Unmanned robot arm (B) Remote Operated Vehicles (ROV) (C) Unmanned Aerial Vehicles / Drones (D) Other means acceptable to the Classification Society. 3. ~ 4. <omitted> 113. ~ 114. <omitted> (2017) https://doi.org/10.100/journel-page-10.20 https://doi.org/10.100/journel-page-10.20 https://doi.org/10.20 https://do</omitted></omitted></omitted></omitted>	 5. The Surveyor is to be satisfied with the method of data presentation including pictorial representation, and a good two-way communication between the Surveyor and RIT operator is to be provided. 6. If the RIT reveals damage or deterioration that requires attention, the Surveyor may require traditional survey to be undertaken without the use of a RIT. 113. Preparations for survey (2019) 1. <same as="" present="" rules=""></same> 2. Access to structures (1) ~ (2) <same as="" current="" rules=""></same> (3) For Surveys conducted by use of a remote inspection technique, one or more of the following means for access, acceptable to the Surveyor, is to be provided: (2018) (A) Unmanned robot arm (B) Remotely Operated Vehicles (ROV) (C) Unmanned Aerial Vehicles / Drones (D) Other means acceptable to the Classification Society. 3. ~ 4. <same as="" current="" rules=""></same> 114. ~ 115. <same as="" current="" rules=""></same> hereafter, same as current Rules>

Section 4 Special Survey (Hull, Equipment and Fire-extinguishing Appliances)

401. ~ 402. <omitted>

403. Requirements of survey

Table 1.2.3 Minimum requirements for Internal examination of tanks and spaces at each Special Survey

No Tanks or Spaces	of Special Survey	Special Survey No. 1	Special Survey No. 2	Special Survey No. 3	Special Survey No. 4 and Subsequent
Cargo holds(and where fitted), carg	their 'tween decks go tanks	0	0	0	0
Double bottom ballast tanks, peak	tanks, deep tanks, tanks	0	0	0	0
	tunnel, duct keel, dry spaces, coffer-	0	0	0	0
Fuel oil tanks ^{\triangle}	Engine room	-	-	1	1
ruei oii tanks	Cargo length area	-	1	2	Half, minimum 2
Lubrication oil tar	nks $^{\triangle}$	-	-	-	1
Fresh water tanks	Δ	-	1	0	0

(NOTES)

Purpose of tank has a priority in application.

- O: All tanks and spaces are to be internally examined.
- \triangle : As follows:
- 1) These requirements apply to tanks of integral (structural) type.
- 2) If a selection of tanks is accepted to be examined, then different tanks are to be examined at each Special Survey, on a rotational basis.
- 3) Peak tanks (all uses) are subject to internal examination at each Special Survey.
- 4) At Special Survey No. 3 and subsequent surveys, one deep tank for fuel oil in the cargo length area is to be included, if fitted.

<newly added>

<hereafter, omitted>

Amendments

Section 4 Special Survey (Hull, Equipment and Fire-extinguishing Appliances)

401. ~ 402. <same as current Rules>

403. Requirements of survey

Table 1.2.3 Minimum requirements for Internal examination of tanks and spaces at each Special Survey

Tanks or Spaces	o. of Special Survey	Special Survey No. 1	Special Survey No. 2	Special Survey No. 3	Special Survey No. 4 and Subsequent
	<same as="" current="" rules=""></same>				
	nflooding ducts and lation ducts (2019)	Ξ	=	<u>O</u>	<u> </u>
	Engine room	-	-	1	1
Fuel oil tanks [^]	Cargo length area	-	1	2	Half, minimum 2

<same as current Rules>

(NOTES)

- 1. Purpose of tank has a priority in application.
 - <same as current Rules>
- 2. Definitions: downflooding ducts and ventilations ducts which are integrated to the ship's structures (2019)
 - 1) Downflooding ducts
 - : Downflooding ducts are fitted in order to meet the SOLAS damage stability criteria. Their purpose is to transfer water to a lower compartment in case of water ingress and thereby improve stability in the damaged condition.
 - Downflooding ducts are normally found on the ship sides, integrated into the structure by using the side shell plating as one of their boundaries.
 - 2) Structural ventilation ducts
 - : Structural ventilation ducts are stiffened in such a way that the boundaries can withstand loads other than just the loads from air pressure and may be integrated with the ship structure or self supporting. These ducts are used in cases where a ventilation duct is crossing a watertight bulkhead, or in spaces that may be filled in case of damages according to the damage scenarios calculated for the ship.
 - (Ex, Structural ventilation ducts installed in cargo length area for the carriage of vehicles such as RoRo Ship, Passenger Ship-RoRo or Passenger Ship-Car Ferry etc. One of their boundaries is composed of a side shell plating, which is integrated into the ship's structure.)

Present	Amendment	
Section 6 Docking Survey	Section 6 Docking Survey	
601.~ 603. <omitted></omitted>	601.~ 603. <same as="" current="" rules=""></same>	
604. In-water Survey	604. In-water Survey	
1. ~ 2. <omitted></omitted>	1. ~ 2. <same as="" current="" rules=""></same>	
3. Where an In-water Survey in lieu of the intermediate docking between Special Surveys is desired, the survey procedures are as follows:(1) ~ (2) <omitted></omitted>	3. Where an In-water Survey in lieu of the intermediate docking between Special Surveys is desired, the survey procedures are as follows:(1) ~ (2) <same as="" current="" rules=""></same>	
 (3) Condition of survey (a)~(b) <omitted></omitted> (c) The sea state conditions such as tidal stream, current, swell, etc. at the location of the survey are to be calm and peaceful. The in-water visibility and the cleanliness of the hull below the waterline is to be clear enough to permit a meaningful examination which allows the Surveyor and diver to determine the condition of the plating, appendages and the welding. 	 (3) Condition of survey (a)~(b) <same as="" current="" rules=""></same> (c) The sea state conditions such as tidal stream, current, swell, etc. at the location of the survey are to be calm and peaceful. The in-water visibility and the cleanliness of the hull below the waterline is to be clear enough to permit a meaningful examination which allows the Surveyor and diver "firms carrying out an in-water survey on ships and mobile offshore units by diver or Remotely Operated Vehicle(ROV)" to determine the condition of the plating, appendages and the welding. 	
(d) The distance between hull bottom and sea bottom is to be enough.(e) In-water Survey is to be carried out by a company approved by the Society.	 (d) The distance between hull bottom and sea bottom is to be enough. (e) In-water Survey is to be carried out by a company "firms carrying out an in-water survey on ships and mobile offshore units by diver or Remotely Operated Vehicle(ROV)"approved by the Society. (2019) 	
<omitted></omitted>	<same as="" current="" rules=""></same>	
(6) Diving report The following items are to be stated in the diving report. (a) Name of <u>diving company</u>	(6) Diving report The following items are to be stated in the diving report. (a) Name of diving company "firms carrying out an in-water survey on ships and mobile offshore units by diver or Remotely Operated Vehicle(ROV)" (2019)	
<hereafter, omitted=""></hereafter,>	<hereafter, as="" current="" rules="" same=""></hereafter,>	

Amendment

Section 14 Hull Surveys for General Dry Cargo Ships

1401. General

1. Application

- (1) In addition to the other requirements specified in **Ch 2**, the requirements apply to all self-propelled general dry cargo ships of 500 GT and above carrying solid cargoes other than:
 - bulk carriers and double skin bulk carriers subject to the enhanced survey programme(ESP)
 - dedicated container carriers
 - ro-ro cargo ships
 - refrigerated cargo ships
 - dedicated wood chip carriers
 - dedicated cement carriers
 - livestock carriers
 - deck cargo ship(A ship that is designed to carry cargo exclusively above deck without any access for cargo below deck)
 - general dry cargo ships of double side-skin construction, with double side-skin extending for the entire length of the cargo area, and for the entire height of the cargo hold to the upper deck

However, the requirements specified in **1402. 7** and **1404. 7** also apply to those cargo ships, which, although belonging to the ship types listed above that are excluded from the application of this requirements, are fitted with a single cargo hold.

<newly added>

<hereafter, omitted>

Section 14 Hull Surveys for General Dry Cargo Ships

1401. General

1. Application

- (1) In addition to the other requirements specified in **Ch 2**, the requirements apply to all self-propelled general dry cargo ships of 500 GT and above carrying solid cargoes other than:
 - bulk carriers and double skin bulk carriers subject to the enhanced survey programme(ESP)
 - dedicated container carriers
 - ro-ro cargo ships
 - refrigerated cargo ships
 - dedicated wood chip carriers
 - dedicated cement carriers
 - livestock carriers
 - deck cargo ship(A ship that is designed to carry cargo exclusively above deck without any access for cargo below deck)
 - general dry cargo ships of double side-skin construction, with double side-skin extending for the entire length of the cargo area, and for the entire height of the cargo hold to the upper deck

However, the requirements specified in **1402. 7** and **1404. 7** also apply to those cargo ships, which, although belonging to the ship types listed above that are excluded from the application of this requirements, are fitted with a single cargo hold.

Regarding to the hull surveys for General Dry Cargo Ships, for ships with hybrid cargo hold arrangements, e.g. with some cargo holds of single-side skin and others of double-side skin, the requirements of the Sec. 14 are to be applied only to structure in way of the single-side skin cargo hold region. (2019)

Present	Amendment
Section 18 Special Requirements for Ships Subject to Korean Ship Safety Act or Fishing Vessels Act	Section 18 Special Requirements for Ships Subject to Korean Ship Safety Act or Fishing Vessels Act
1801. Special requirements for ships subject to Korean Ship Safety Act [See Guidance]	1801. Special requirements for ships subject to Korean Ship Safety Act [See Guidance]
1.~5. <omitted></omitted>	1.~5. <omitted></omitted>
6. In application to 303. (Machinery, electrical installations and additional installations at Intermediate Survey), spare parts for ships are to be examined.	6. In application to 303. (Machinery, electrical installations and additional installations at Intermediate Survey), spare parts for ships are to be examined.
<newly added=""></newly>	7. In application to Ch 3 Sec 1 101. 2.(Procedural requirements for certain ESP Survey), on duoble skin bulk carriers and oil tankers 100,000DWT and above at the intermediate hull classification survey between 10 and 15 years of age, the survey of hull structure and piping system to which these requirements applies is to be performed by two at least exclusive Surveyors, where substantial corrosion and/or structural defects are found. (2019)
7. In application to Pt 9, Ch 2(Cargo handling appliances), the cargo handling appliances, except cargo ramps, of safe working load not less than 1 ton are to be included.	8. In application to Pt 9, Ch 2(Cargo handling appliances), the cargo handling appliances, except cargo ramps, of safe working load not less than 1 ton are to be included. (2019)

Amendment

1802. Special requirements for ships subject to Korean Fishing Vessels Act

1. ~ 2. <omitted>

- **3.** For fishing vessels of 24 m in length and above and 20 years of age and over after launching date, the minimum requirements for thickness measurements at Special Survey are to be extended to add engine room forward & afterward transverse bulkheads and seachests.
- **4.** For fishing vessels of $24 \, \mathrm{m}$ in length and above and 30 years of age and over after launching date, the requirements for thickness measurements at Intermediate Survey are to be the same extent as the previous Special Survey.
- **5.** In application to **203.**, **303.** and **502.**(Machinery, electrical installations and additional installations at Annual Survey, Intermediate Survey and Special Survey), insulation resistance test and performance test of electrical installations are to be made
- **6.** In application to **303.** (Machinery, electrical installations and additional installations at Intermediate Survey), for engines specified in **303. 2** and **3**, operation test of alarms and safety devices is to be made. However, this test may be omitted for an engine which is installed onboard within less than 5 years.

<newly added>

1802. Special requirements for ships subject to Korean Fishing Vessels Act

1. ~ 2. <omitted>

- **3.** For fishing vessels of 24 m in length and above and 20 years of age and over after launching date, the minimum requirements for thickness measurements at Special Survey are to be extended to add engine room forward & afterward transverse bulkheads and seachests. The extends and method of thickness measurement, wear limit, measures and records of the results of thickness measurement, etc. shall be carried out in accordance with Article 55, Clauses 2, and 3 of the Enforcement Decree of Fishing Vessels Act and Attached Table No. 14 of it. (2019)
- **4.** For fishing vessels of 24 m in length and above and 30 years of age and over after launching date, the requirements for thickness measurements at Intermediate Survey are to be the same extent as the previous Special Survey.
- **5.** In application to **203.**, **303.** and **502.**(Machinery, electrical installations and additional installations at Annual Survey, Intermediate Survey and Special Survey), insulation resistance test and performance test of electrical installations are to be made
- **6.** In application to **303.**(Machinery, electrical installations and additional installations at Intermediate Survey), for engines specified in **303. 2** and **3**, operation test of alarms and safety devices is to be made. However, this test may be omitted for an engine which is installed onboard within less than 5 years.
- 7. In application to Pt 9, Ch 2(cargo handling appliances), for the ships not less than 300 gross tonnage, the cargo handling appliances of safe working load not less than 1 ton are to be included. (2019)

CHAPTER 3 HULL SURVEYS OF SHIPS SUBJECT TO THE ENHANCED SURVEY PROGRAMME

Section 1 General

- 101. Application <omitted>
- 102. Preparations for survey

1. Survey programme

- (1) <omitted>
- (2) In developing the survey programme, the following documentation is to be collected and consulted with a view to selecting cargo holds/tanks, tanks, areas, and structural elements to be examined:
 - (A) Bulk carriers and double skin bulk carriers <omitted>
 - (B) Oil tankers, chemical tankers and double hull oil tankers (a)~(j) <omitted>
 - (k) Inspections by the Owner's personnel during the last 3 *years* with reference to structural deterioration in general, leakages in tank boundaries and piping and condition of the coating and corrosion prevention system, if any newly-added>

<omitted>

- (3) The submitted survey programme is to include relevant information including at least:
 - (A) Bulk carriers and double skin bulk carriers
 - (a) \sim (k) <omitted>
 - (B) Oil tankers, chemical tankers and double hull oil tankers
 (a) ~ (i) <omitted>
 - (k) Identification of the thickness measurement company

<hereafter, omitted>

Amendment

CHAPTER 3 HULL SURVEYS OF SHIPS SUBJECT TO THE ENHANCED SURVEY PROGRAMME

Section 1 General

- 101. Application <same as current Rules>
- 102. Preparations for survey

1. Survey programme

- (1) <omitted>
- (2) In developing the survey programme, the following documentation is to be collected and consulted with a view to selecting cargo holds/tanks, tanks, areas, and structural elements to be examined:
 - (A) Bulk carriers and double skin bulk carriers <omitted>
 - (B) Oil tankers, chemical tankers and double hull oil tankers (a)~(j) <omitted>
 - (k) Inspections by the Owner's personnel during the last 3 *years* with reference to structural deterioration in general, leakages in tank boundaries and piping and condition of the coating and corrosion prevention system, if any. Guidance for reporting is shown in Annex 1-4 "Owners Inspection Report" (2019)

<same as current Rules>

- (3) The submitted survey programme is to include relevant information including at least:
 - (A) Bulk carriers and double skin bulk carriers
 - (a) \sim (k) <omitted>
 - (B) Oil tankers, chemical tankers and double hull oil tankers
 - (a) \sim (j) <omitted>
 - (k) Identification of the thickness measurement company firm (2019)

Present	Amendment
 3. Access to structures (1) ~ (3) < omitted> (4) For Close-up Surveys of the cargo hold shell frames of bulk carriers(except double skin bulk carriers) 100,000 DWT and above, the use of portable ladders is not accepted, and one or more of the following means for access, acceptable 	 3. Access to structures (1) ~ (3) <same as="" current="" rules=""></same> (4) For Close-up Surveys of the cargo hold shell frames of bulk carriers(except double skin bulk carriers) 100,000 DW and above, the use of portable ladders is not accepted, and one or more of the following means for access, acceptable
to the Surveyor, is to be provided: (A) ~ (B) <omitted> Notwithstanding the above requirements, the use of a port-</omitted>	to the Surveyor, is to be provided: (A) \sim (B) <same as="" current="" rules=""> Notwithstanding the above requirements: (2019)</same>
able ladder fitted with a mechanical device to secure the upper end of the ladder is acceptable for the "close-up examination of sufficient extent, minimum 25% of frames, to establish the condition of the lower region of the shell frames including approx. lower one third length of side frame at side shell and side frame end attachment and the adjacent shell plating of the forward cargo hold" at Annual Survey, required in 202. 4(10 years < age ≤ 15 years, Close-up Survey), and the "one other selected cargo hold" required in 202. 4(15 years ≤ age, Close-up Survey). <newly-added< a="">></newly-added<>	 a) the use of a portable ladder fitted with a mechanical d vice to secure the upper end of the ladder is acceptable for the "close-up examination of sufficient extent, mir mum 25% of frames, to establish the condition of the lower region of the shell frames including approx. low one third length of side frame at side shell and side frame end attachment and the adjacent shell plating the forward cargo hold" at Annual Survey, required 202. 4(10 years < age ≤ 15 years, Close-up Survey and the "one other selected cargo hold" required 202. 4(15 years ≤ age, Close-up Survey). (2019) b) The use of hydraulic arm vehicles or aerial lift ("Cherry picker") may be accepted by the attending surveyor for the close-up survey of the upper part of side shell frames or other structures in all cases where the maximum working height is not more than 17 in (2019)
<pre><hereafter, omitted=""></hereafter,></pre>	<hereafter, as="" current="" rules="" same=""></hereafter,>

6. Survey at sea or at anchorage

- $(1)\sim(5)$ omitted>
- (6) If the depth of the webs is more than 1.5 m, rafts or boats alone may be allowed only:
 - (A) when the coating of the under deck structure is in GOOD condition and there is no evidence of wastage; or
 - (B) if a permanent means of access is provided in each bay to allow safe entry and exit. This means:
 - (a) access direct from the deck via a vertical ladder and a small platform fitted approximately $2\ m$ below the deck in each bay; or
 - (b) access to deck from a longitudinal permanent platform having ladders to deck in each end of the tank. The platform shall, for the full length of the tank, be arranged in level with, or above, the maximum water level needed for rafting of under deck structure

For this purpose, the ullage corresponding to the maximum water level is to be assumed not more than 3 m from the deck plate measured at the midspan of deck transverses and in the middle length of the tank. (For oil tankers, chemical tankers and double hull oil tankers, see **Fig 1.3.1**)

If neither of the above conditions are met, then staging or an "other equivalent means" is to be provided for the survey of the under deck areas.

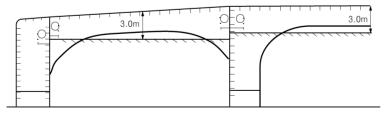


Fig 1.3.1

<hereafter, omitted>

Amendment

6. Survey at sea or at anchorage

- (1)~(5) <same as current Rules>
- (6) If the depth of the webs is more than 1.5 m, rafts or boats alone may be allowed only:
 - (A) when the coating of the under deck structure is in GOOD condition and there is no evidence of wastage; or
 - (B) if a permanent means of access is provided in each bay to allow safe entry and exit. This means:
 - (a) access direct from the deck via a vertical ladder and a small platform fitted approximately $2\ m$ below the deck in each bay, or
 - (b) access to deck from a longitudinal permanent platform having ladders to deck in each end of the tank. The platform shall, for the full length of the tank, be arranged in level with, or above, the maximum water level needed for rafting of under deck structure.

For this purpose, the ullage corresponding to the maximum water level is to be assumed not more than 3 m from the deck plate measured at the midspan of deck transverses and in the middle length of the tank. (For oil tankers, chemical tankers and double hull oil tankers, see **Fig 1.3.1**)

If neither of the above conditions are met, then staging or an "other equivalent means" is to be provided for the survey of the under deck areas.

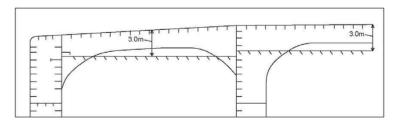


Fig 1.3.1 Maximum water level in a tank (2019)

Present	Amendment
105. Acceptance criteria for the corrosion	105. Acceptance criteria for the corrosion
1. For vessels not built under IACS Common Structural Rules(Pt 11, Pt 12 or Pt 13), the acceptance criteria for the corrosion is according to Annex 1-5, Table 1 of the Guidance and/or specific requirements, if exist, e.g. IACS UR S31 (Renewal Criteria for Side Shell Frames and Brackets in Single Side Skin Bulk Carriers and Single Side Skin OBO Carriers not Built in accordance with UR S12 Rev.1 or subsequent revisions).	1. For vessels not built under IACS Common Structural Rules(11, Pt 12 or Pt 13), the acceptance criteria for the corrosic is according to Annex 1-5, Table 1 of the Guidance and/specific requirements, if exist, e.g. IACS S18(Evaluation Scantlings of Corrugated Transverse Watertight Bulkheads Bulk Carriers Considering Hold Flooding), S19(Evaluation Scantlings of the Transverse Watertight Corrugated Bulkheads between Cargo Holds Nos. 1 and 2, with Cargo Hold No. Flooded, for Existing Bulk Carriers), S21(Evaluation Scantlings of Hatch Covers and Hatch Coamings of Cargo Holds of Bulk Carriers, Ore carriers and Combination Carriers UR S31(Renewal Criteria for Side Shell Frames and Bracket in Single Side Skin Bulk Carriers and Single Side Skin OB Carriers not Built in accordance with UR S12 Rev.1 or su sequent revisions) as applicable. (2019)
 For vessels built under IACS Common Structural Rules(Pt 11, Pt 12 or Pt 13), the acceptance criteria for the corrosion is according to Ch 13 of IACS Common Structural Rules for Bulk Carriers(Pt 11), Sec 12 of IACS Common Structural Rules for Double Hull Oil Tankers(Pt 12), Sub-part 1, Ch 13 of IACS Common Structural Rules for Bulk Carriers and Oil Tankers(Pt 13) and as specified in the followings. Acceptance criteria for pitting corrosion (A) Side structures: for bulk carriers and double skin bulk carriers 	 For vessels built under IACS Common Structural Rules(Pt 1 Pt 12 or Pt 13), the acceptance criteria for the corrosion according to Ch 13 of IACS Common Structural Rules for Bulk Carriers(Pt 11), Sec 12 of IACS Common Structural Rules for Double Hull Oil Tankers(Pt 12), Sub-part 1, Ch of IACS Common Structural Rules for Bulk Carriers and Carriers (Pt 13) and as specified in the followings. (1) Acceptance criteria for pitting corrosion (A) Side structures: for bulk carriers and double skin but carriers
<omitted></omitted>	<same as="" current="" rules=""></same>
	Same as carrent reacts

(B) Other structures

For plates with pitting intensity less than 20 % (see **Fig 1.2.1**), the measured thickness, t_m of any individual measurement is to meet the lesser of the following criteria:

$$t_m \geq 0.7 \left(t_{as-built} - t_{vol\,add}\right) \hspace{1cm} \text{mm}$$

$$t_m \geq t_{ren} - 1 \hspace{1cm} \text{mm}$$

where,

 t_c

 $t_{as-built}$ as-built thickness of the member, in mm

 $t_{vol \, add}$ <omitted>

renewal thickness; minimum allowable thickness, in mm, below which renewal of structural members is to be carried out. total corrosion addition, in mm, defined in Ch 3, Sec 3 of IACS Common Structural Rules for Bulk Carriers(Pt 11), Sec 6 of IACS Common Structural Rules for Double Hull Oil Tankers(Pt 12) or Sub-part 1, Ch 3, Sec 3 of IACS

Common Structural Rules for Bulk

Carriers and Oil Tankers(Pt 13), as

 t_m <omitted>

applicable.

The average thickness across any cross section in the plating is not to be less than the renewal criteria for general corrosion given in Ch 13 of IACS Common Structural Rules for Bulk Carriers(Pt 11), Sec 12 of IACS Common Structural Rules for Double Hull Oil Tankers(Pt 12) or Sub-part 1, Ch 13 of IACS Common Structural Rules for Bulk Carriers and Oil Tankers(Pt 13), as applicable.

Amendment

(B) Other structures

For plates with pitting intensity less than 20% (see **Fig 1.2.1**), the measured thickness, t_m of any individual measurement is to meet the lesser of the following criteria:

$$t_m \geq 0.7 \left(t_{as-built} - t_{vol\,add}\right) \qquad \qquad \text{mm}$$

$$t_m \geq t_{ren} - 1 \qquad \qquad \text{mm}$$

where,

 t_{ren}

 $t_{as-built}$ as-built thickness of the member, in mm

 $t_{vol\,add}$ <same as current Rules>

renewal thickness(minimum allowable thickness, in mm, below which renewal of structural members is to be carried out) defined in Ch 13, Sec 2 of IACS Common Structural Rules for Bulk Carriers(Pt 11), Ch 12, Sec 12 of IACS Common Structural Rules for Double Hull Oil Tankers(Pt 12) or Sub-part 1, Ch 13, Sec 2 of IACS Common Structural Rules for Bulk Carriers and Oil Tankers(Pt 13), as applicable.

t_c <same as current Rules>

 t_m <same as current Rules>

The average thickness across any cross section in the plating is not to be less than the renewal criteria for general corrosion given in Ch 13 Sec 2 of IACS Common Structural Rules for Bulk Carriers(Pt 11), Ch 12, Sec 12 of IACS Common Structural Rules for Double Hull Oil Tankers(Pt 12) or Sub-part 1, Ch 13, Sec 2 of IACS Common Structural Rules for Bulk Carriers and Oil Tankers(Pt 13), as applicable.

- (2) Acceptance criteria for edge corrosion
 - (A) Provided that the overall corroded height of the edge corrosion of the flange, or web in the case of flat bar stiffeners, is less than 25% (see **Fig 1.2.2**), of the stiffener flange breadth or web height, as applicable, the measured thickness, t_m , is to meet the lesser of the following criteria:

$$t_m \ge 0.7 \left(t_{as-built} - t_{vol\,add}\right)$$
 mm
$$t_m \ge t_{ren} - 1$$
 mm

<newly added>

- (B) \sim (C) <omitted>
- (3) Acceptance criteria for grooving corrosion
 - (A) Where the groove breadth is a maximum of 15% of the web height, but not more than 30 mm (see **Fig 1.2.3**), the measured thickness, t_m , in the grooved area is to meet the lesser of the following criteria:

$$t_m \geq 0.75 \left(t_{as-built} - t_{vol~add}\right)$$
 mm
$$t_m \geq t_{ren} - 0.5$$
 mm

but is not to be less than

$$t_m = 6$$
 mm < newly added>

<omitted>

Amendment

- (2) Acceptance criteria for edge corrosion
 - (A) Provided that the overall corroded height of the edge corrosion of the flange, or web in the case of flat bar stiffeners, is less than 25 % (see **Fig 1.2.2**), of the stiffener flange breadth or web height, as applicable, the measured thickness, t_m , is to meet the lesser of the following criteria:

$$t_m \geq 0.7 \left(t_{as-built} - t_{vol\,add}\right) \qquad \qquad \text{mm}$$

$$t_m \geq t_{ren} - 1 \qquad \qquad \text{mm}$$

where,

For $t_{as-built}$, $t_{vol,add}$, t_{ren} , t_c and t_m , refer to Ch 3, Sec 1, 105. 2. (1), (B) (2019)

- (B) ~ (C) <same as current Rules>
- (3) Acceptance criteria for grooving corrosion
 - (A) Where the groove breadth is a maximum of 15% of the web height, but not more than 30 mm (see **Fig 1.2.3**), the measured thickness, t_m , in the grooved area is to meet the lesser of the following criteria:

$$t_m \geq 0.75 \left(t_{as-built} - t_{vol\,add}\right) \qquad \qquad \text{mm}$$

$$t_m \geq t_{ren} - 0.5 \qquad \qquad \text{mm}$$

but is not to be less than

$$t_m = 6$$
 mm

where,

For $t_{as-built}$, $t_{vol,add}$, t_{ren} , t_c and t_m , refer to Ch 3, Sec 1, 105. 2. (1), (B) (2019)

<same as current Rules>

Present	Amendment	
Section 2 Bulk Carriers	Section 2 Bulk Carriers	
201. General <omitted></omitted>	201. General <same as="" current="" rules=""></same>	
202. Annual Survey	202. Annual Survey	
1. General	1. General	
 (1) The due range of Annual Survey is to be in accordance with the requirements of Ch 2, 201. (2) The survey is to consist of an examination for the purpose of ensuring, as far as practicable, that the hull, weather decks, hatch covers, coamings and piping are maintained in a satisfactory condition. newly added> 	 (1) The due range of Annual Survey is to be in accordance with the requirements of Ch 2, 201. (2) The survey is to consist of an examination for the purpose of ensuring, as far as practicable, that the hull, weather decks, hatch covers, coamings and piping are maintained in a satisfactory condition and should take into account the service history, condition and extent of the corrosion prevention system of ballast tanks and areas identified in the survey report file. (2019) 	
<omitted></omitted>	<same as="" current="" rules=""></same>	
3. Examination of weather decks, hatch covers and coamings	3. Examination of weather decks, hatch covers and coamings	
 (1) Confirmation is to be obtained that no unapproved changes have been made to the hatch covers, hatch coamings and their securing and sealing devices since the last survey. (2) ~ (3) <omitted></omitted> (4) Where the cargo hatch securing system does not function properly, repairs are to be carried out under the supervision of the Society. <newly added=""></newly> 	 (1) Confirmation is to be obtained that no unapproved change have been made to the hatch covers, hatch coamings and their securing and sealing devices since the last survey. (2) ~ (3) <same as="" current="" rules=""></same> (4) Where the cargo hatch securing system does not function properly, repairs are to be carried out under the supervision of the Society. Where hatch covers or coamings undergous substantial repairs, the strength of securing devices should be upgraded to comply with Rules Pt 7, Ch 3, Sec 9, 905 "Securing arrangements". (2019) 	
<omitted></omitted>	<same as="" current="" rules=""></same>	
(6) At each hatchway, at each Annual Survey, the coamings, with <u>panel</u> stiffeners and brackets are to be checked for corrosion, cracks and deformation, especially of the coaming tops, including Close-up Survey.	(6) At each hatchway, at each Annual Survey, the coamings with panel plating stiffeners and brackets are to be checked for corrosion, cracks and deformation, especially of the coaming tops, including Close-up Survey. (2019)	

<hereafter, same as current Rules>

<hereafter, omitted>

Section 3 Oil Tankers

301. <omitted>

302. Annual Survey

1. General

- (1) <mitted>
- (2) The survey is to consist of an examination for the purpose of ensuring, as far as practicable, that the hull and piping are maintained in a satisfactory condition.
 <newly added>

<omitted>

Section 4 Chemical Tankers

401. <omitted>

402. Annual Survey

1. General

- (1) <omitted>
- (2) The survey is to consist of an examination for the purpose of ensuring, as far as practicable, that the hull and piping are maintained in a satisfactory condition.

<newly added>
<omitted>

Section 5 Double Hull Oil Tankers

501. <omitted>

502. Annual Survey

1. General

- (1) <omitted>
- (2) The survey is to consist of an examination for the purpose of ensuring, as far as practicable, that the hull and piping are maintained in a satisfactory condition. <newly added>

<hereafter, omitted>

Amendment

Section 3 Oil Tankers

301. <same as current Rules>

302. Annual Survey

1. General

- (1) <same as current Rules>
- (2) The survey is to consist of an examination for the purpose of ensuring, as far as practicable, that the hull and piping are maintained in a satisfactory condition and should take into account the service history, condition and extent of the corrosion prevention system of ballast tanks and areas identified in the survey report file. (2019) <same as current Rules>

Section 4 Chemical Tankers

401. <same as current Rules>

402. Annual Survey

1. General

- (1) <same as current Rules>
- (2) The survey is to consist of an examination for the purpose of ensuring, as far as practicable, that the hull and piping are maintained in a satisfactory condition and should take into account the service history, condition and extent of the corrosion prevention system of ballast tanks and areas identified in the survey report file. (2019)

<same as current Rules>

Section 5 Double Hull Oil Tankers

501. <same as current Rules>

502. Annual Survey

1. General

- (1) <same as current Rules>
- (2) The survey is to consist of an examination for the purpose of ensuring, as far as practicable, that the hull and piping are maintained in a satisfactory condition and should take into account the service history, condition and extent of the corrosion prevention system of ballast tanks and areas identified in the survey report file. (2019)

Table 1.3.10 Minimum requirements for Close-up Survey at Special Survey of Double Hull Oil Tankers¹⁾ [See Guidance]

Special Survey No. 1	Special Survey No. 2	Special Survey No. 3	Special Survey No. 4 and Subsequent
1. One web frame, in a ballast tank ²⁾ (*1)	1. All web frames, in a ballast tank ²⁾ (*1)	1. All web frames, in all ballast tanks (*1)	1. As for Special Survey No. 3
cargo oil tank (*2)	The knuckle area and the upper part (5 meters approximately) of one web	deck transverse and cross ties, if fitted, in a cargo	areas as deemed neces-
3. One transverse bulkhead, in a ballast tank ²⁾ (*4)	ballast tank (*6)	oil tank (*7) 3. One web frame, including	
in a cargo oil centre tank ³⁾ (*5)	3. One deck transverse, in two cargo oil tanks (*2)4. One transverse bulkhead,	deck transverse and cross ties, if fitted, in each re- maining cargo oil tank	
5. One transverse bulkhead, in a cargo oil wing tank (*5)		- ' '	
	6. One transverse bulkhead, in a cargo oil wing tank (*5)		

(NOTES)

- 1) (*1) to (*7) mean as follows and are illustrated in **Annex 1-6** of the Guidance: [See Guidance] (*1) \sim (* 7) <omitted>
- 2) <u>Ballast tank</u>: means double bottom tank plus double side tank plus double deck tank, as applicable, even <u>if these tanks are separate.</u>
 <newly added>
- 3) Where no centre cargo tanks are fitted(as in the case of centre longitudinal bulkhead), transverse bulkheads in wing tanks are to be surveyed.

<hereafter, omitted>

Amendment

Table 1.3.10 Minimum requirements for Close-up Survey at Special Survey of Double Hull Oil Tankers¹¹ [See Guidance]

Special Survey No. 1	Special Survey No. 2	Special Survey No. 3	Special Survey No. 4 and Subsequent
	1. All web frames, in a ballast 1	. All web frames, in all ballast	1. As for Special Survey No. 3
tank ²⁾ (*1)	tank ²⁾ (*1)	tanks (*1)	
	2. The knuckle area and the up- 2	2. All web frames, including	2. Additional transverse areas as
2. One deck transverse, in a	per part (5 meters approx-	deck transverse and cross	deemed necessary by the
cargo oil tank (*2)	imately) of one web frame in	ties, if fitted, in a cargo oil	Society
	each remaining ballast tank (*6)	tank (*7)	
3. One transverse bulkhead, in a	3. One deck transverse, in two 3	6. One web frame, including	
ballast tank ²⁾ (*4)	cargo oil tanks (*2)	deck transverse and cross	
	4. One transverse bulkhead, in	ties, if fitted, in each re-	
4. One transverse bulkhead, in a	each ballast tank ²⁾ (*4)	maining cargo oil tank (*7)	
cargo oil centre tank ³⁾ (*5)	5. One transverse bulkhead, in	All transverse bulkheads, in	
	two cargo oil centre tanks ³⁾ (*5)	all cargo oil (*3) and ballast	
5. One transverse bulkhead, in a	6. One transverse bulkhead, in a	(*4) tanks	
cargo oil wing tank (*5)	cargo oil wing tank (*5)		

(NOTES)

- 1) (*1) to (*7) mean as follows and are illustrated in **Annex 1-6** of the Guidance: **[See Guidance]** (*1) ~ (*7) <same as current Rules>
- 2) Ballast tank: means double bottom tank plus double side tank plus double deck tank, as applicable, even if these tanks are separate Apart from the fore and aft peak tanks, the term "ballast tank" has the following meaning:
 - all ballast compartments (hopper tank, side tank and double-deck tank, if separate from double-bottom tank) located on one side, i.e. portside or starboard side, and additionally double-bottom tank on portside plus starboard side, when the longitudinal central girder is not watertight and, therefore, the double-bottom tank is a unique compartment from portside to starboard side; or
 - all ballast compartments (double-bottom tank, hopper tank, side tank and double-deck tank) located on one side, i.e. portside or starboard side, when the longitudinal central girder is watertight and, therefore, the portside double-bottom tank separate from the starboard-side double-bottom tank.". (2019)
- 3) Where no centre cargo tanks are fitted(as in the case of centre longitudinal bulkhead), transverse bulkheads in wing tanks are to be surveyed.

Present **Amendment** Section 6 Double Skin Bulk Carriers Section 6 Double Skin Bulk Carriers 601. <omitted> 601. <same as current Rules> 602. Annual Survey 602. Annual Survey 1. General 1. General (1) The due range of Annual Survey is to be in accordance (1) The due range of Annual Survey is to be in accordance with the requirements of Ch 2, 201. with the requirements of Ch 2, 201. (2) The survey is to consist of an examination for the purpose (2) The survey is to consist of an examination for the purpose of ensuring, as far as practicable, that the hull, weather of ensuring, as far as practicable, that the hull, weather decks, hatch covers, coamings and piping are maintained in decks, hatch covers, coamings and piping are maintained in a satisfactory condition. <newly added> a satisfactory condition and should take into account the service history, condition and extent of the corrosion prevention system of ballast tanks and areas identified in the survey report file. (2019) <omitted> <same as current Rules> 3. Examination of weather deck, hatch covers and coam-3. Examination of weather deck, hatch covers and coaminas inas $(1) \sim (3)$ Omitted $(1) \sim (3)$ Omitted (4) Where the cargo hatch securing system does not function (4) Where the cargo hatch securing system does not function properly, repairs are to be carried out under the supervision properly, repairs are to be carried out under the supervision of the Society. Where hatch covers or coamings undergo of the Society. <newly added> substantial repairs, the strength of securing devices should be upgraded to comply with Rules Pt 7, Ch 3, Sec 9, 905. "Securing arrangements". (2019) (5) <omitted> (5) <same as current Rules> (6) At each hatchway, at each Annual Survey, the coamings, (6) At each hatchway, at each Annual Survey, the coamings, with panel plating stiffeners and brackets are to be checked with panel stiffeners and brackets are to be checked for corrosion, cracks and deformation, especially of the coamfor corrosion, cracks and deformation, especially of the ing tops, including Close-up Survey. coaming tops, including Close-up Survey. (2019) <hereafter, omitted> <hereafter, same as current Rules>

(2) Effective date: 1 Jul 2019

(Date of which application for survey is submitted)

Present	Amendment	
CHAPTER 2 PERIODICAL AND OTHER SURVEYS	CHAPTER 2 PERIODICAL AND OTHER SURVEYS	
Section 2 Annual Survey	Section 2 Annual Survey	
204. Additional requirements to ship types	204. Additional requirements to ship types	
1. Oil tankers(including tankers) : [See Guidance]	1. Oil tankers(including tankers) : [See Guidance]	
The additional requirements are to apply to Annual Survey as follows, as far as practicable. Where considered necessary by the Surveyor, the performance test and overhauling may be required. (1) <omitted> (2) Examining the inert gas system, and in particular: (A) to (C) <omitted> (D) Checking the deck water seal for automatic filling and draining.</omitted></omitted>	The additional requirements are to apply to Annual Survey as follows, as far as practicable. Where considered necessary by the Surveyor, the performance test and overhauling may be required. (1) <same as="" present="" rule="" the=""> (2) Examining the inert gas system, and in particular: (A) to (C) <same as="" present="" rule="" the=""> (D) Examining externally deck seals or double block and bleed assemblies, and non-return valves, and checking automatic filling and draining of the deck seal or operation of double block and bleed assemblies, and operation of non-return valves. (2019)</same></same>	
<hereafter, omitted=""></hereafter,>	<pre><hereafter, as="" present="" rule="" same="" the=""></hereafter,></pre>	

Present Section 4 Special Survey (Hull, Equipment and Fire-extinguishing Appliances) 401. ~402. <omitted> 403. Requirements of survey (2018) <omttted>

Table 1.2.4 Minimum requirements for Thickness Measurements at Special Survey

1. General Ships

Special Survey No. 1 ~ No. 4 and Subsequent

<omitted>

(NOTES)

- 1) \sim 2) <omitted>
- 3) Thickness measurements of internals may be <u>specially considered</u> by the Surveyor if the hard protective coating is in GOOD condition.

<omitted>

2. Other Ships

Special Survey No. $1 \sim 4$ and Subsequent

<omitted>

(NOTES)

- 1) \sim 2) <omitted>
- 3) Thickness measurements of internals may be <u>specially considered</u> by the Surveyor if the hard protective coating is in GOOD condition.

<omitted>

Amendment

Section 4 Special Survey (Hull, Equipment and Fire-extinguishing Appliances)

401. ~402. <same as current rules> 403. Requirements of survey (2018)

<same as current rules>

Table 1.2.4 Minimum requirements for Thickness Measurements at Special Survey

1. General Ships

Special Survey No. 1 ~ No. 4 and Subsequent

<same as current Rules>

(NOTES)

- 1) \sim 2) <same as current rules>
- 3) Thickness measurements of internals may be specially considered reduced to extent of measurement points that is sufficient to confirm the actual average condition of the structure under the coating by the Surveyor if the hard protective coating is in GOOD condition. (2019) hereafter, same as current Rules>

2. Other Ships

Special Survey No. 1 ~ 4 and Subsequent

<same as current Rules>

(NOTES)

- 1) \sim 2) <same as current rules>
- 3) Thickness measurements of internals may be specially considered reduced to extent of measurement points that is sufficient to confirm the actual average condition of the structure under the coating by the Surveyor if the hard protective coating is in GOOD condition. (2019) hereafter, same as current Rules>

Section 14 Hull Surveys for General Dry Cargo Ships

1401. General <omitted>

1402. Annual Survey

1. ~ 4. <omitted>

5. Examination of cargo holds

The examination of cargo holds in Annual Survey is to be in accordance with the follows.

	$10 years < age \le 15$ $years^{3)}$	15 years < age ^{1), 2), 3)}
Overall Survey	- <omitted></omitted>	
Close-up Survey		<omitted></omitted>
Others	-	All piping and penetrations in cargo holds, including overboard piping, are to be examined

(NOTES)

1) Where the <u>protective coating</u> in cargo holds, as applicable, is found to be in GOOD condition, the extent of Close-up Surveys may be specially considered.

<omitted>

<hereafter, omitted>

Amendment

Section 14 Hull Surveys for General Dry Cargo Ships

1401. General <same as current rules>

1402. Annual Survey

1. ~ 4. <same as current rules>

5. Examination of cargo holds

The examination of cargo holds in Annual Survey is to be in accordance with the follows.

	$10 years < age \le 15$ $years^{3)}$	15 years $< age^{1), 2), 3}$
Overall Survey	<same as="" current<="" td=""><td>Rules></td></same>	Rules>
Close-up Survey	<same as="" current<="" td=""><td>Rules></td></same>	Rules>
Others	-	All piping and penetrations in cargo holds, including overboard piping, are to be examined

(NOTES)

1) Where the <u>hard protective coating</u> in cargo holds, as applicable, is found to be in GOOD condition, the extent of Close-up Surveys may be <u>specially considered reduced by sufficiently confirming the</u> actual average condition of the structure under the coating. (2019)

<same as current rules>

Present **Amendment** 1404. Special Survey 1404. Special Survey 1. General 1. General $(1) \sim (5)$ omitted> $(1) \sim (5)$ <same as current Rules> (6) The survey extent of ballast tanks converted to void spaces (6) The survey extent of ballast tanks converted to void spaces is to be may be specially considered reduced to extent of is to be specially considered for close-up surveys and measurement points and Close-up Surveys that is sufficient thickness measurements in relation to the requirements for to confirm the actual average condition of the structure unballast tanks der the coating for close-up surveys and thickness measurements in relation to the requirements for ballast tanks where hard protective coatings are found to be in GOOD condition. (2019) <omitted> <same as current Rules> 2. Tank protection 2. Tank protection $(1) \sim (2)$ omitted> $(1) \sim (2)$ <same as current Rules> (3) Where the hard protective coating in spaces is found to be (3) Where the hard protective coating in spaces is found to be in a GOOD condition, the extent of Close-up Surveys and in a GOOD condition, the extent of Close-up Surveys and thickness measurements may be specially considered. thickness measurements may be specially considered reduced by sufficiently confirming the actual average condition of the structure under the coating. (2019) 3. Hatch covers and coamings <omitted> 3. Hatch covers and coamings <same as current Rules> 4. Extent of Overall and Close-up Survey 4. Extent of Overall and Close-up Survey $(1) \sim (3)$ omitted> $(1) \sim (3)$ <same as current Rules> (4) For areas in spaces where hard protective coatings are (4) For areas in spaces where hard protective coatings are found in a GOOD condition, the extent of Close-up found in a GOOD condition, the extent of Close-up Surveys according to **Table 1.2.8** may be specially Surveys according to Table 1.2.8 may be specially considconsidered. ered reduced by sufficiently confirming the actual average condition of the structure under the coating. (2019) <omitted> <same as current Rules>

Present	Amendment
5. Extent of thickness measurement (1) ~ (2) <omitted> (3) For areas in spaces where hard protective coatings are found to be in a GOOD condition, the extent of thickness measurement according to Table 1.2.9 may be specially considered. <hr/> <</omitted>	5. Extent of thickness measurement (1) ~ (2) <same as="" current="" rules=""> (3) For areas in spaces where hard protective coatings are found to be in a GOOD condition, the extent of thickness measurement according to Table 1.2.9 may be reduced to extent of measurement points that is sufficient to confirm the actual average condition of the structure under the coating. (2019) <hr/> <hr/></same>

Section 15 Hull Surveys for Liquefied Gas Carriers

1501. ~ 1502. <omitted>

1503. Intermediate Survey

1. General <omitted>

2. Examination of ballast tanks

- (1) <omitted>
- (2) The minimum requirements for Close-up Survey of ballast tanks in Intermediate Survey is to be in accordance with the follows.

10 years $<$ age \le 15 years	15 years < age
<omitted></omitted>	<omitted></omitted>

(NOTES)

- 1) (*1) and (*2) mean as follows;
 - (*1): Complete transverse web frame including adjacent structural members
 - (*2) : Transverse bulkhead complete, including girder system and adjacent structural members, and adjacent longitudinal bulkhead structure
- Ballast tanks include topside, double hull side, double bottom, hopper side, or any combined arrangement of the aforementioned, and peak tanks where fitted.
- 3) For areas in tanks where <u>protective coatings</u> are found to be in GOOD condition, the extent of Close-up Surveys may be <u>specially considered</u> by the Society.
- 4) For ships having independent tanks of type C, with a midship section similar to that of a general cargo ship, the extent of Close-up Surveys may be specially considered by the Society.

<hereafter, omitted>

Amendment

Section 15 Hull Surveys for Liquefied Gas Carriers

1501. ~ 1502. <same as current Rules>

1503. Intermediate Survey

1. General <same as current Rules>

2. Examination of ballast tanks

- (1) <same as current Rules>
- (2) The minimum requirements for Close-up Survey of ballast tanks in Intermediate Survey is to be in accordance with the follows.

10 years $<$ age \le 15 years	15 years < age
<same as="" current="" rules=""></same>	<same as="" current="" rules=""></same>

(NOTES)

- 1) (*1) and (*2) mean as follows;
 - (*1): Complete transverse web frame including adjacent structural members
 - (*2) : Transverse bulkhead complete, including girder system and adjacent structural members, and adjacent longitudinal bulkhead structure
- 2) Ballast tanks include topside, double hull side, double bottom, hopper side, or any combined arrangement of the aforementioned, and peak tanks where fitted.
- 3) For areas in tanks where <u>hard protective coatings</u> are found to be in GOOD condition, the extent of Close-up Surveys may be <u>specially considered reduced by sufficiently confirming the actual average condition of the structure under the coating by the Society.</u>

(2019)

- 4) For ships having independent tanks of type C, with a midship section similar to that of a general cargo ship, the extent of Close-up Surveys may be specially considered reduced by sufficiently confirming the actual average condition of the structure under the coating by the Society. (2019)
 - <hereafter, same as current Rules>

Amendment

1504. Special Survey

1. General

- $(1) \sim (5)$ omitted>
- (6) The survey extent of ballast tanks converted to void spaces is to be specially considered for close-up surveys and thickness measurements in relation to the requirements for ballast tanks

<omitted>

2. Tank protection

- $(1) \sim (2)$ omitted>
- (3) Where the hard protective coating in ballast tanks is found to be in a GOOD condition, the extent of Close-up Surveys and thickness measurements may be specially considered.

3. Extent of Overall and Close-up Survey

- $(1) \sim (3)$ omitted>
- (4) For areas in tanks where hard protective coatings are found in a GOOD condition, the extent of Close-up Surveys according to **Table 1.2.10** may be specially considered.

4. Extent of thickness measurement

- $(1) \sim (2)$ omitted>
- (3) For areas in tanks where hard protective coatings are found to be in a GOOD condition, the extent of thickness measurement according to **Table 1.2.11** may be specially considered.

<hereafter, omitted>

1504. Special Survey

1. General

- $(1) \sim (5)$ <same as current Rules>
- (6) The survey extent of ballast tanks converted to void spaces is to be may be specially considered reduced to extent of measurement points and Close-up Surveys that is sufficient to confirm the actual average condition of the structure under the coating for close-up surveys and thickness measurements in relation to the requirements for ballast tanks where hard protective coatings are found to be in GOOD condition. (2019) <same as current Rules>

2. Tank protection

- (1) \sim (2) <same as current Rules>
- (3) Where the hard protective coating in ballast tanks is found to be in a GOOD condition, the extent of Close-up Surveys and thickness measurements may be specially considered reduced by sufficiently confirming the actual average condition of the structure under the coating. (2019)

3. Extent of Overall and Close-up Survey

- (1) \sim (3) <same as current Rules>
- (4) For areas in tanks where hard protective coatings are found in a GOOD condition, the extent of Close-up Surveys according to **Table 1.2.10** may be specially considered reduced by sufficiently confirming the actual average condition of the structure under the coating. (2019).

<same as current Rules>

4. Extent of thickness measurement

- $(1) \sim (2)$ <same as current Rules>
- (3) For areas in tanks where hard protective coatings are found to be in a GOOD condition, the extent of thickness measurement according to **Table 1.2.11** may be specially considered reduced to extent of measurement points that is sufficient to confirm the actual average condition of the structure under the coating. (2019)

Table 1.2.10 Minimum requirements for Close-up Survey at Special Survey of Liquefied Gas Carriers

Special Survey	Special Survey	Special Survey No. 3
No. 1	No. 2	and Subsequent
<omitted></omitted>	<omitted></omitted>	<omitted></omitted>

(NOTES)

- 1) \sim 2) <omitted>
- 3) For areas in tanks where <u>protective coatings</u> are found to be in GOOD condition, the extent of Close-up Surveys may be <u>specially</u> considered by the Society.

4

) For ships having independent tanks of type C, with a midship section similar to that of a general cargo ship, the extent of Close-up Surveys may be specially considered by the Society.

<omitted>

Table 1.2.11 Minimum requirements for thickness measurements at Special Survey of Liquefied Gas Carriers

Special Survey	Special Survey	Special Survey	Special Survey No. 4 and Subsequent
No. 1	No. 2	No. 3	
<omitted></omitted>	<omitted></omitted>	<omitted></omitted>	<omitted></omitted>

(NOTES)

- 1) At least one section is to include a ballast tank within 0.5 L amidships, if any.
- 2) For ships having independent tanks of type C, with a midship section similar to that of a general cargo ship, the extent of thickness measurements may be increased to include the tank top plating at the discretion of the Surveyor. **[See Guidance]**
- For areas in spaces where <u>protective coatings</u> are found to be in GOOD condition, the extent of thickness measurements may be specially considered by the Society.

<hereafter, omitted>

Amendment

Table 1.2.10 Minimum requirements for Close-up Survey at Special Survey of Liquefied Gas Carriers

Special Survey	Special Survey	Special Survey No. 3
No. 1	No. 2	and Subsequent
<same as="" current="" rules=""></same>		

(NOTES)

- 1) ~ 2) <same as current Rules>
- 3) For areas in tanks where <u>hard protective coatings</u> are found to be in GOOD condition, the extent of Close-up Surveys may be specially considered reduced by sufficiently confirming the actual average condition of the structure under the coating by the Society. (2019)
- 4) For ships having independent tanks of type C, with a midship section similar to that of a general cargo ship, the extent of Close-up Surveys may be specially considered reduced by sufficiently confirming the actual average condition of the structure under the coating by the Society. (2019)

<same as current Rules>

Table 1.2.11 Minimum requirements for thickness measurements at Special Survey of Liquefied Gas Carriers

No. 1 No. 2 No. 3 and Subsequent

<same as current Rules>

(NOTES)

- 1) At least one section is to include a ballast tank within 0.5 L amidships, if any.
- 2) For ships having independent tanks of type C, with a midship section similar to that of a general cargo ship, the extent of thickness measurements may be increased to include the tank top plating at the discretion of the Surveyor. **[See Guidance]**
- 3) For areas in spaces where <u>hard protective coatings</u> are found to be in GOOD condition, the extent of thickness measurements may be <u>specially considered reduced to extent of measurement points that</u> is sufficient to confirm the actual average condition of the structure under the coating by the Society. (2019)

Amendment

Section 2 Bulk Carriers

201. General <omitted>

202. Annual Survey

1. ~ 3. <omitted>

4. Examination of cargo holds [See Guidance]

The examination of cargo holds in Annual Survey is to be in accordance with the follows.

	10 years $\langle age \leq 15 years^{2), 3} \rangle$	15 years < age ^{2), 3)}
Overall Survey	All cargo holds	All cargo holds
Close-up Survey	<omitted></omitted>	<omitted></omitted>
Others	All piping and penetrations in cargo holds, including overboard piping, are to be examined.	in cargo holds, including

(NOTES)

- 1) \sim 2) < omitted>
- 3) Where a hard protective coating in cargo holds is found to be in GOOD condition, the extent of Close-up Surveys and thickness measurements may be specially considered.

<hereafter, omitted>

Section 2 Bulk Carriers

201. General <same as current Rules>

202. Annual Survey

- 1. ~ 3. <same as current Rules>
- 4. Examination of cargo holds [See Guidance]

The examination of cargo holds in Annual Survey is to be in accordance with the follows.

	10 years $\langle \text{ age } \leq 15 \text{ years}^{2), 3 \rangle$	15 years < age ^{2), 3)}
Overall Survey	All cargo holds	All cargo holds
Close-up Survey	<same as="" current="" rules=""></same>	<same as="" current="" rules=""></same>
Others	All piping and penetrations in cargo holds, including overboard piping, are to be examined.	in cargo holds, including

(NOTES)

- 1) \sim 2) <same as current Rules>
- 3) Where a hard protective coating in cargo holds is found to be in GOOD condition, the extent of Close-up Surveys and thickness measurements may be specially considered reduced by sufficiently confirming the actual average condition of the structure under the coating. (2019)

Amendment

203. Intermediate Survey

1. ~ 2. <omitted>

3. Examination of cargo holds

The examination of cargo holds in Intermediate Survey is to be in accordance with the follows.

	5 years ⟨ age ≤ 10 years¹)	10 years ⟨ age ≤ 15 years	15 years < age
Overall Survey	All cargo holds	203. 1 (3) to be applied.	203. 1 (4) to be applied.
Close-up Survey	1. Cargo holds: - forward cargo hold - one other selected cargo hold. (extent: Survey of sufficient extent, minimum 25% of frames, is to be carried out to establish the condition of: shell frames including their upper and lower end attachments, adjacent shell plating, and transverse bulkheads) 2. Suspect areas found at previous surveys	203. 1 (3) to be applied.	203. 1 (4) to be applied.

(NOTES)

1) Where considered necessary by the Surveyor as a result of the Overall and Close-up Survey, the survey is to be extended to include a Close-up Survey of all of the shell frames and adjacent shell plating of that cargo hold as well as a Close-up Survey of sufficient extent of all remaining cargo holds. [See Guidance]

203. Intermediate Survey

1. ~ 2. <same as current Rules>

3. Examination of cargo holds

The examination of cargo holds in Intermediate Survey is to be in accordance with the follows.

	5 years \langle age \leq 10 years ¹⁾	10 years ⟨ age ≤ 15 years	15 years < age
Overall Survey	All cargo holds	203. 1 (3) to be applied.	203. 1 (4) to be applied.
Close-up Survey (2019)	1. Cargo holds: - forward cargo hold - one other selected cargo hold. 2. Extent: Survey of sufficient extent, minimum 25% of frames, is to be carried out to establish the condition of: shell frames including their upper and lower end attachments, adjacent shell plating, and transverse bulkheads) 3. Suspect areas found at previous surveys	203. 1 (3) to be applied.	203. 1 (4) to be applied.

(NOTES)

 Where considered necessary by the Surveyor as a result of the Overall and Close-up Survey, the survey is to be extended to include a Close-up Survey of all of the shell frames and adjacent shell plating of that cargo hold as well as a Close-up Survey of sufficient extent of all remaining cargo holds. [See Guidance]

4. Extent of thickness measurement

- (1) Bulk carriers exceeding 5 years of age up to 10 years of age, the following is to apply:
 - (a) <omitted>
 - (b) The thickness measurement may be specially considered provided the Surveyor is satisfied by the Close-up Survey, that there is no structural diminution and the hard protective coatings are found to be in a GOOD condition.
 - (c) <omitted>
 - (d) Where the hard protective coating in cargo holds is found to be in GOOD condition, the extent of Close-up Surveys and thickness measurements may be specially considered.

204. Special Survey

1. General

- $(1) \sim (4)$ omitted>
- (5) The survey extent of ballast tanks converted to void spaces is to be specially considered for close-up surveys and thickness measurements in relation to the requirements for ballast tanks.

<hereafter, omitted>

Amendment

4. Extent of thickness measurement

- (1) Bulk carriers exceeding 5 years of age up to 10 years of age, the following is to apply:
 - (a) <same as current Rules>
 - (b) The thickness measurement may be specially considered reduced to extent of measurement points that is sufficient to confirm the actual average condition of the structure under the coating provided the Surveyor is satisfied by the Close-up Survey, that there is no structural diminution and the hard protective coatings are found to be in a GOOD condition. (2019)
 - (c) <same as current Rules>
 - (d) Where the hard protective coating in cargo holds is found to be in GOOD condition, the extent of Close-up Surveys and thickness measurements may be specially considered reduced by sufficiently confirming the actual average condition of the structure under the coating. (2019)

204. Special Survey

1. General

- (1) ~ (4) <same as current Rules>
- (5) The survey extent of ballast tanks converted to void spaces is to be may be specially considered reduced to extent of measurement points and Close-up Surveys that is sufficient to confirm the actual average condition of the structure under the coating for close-up surveys and thickness measurements in relation to the requirements for ballast tanks where hard protective coatings are found to be in GOOD condition. (2019)

<same as current Rules>

Amendment

2. Tank protection

- $(1) \sim (2)$ omitted>
- (3) Where a hard protective coating is provided in cargo holds and is found in GOOD condition, the extent of Close-up Surveys and thickness measurements may be specially considered.

<omitted>

4. Extent of Overall and Close-up Survey

- $(1) \sim (3)$ omitted>
- (4) For areas in spaces where hard protective coatings are found to be in a GOOD condition, the extent of Close-up Surveys according to **Table 1.3.1** may be specially considered. (Refer also to **204. 2** (3))

5. Extent of thickness measurement

- $(1) \sim (3)$ omitted>
- (4) For areas in tanks where hard protective coatings are found to be in a GOOD condition, the extent of thickness measurement according to **Table 1.3.2** may be specially considered. (Refer also to **204. 2** (3))
- (5) <omitted>
- (6) Representative thickness measurement to determine both general and local levels of corrosion in the shell frames and their end attachments in all cargo holds and ballast tanks is to be carried out. Thickness measurement is also to be carried out to determine the corrosion levels on the transverse bulkhead plating. The extent of thickness measurements may be specially considered provided the Surveyor is satisfied by the Close-up Survey, that there is no structural diminution, and the hard protective coating where applied remains efficient. [See Guidance]

<hereafter, omitted>

2. Tank protection

- $(1) \sim (2)$ <same as current Rules>
- (3) Where a hard protective coating is provided in cargo holds and is found in GOOD condition, the extent of Close-up Surveys and thickness measurements may be specially considered reduced by sufficiently confirming the actual average condition of the structure under the coating. (2019) <same as current Rules>

4. Extent of Overall and Close-up Survey

- $(1) \sim (3)$ <same as current Rules>
- (4) For areas in spaces where hard protective coatings are found to be in a GOOD condition, the extent of Close-up Surveys according to **Table 1.3.1** may be specially considered reduced by sufficiently confirming confirm the actual average condition of the structure under the coating. (Refer also to **204. 2** (3)) (2019)

5. Extent of thickness measurement

- $(1) \sim (3)$ <same as current Rules>
- (4) For areas in tanks where hard protective coatings are found to be in a GOOD condition, the extent of thickness measurement according to **Table 1.3.2** may be specially considered reduced to extent of measurement points that is sufficient to confirm the actual average condition of the structure under the coating. (Refer also to **204. 2** (3)) (2019)
- (5) <same as current Rules>
- (6) Representative thickness measurement to determine both general and local levels of corrosion in the shell frames and their end attachments in all cargo holds and ballast tanks is to be carried out. Thickness measurement is also to be carried out to determine the corrosion levels on the transverse bulkhead plating. The extent of thickness measurements may be specially considered reduced to extent of measurement points that is sufficient to confirm the actual average condition of the structure under the coating provided the Surveyor is satisfied by the Close-up Survey, that there is no structural diminution, and the hard protective coating where applied remains efficient. [See Guidance] (2019)

<hereafter. same as current Rules>

Amendment
Section 3 Oil Tankers
301. ~ 303. <same as="" current="" rules=""></same>
304. Special Survey
1. ~ 2. <same as="" current="" rules=""></same>
3. Extent of Overall and Close-up Survey
 (1) ~ (3) <same as="" current="" rules=""></same> (4) For areas in tanks where hard protective coatings are found to be in GOOD condition, the extent of Close-up Surveys according to Table 1.3.4 may be specially considered reduced by sufficiently confirming the actual average condition of the structure under the coating. (2019)
4. Extent of thickness measurement
 (1) ~ (3) <same as="" current="" rules=""></same> (4) For areas in tanks where hard protective coatings are found to be in a GOOD condition, the extent of thickness measurements according to Table 1.3.5 may be specially considered reduced to extent of measurement points that is sufficient to confirm the actual average condition of the structure under the coating. (2019)
<hereafter, as="" current="" rules="" same=""></hereafter,>

Present	Amendment
Section 4 Chemical Tankers	Section 4 Chemical Tankers
101. ~ 403. <omitted></omitted>	401. ~ 403. <same as="" current="" rules=""></same>
104. Special Survey	404. Special Survey
1. ~ 2. <omitted></omitted>	1. ~ 2. <same as="" current="" rules=""></same>
 3. Extent of Overall and Close-up Survey (1) ~ (3) <omitted></omitted> (4) For areas in tanks where hard protective coatings are found to be in GOOD condition, the extent of Close-up Surveys according to Table 1.3.7 may be specially considered. 	 3. Extent of Overall and Close-up Survey (1) ~ (3) <same as="" current="" rules=""></same> (4) For areas in tanks where hard protective coatings are foun to be in GOOD condition, the extent of Close-up Survey according to Table 1.3.7 may be specially considered reduced by sufficiently confirming the actual average condition of the structure under the coating. (2019)
 4. Extent of thickness measurement (1) ~ (3) <omitted></omitted> (4) For areas in tanks where hard protective coatings are found to be in a GOOD condition, the extent of thickness measurements according to Table 1.3.8 may be specially considered. 	 4. Extent of thickness measurement (1) ~ (3) <same as="" current="" rules=""></same> (4) For areas in tanks where hard protective coatings are foun to be in a GOOD condition, the extent of thickness measurements according to Table 1.3.8 may be specially considered reduced to extent of measurement points that is sufficient to confirm the actual average condition of the structure under the coating. (2019)
<hereafter, omitted=""></hereafter,>	<hereafter, as="" current="" rules="" same=""></hereafter,>

Present	Amendment
Section 5 Double Hull Oil Tankers	Section 5 Double Hull Oil Tankers
501. ~ 503. <omitted></omitted>	501. ~ 503. <same as="" current="" rules=""></same>
504. Special Survey	504. Special Survey
1. ~ 2. <omitted></omitted>	1. $^{\sim}$ 2. <same as="" current="" rules=""></same>
 3. Extent of Overall and Close-up Survey (1) ~ (3) <omitted></omitted> (4) For areas in tanks where hard protective coatings are found to be in GOOD condition, the extent of Close-up Surveys according to Table 1.3.10 may be specially considered. 	 3. Extent of Overall and Close-up Survey (1) ~ (3) <same as="" current="" rules=""></same> (4) For areas in tanks where hard protective coatings are found to be in GOOD condition, the extent of Close-up Surveys according to Table 1.3.10 may be specially considered reduced by sufficiently confirming the actual average condition of the structure under the coating. (2019)
 4. Extent of thickness measurement (1) ~ (3) <omitted></omitted> (4) For areas in tanks where hard protective coatings are found to be in a GOOD condition, the extent of thickness measurements according to Table 1.3.11 may be specially considered. <hereafter, omitted=""> </hereafter,> 	 4. Extent of thickness measurement (1) ~ (3) <same as="" current="" rules=""></same> (4) For areas in tanks where hard protective coatings are found to be in a GOOD condition, the extent of thickness measurements according to Table 1.3.11 may be specially considered reduced to extent of measurement points that is sufficient to confirm the actual average condition of the structure under the coating. (2019) <hereafter, as="" current="" rules="" same=""></hereafter,>

Section 6 Double Skin Bulk Carriers

601.~602. <omitted>

603. Intermediate Survey

1. ~ 3. <omitted>

4. Extent of thickness measurements

- (1) Double skin bulk carriers exceeding 5 years of age up to 10 years of age, the following is to apply:
 - (a) <omitted>
 - (b) The extent of thickness measurement may be <u>specially</u> <u>considered</u> provided the Surveyor is satisfied by the <u>Close-up</u> Survey that there is no structural diminution and the hard protective coatings are found to be in a <u>GOOD</u> condition.
 - (c) <omitted>
 - (d) Where the hard protective coating in cargo holds is found to be in GOOD condition, the extent of Close-up Surveys and thickness measurements may be specially considered.

<omitted>

604. Special Survey

1. General

- $(1) \sim (4)$ omitted>
- (5) The survey extent of ballast tanks converted to void spaces is to be specially considered for close-up surveys and thickness measurements in relation to the requirements for ballast tanks. (2017)

<hereafter, omitted>

Amendment

Section 6 Double Skin Bulk Carriers

601.~602. <same as current Rules>

603. Intermediate Survey

1. ~ 3. <same as current Rules>

4. Extent of thickness measurements

- (1) Double skin bulk carriers exceeding 5 years of age up to 10 years of age, the following is to apply:
 - (a) <same as current Rules>
 - (b) The extent of thickness measurement may be specially considered reduced to extent of measurement points that is sufficient to confirm the actual average condition of the structure under the coating provided the Surveyor is satisfied by the Close-up Survey that there is no structural diminution and the hard protective coatings are found to be in a GOOD condition. (2019)
 - (c) <same as current Rules>
 - (d) Where the hard protective coating in cargo holds is found to be in GOOD condition, the extent of Close-up Surveys and thickness measurements may be specially considered reduced by sufficiently confirming the actual average condition of the structure under the coating. (2019)

<same as current Rules>

604. Special Survey

1. General

- (1) ~ (4) <same as current Rules>
- (5) The survey extent of ballast tanks converted to void spaces is to be may be specially considered reduced to extent of measurement points and Close-up Surveys that is sufficient to confirm the actual average condition of the structure under the coating for close-up surveys and thickness measurements in relation to the requirements for ballast tanks where hard protective coatings are found to be in GOOD condition. (2019) hereafter, same as current Rules>

<same as current Rules>

Amendment

2. Tank protection

- $(1) \sim (2)$ omitted>
- (3) Where a hard protective coating is provided in cargo holds, and is found in GOOD condition, the extent of Close-up Surveys and thickness measurements may be specially considered.

3. Hatch covers and coamings <omitted>

4. Extent of Overall and Close-up Survey

- $(1) \sim (3)$ omitted>
- (4) For areas in spaces where hard protective coatings are found to be in a GOOD condition, the extent of Close-up Survey according to **Table 1.3.13** may be specially considered. (Refer also to **604. 2** (3))

5. Extent of thickness measurements

- $(1) \sim (3)$
- (4) For areas in tanks where hard protective coatings are found to be in a GOOD condition, the extent of thickness measurement according to **Table 1.3.14** may be specially considered. (Refer also to **604. 2** (3))
- (5) <omitted>
- (6) Representative thickness measurement to determine both general and local levels of corrosion in the transverse web frames in ballast tanks is to be carried out. Thickness measurement is also to be carried out to determine the corrosion levels on the transverse bulkhead plating. The extent of thickness measurements may be specially considered provided the Surveyor is satisfied by the Close-up Survey, that there is no structural diminution, and the hard protective coating where applied remains efficient. [See Guidance]

<hereafter, omitted>

2. Tank protection

- $(1) \sim (2)$ <same as current Rules>
- (3) Where a hard protective coating is provided in cargo holds, and is found in GOOD condition, the extent of Close-up Surveys and thickness measurements may be specially considered reduced by sufficiently confirming the actual average condition of the structure under the coating. (2019)

3. Hatch covers and coamings <same as current Rules>

4. Extent of Overall and Close-up Survey

- $(1) \sim (3)$ <same as current Rules>
- (4) For areas in spaces where hard protective coatings are found to be in a GOOD condition, the extent of Close-up Survey according to **Table 1.3.13** may be specially considered reduced by sufficiently confirming the actual average condition of the structure under the coating. (Refer also to **604. 2** (3)) (2019)

5. Extent of thickness measurements

- $(1) \sim (3)$
- (4) For areas in tanks where hard protective coatings are found to be in a GOOD condition, the extent of thickness measurement according to **Table 1.3.14** may be specially considered reduced to extent of measurement points that is sufficient to confirm the actual average condition of the structure under the coating. (Refer also to **604. 2** (3)) (2019)
- (5) <same as current Rules>
- (6)
- ~ Thickness measurement is also to be carried out to determine the corrosion levels on the transverse bulkhead plating. The extent of thickness measurements may be specially considered reduced to extent of measurement points that is sufficient to confirm the actual average condition of the structure under the coating provided the Surveyor is satisfied by the Close-up Survey, that there is no structural diminution, and the hard protective coating where applied remains efficient. [See Guidance] (2019)

<hereafter, same as current Rules>

Amended Guidance Relating to the Rules for the Classification of Steel Ships

(Part 1 Classification and Surveys)



- Main Amendments -

- (1) Effective date: 1 Nov. 2018 (from the time this became known to the Society & may be made retroactively)
 - to add withdrawal requirement for class of ships
 - A ship which has been declared (or notified) by an international organization or a national body in violation of internationally approved sanctions provisions, including resolutions of the UN Security Council.
- (2) Effective date: 1 Jan/2 Mar 2019 (Date of which application for survey is submitted)
 - To reflect IACS UR Z10.1/Z10.2/Z10.4/Z10.5(Rev.23/35/15/18 Jan 2018)
 - Annex 1-11 "Procedural Requirements for Service Suppliers" will be separated as a new Guidance
 - To Add and delete Class Notations in accordance with relevant rule amendment

- (3) Effective date: 1 July 2019 (Date of which application for survey is submitted, Survey commencement and Survey Schemes Approval)
 - To amend survey requirements for azimuth thruster
 - To amend survey requirements for CMS
 - To amend survey requirements for CM and add survey requirements for CBM (the date for survey commencement)
 - To reflect IACS UR Z10.2(Rev. 33, 34, 35 Corr.1 Sep 2018)
 - To reflect of the request for revision of Rules by Internal customers
 - To clarify the meaning of "specially considered"
 - To amend unreasonable contents disclosed while implementing the Rules

(1) Effective date: 1 Nov 2018

(from the time this became known to the Society & may be made retroactively)

Present	Amendments
CHAPTER 1 CLASSIFICATION	CHAPTER 1 CLASSIFICATION
Section 1 ~ Section 8 <omitted></omitted>	Section 1 [~] Section 8 <same as="" current="" guidance="" the=""></same>
Section 9 Suspension/Withdrawal of Class and Reclassification	Section 9 Suspension/Withdrawal of Class and Reclassification
901. Suspension/Reinstatement of class [see rule]	901. Suspension/Reinstatement of class [see rule]
In application to 901. 1 and 6 of the Rules, the surveys to be carried out for reinstatement of class are to be based upon the survey requirements at the original date due and not on the age of the vessel when the survey is carried out.	In application to 901. 1 and 6 of the Rules, the surveys to be carried out for reinstatement of class are to be based upon the survey requirements at the original date due and not on the age of the vessel when the survey is carried out.
902. Withdrawal of class (2018) [see rule]	902. Withdrawal of class (2018) [see rule]
1 In the case of the following shins classed with the Society	1 In the case of the following shins classed with the Society

- 1. In the case of the following ships classed with the Society, the class of the ships may be suspended or withdrawn through the deliberation of the Classification Committee.
 - (1) When a ship is detained following a Port State Control inspection with serious deficiencies found
 - (2) When a ship for which statutory certificates have been withdrawn by the relevant Administration or a ship is operating with no certificate of ship's nationality without any special reason <newly added>

2. In the case of fishing vessel that is in operation for a long period of time, when submitting the survey plan and documents certifying that they are being operated, a longer suspension period may be granted by an approval of the Classification Committee. (2018)

<hereafter, omitted>

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- 1. In the case of the following ships classed with the Society, the class of the ships may be suspended or withdrawn through the deliberation of the Classification Committee.
 - (1) When a ship is detained following a Port State Control inspection with serious deficiencies found

- (2) When a ship for which statutory certificates have been withdrawn by the relevant Administration or a ship is operating with no certificate of ship's nationality without any special reason
- (3) A ship which has been declared(or notified) by an international organization or a national body in violation of internationally approved sanctions provisions, including resolutions of the UN Security Council (2018)
- 2. In the case of fishing vessel that is in operation for a long period of time, when submitting the survey plan and documents certifying that they are being operated, a longer suspension period may be granted by an approval of the Classification Committee. (2018)

<hereafter, same as current Guidances>

(2) Effective date: 1 Jan/2 Mar 2019

(Date of which application for survey is submitted)

Present	Amendment
CHAPTER 1 CLASSIFICATION	CHAPTER 1 CLASSIFICATION
Section 1 ~ Section 6 <omitted></omitted>	Section 1 ~ Section 6 <same as="" current<br="">Guidances></same>
Section 7 Cooperation Duties of Owners	Section 7 Cooperation Duties of Owners
702. Cooperation to survey	702. Cooperation to survey [see rule]
In application to 702. 4 of the Rules, "the Guidance" means the requirements specified in Annex 1-11 of the Guidance. [see rule]	In application to 702. 4 of the Rules, "the Guidance" means the requirements specified in Guidance for Approval of Service Suppliers Annex 1–11 of the Guidance. (2019) hereafter, same as current Guidances>
<hereafter, omitted=""></hereafter,>	Thereafter, same as current Guidances

Annex 1-1 Character of Classification

1. Class Notation

1.1 Ship Type and Special Feature Notations

(Remarks) (35): The following Additional Special Feature Notations are to be appended to ships complying with the relevant requirements. The Additional Special Feature Notations are to be located under Service Restriction Notations of Hull after Special Feature Notations regardless whether they are hull items or machinery items.

are hull items or machinery items.	
Additional Special Feature Notations	Relevant Requirements
NVH-N1, NVH-N2, NVH-N3 (2017)	<omitted></omitted>
CSMS1, CSMS2, CSMS3, CSMS1(C), CSMS2(C), CSMS3(C) (2018)	to ships and companies with the maritime cyber security management system specified in the Guidance for Maritime Cyber Security Management System
< <u>newly_added</u> >	

<newly added>

Amendment

Annex 1-1 Character of Classification

1. Class Notation

1.1 Ship Type and Special Feature Notations

(Remarks) (35): The following Additional Special Feature Notations are to be appended to ships complying with the relevant requirements. The Additional Special Feature Notations are to be located under Service Restriction Notations of Hull after Special Feature Notations regardless whether they are hull items or machinery items.

l			
Additional Special Feature Notations	Relevant Requirements		
NVH-N1, NVH-N2, NVH-N3 (2017)	<same as="" current="" guidance=""></same>		
CS1, CS2, CS3, CS1(C), CS2(C), CS3(C) (2019)	to ships operating the maritime cyber security system specified in the Guidance for Maritime Cyber Security System		
<u>CS READY</u> (2019)	to ships with the maritime cyber security system specified in the Guidance for Maritime Cyber Security System		
AL1, AL2, AL3, AL4, AL5 (2019)	to ships with the autonomous systems specified in the Guidance for Autonomous Ships		

Present Annex 1-3 Example of the Survey Programme and the Survey Planning Questionnaire <omitted> Table 1 Example of the Survey Programme **SURVEY PROGRAMME** For Special Survey No. / Intermediate Survey at vears of age. scheduled from at (If the commencement-completion survey system is applied, outlines of each survey are to be listed in the next page) Basic information and particulars Name of ship: Class No. : IMO No.: Class Notation:

Name of ship: Class No.: IMO No.: Class Notation: Flag State: Port of registry: Gross tonnage: Deadweight(metric tones): Length between perpendiculars(m): Shipbuilder: Hull number: Date of delivery of the ship: Date of build / major conversion: / Owner: Thickness measurement company:

Prepared by the Owner in co-operation with the Society;

Owner's representative :	Classification Society:
Signature	Signature
Name	Name
(Place / Date)	(Place / Date)

<hereafter, omitted>

Amendment

Annex 1-3 Example of the Survey Programme and the Survey Planning Questionnaire <same as current Guidances>

Table 1 Example of the Survey Programme

SURVEY PROGRAMME

For Special Survey No. / Intermediate Survey at years of age, scheduled from to at

(If the commencement-completion survey system is applied, outlines of

each survey are to be listed in the next page)

Basic information and particulars

Name of ship:	
Class No.: IMO No.:	
Class Notation:	
Flag State:	
Port of registry:	
Gross tonnage:	
Deadweight(metric tones):	
Length between perpendiculars(m):	
Shipbuilder:	
Hull number:	
Date of delivery of the ship:	
Date of build / major conversion :	/
Owner:	
Thickness measurement company firm (2019):	

Prepared by the Owner in co-operation with the Society;

Owner's representative :	Classification Society:
Signature	Signature
 Name	Name
(Place / Date)	(Place / Date)

<hereafter, same as current Guidances>

Present	Amendment
11. Thickness measurement company This section of the survey programme is to identify changes, if any, relating to the information on the thickness measurement company provided in the survey planning questionnaire.	11. Thickness measurement company firm (2019) This section of the survey programme is to identify changes if any, relating to the information on the thickness measurement company firm provided in the survey planning questionnaire.

Table 2 Example of the Survey Planning Questionnaire

SURVEY PLANNING QUESTIONNAIRE

The following information will enable the Owner in co-operation with the Society to develop a survey programme complying with the requirements of the Rules. It is essential that the Owner provides, when completing the present questionnaire, up-to-date information. The present questionnaire, when completed, is to provide all information and material required by the Rules.

Basic information and particulars

Name of ship:	
Class No.:	IMO No. :
Class Notation:	
Flag State:	
Port of registry:	
Gross tonnage:	
Deadweight(metric tones):	
Length between perpendiculars(m):	
Shipbuilder:	
Hull number:	
Date of delivery of the ship:	
Date of build / major conversion:	/
Owner:	
Thickness measurement company:	
Owner's representative :	

Signature

Name Place / Date

<hereafter, omitted>

Amendment

Table 2 Example of the Survey Planning Questionnaire

SURVEY PLANNING QUESTIONNAIRE

The following information will enable the Owner in co-operation with the Society to develop a survey programme complying with the requirements of the Rules. It is essential that the Owner provides, when completing the present questionnaire, up-to-date information. The present questionnaire, when completed, is to provide all information and material required by the Rules.

Basic information and particulars (2019)

Name of ship:	
Class No.:	IMO No. :
Class Notation:	
Flag State:	
Port of registry:	
Gross tonnage:	
Deadweight(metric tones):	
Length between perpendiculars(m):	
Shipbuilder:	
Hull number:	
Date of delivery of the ship:	
Date of build / major conversion:	/
Owner:	
Thickness measurement company firm:	
Owner's representative :	

Owner's representative :		
	Signature	
_		
	Name	
(Place / Date)

<hereafter, same as current Rules>

	Present			Amendment		
5. Name and address of the approved thickness measurement <u>company</u>		5. Name and address of the approved thickness measurement company firm (2019)				
lame	me Address Approved by		Name	Address	Approved by	
<hereaft< td=""><td>ter, omitted></td><td></td><td><hereaft< td=""><td>er, same as current Gu</td><td>idances</td></hereaft<></td></hereaft<>	ter, omitted>		<hereaft< td=""><td>er, same as current Gu</td><td>idances</td></hereaft<>	er, same as current Gu	idances	

Present		Ame	endment
Table 19 General Particulars		Table 19 General Particulars	
GENERAI	GENERAL PARTICULARS		RTICULARS <u>(2019)</u>
Ship's name:		Ship's name:	
IMO Number:		IMO Number :	
Class Identification number:		Class Identification number:	
Port of registry:		Port of registry:	
Gross tons :		Gross tons:	
Deadweight:		Deadweight:	
Date of build :		Date of build :	
Classification society:		Classification society :	
Certificate valid from Place of measurement: First date of measurement: Last date of measurement: Special survey/intermediate survey. Details of measurement equipm. Qualification of operator:		Certificate valid from Place of measurement: First date of measurement: Last date of measurement: Special survey/intermediate survey Details of measurement equipment Qualification of operator:	
Report Number :	consisting of Sheets	Report Number :	consisting of Sheets
Name of operator : Signature of operator : Company official stamp :	Name of surveyor : Signature of surveyor : Classification Society Official Stamp :	Name of operator : Signature of operator : Company Firm official stamp :	Name of surveyor : Signature of surveyor : Classification Society Official Stamp :
* Delete as appropriate		* Delete as appropriate	

Pres	ent
------	-----

Amendment

Annex 1-11 Procedural Requirements for Service Suppliers

1. General

To approve firms providing services, such as measurements, tests or maintenance of safety systems and equipment, the Society is to apply procedures in this requirements and relevant **Appendix 1-11-1**.

2.~8. <omitted>

9. Existing approvals

Approvals for the categories of service suppliers granted before the date of implementation of this **Annex 1-11** by the Society may remain valid as stated in the respective certificates for a period up to but not exceeding 3 years. Renewals of such certificates must be carried out in accordance with this **Annex 1-11**. \downarrow

Appendix 1-11-1 Special Requirements by Each Service Supplier of Various Categories (2017)

- 1. Firms engaged in thickness measurements on ships <omitted>
- 8. Firms engaged in inspection using Remote Inspection Techniques (RIT) (2017)

<omitted>

9. Other service firms (2017)

Where the supplier providing the service other than **Par 1** through **Par 8**. wishes to obtain the approval of the Society, other specified requirements are to be applied. \downarrow

Annex 1-11 Procedural Requirements for Service Suppliers

1. General

To approve firms providing services, such as measurements, tests or maintenance of safety systems and equipment, the Society is to apply procedures in this requirements and relevant **Appendix 1–11–1**.

2.~8. <omitted>

9. Existing approvals

Approvals for the categories of service suppliers granted before the date of implementation of this **Annex 1-11** by the Society may remain valid as stated in the respective certificates for a period up to but not exceeding 3 years. Renewals of such certificates must be carried out in accordance with this **Annex 1-11**.

Appendix 1-11-1 Special Requirements by Each Service Supplier of Various Categories (2017)

- 1. Firms engaged in thickness measurements on ships <omitted>
- 8. Firms engaged in inspection using Remote Inspection Techniques (RIT) (2017)

<omitted>

9. Other service firms (2017)

Where the supplier providing the service other than Par 1 through Par 8. wishes to obtain the approval of the Society, other specified requirements are to be applied. Φ

(3) Effective date: 1 July 2019

(Date of which application for survey is submitted, Survey commencement and Survey Schemes Approval))

Present	Amendment
CHAPTER 1 CLASSIFICATION	CHAPTER 1 CLASSIFICATION
Section 1 ~ Section 7 <omitted></omitted>	Section 1 ~ Section 7 <same as="" current="" guidances=""></same>
Section 8 Competence and Duties of Surveyors	Section 8 Competence and Duties of Surveyors
801. Competence of Surveyors [see rule]	801. Competence of Surveyors [see rule]
1.~2. <omitted></omitted>	1.~2. <same as="" current="" guidances=""></same>
3. Request of thickness measurement	3. Request of thickness measurement
The Surveyor may request thickness measurements or may increase the extent of the thickness measurements considering the following items and so on, if deemed necessary by the Surveyor. (1) where wastage is evident or suspect (2) where considered to be prone to rapid wastage (3) where there is no protective coating or abnormality in protective coating condition such as breakdown of coating, etc. is evident or suspect (4) items specified in 1 (1) to (5) above <hr/> <hr <="" td=""/> <td>The Surveyor may request thickness measurements or may increase the extent of the thickness measurements considering the following items and so on, if deemed necessary by the Surveyor. (1) where wastage is evident or suspect (2) where considered to be prone to rapid wastage (3) where there is no hard protective coating or abnormality in hard protective coating condition such as breakdown of coating, etc. is evident or suspect (2019) (4) items specified in 1 (1) to (5) above <hr/> <hr/> <hr/> <hr> <hr/> <hr/></hr></td>	The Surveyor may request thickness measurements or may increase the extent of the thickness measurements considering the following items and so on, if deemed necessary by the Surveyor. (1) where wastage is evident or suspect (2) where considered to be prone to rapid wastage (3) where there is no hard protective coating or abnormality in hard protective coating condition such as breakdown of coating, etc. is evident or suspect (2019) (4) items specified in 1 (1) to (5) above <hr/> <hr/> <hr/> <hr> <hr/> <hr/></hr>

Present	Amendment		
CHAPTER 3 HULL SURVEYS OF SHIPS SUBJECT TO THE ENHANCED SURVEY PROGRAMME	CHAPTER 3 HULL SURVEYS OF SHIPS SUBJECT TO THE ENHANCED SURVEY PROGRAMME		
Section 1 <omitted> Section 2 Bulk Carriers</omitted>	Section 1 <same as="" current="" guidances=""> Section 2 Bulk Carriers</same>		
201. General <omitted></omitted>	201. General <same as="" current="" guidances=""></same>		
202. Annual Survey	202. Annual Survey		
1. ~ 5. <omitted></omitted>	1. ~ 5. <same as="" current="" guidances=""></same>		
 6. In application to 202. 6 (2) of the Rules, "the Guidance" means the requirements specified as follows. (1) General (A) ~ (C) < omitted> (D) Special consideration (a) Where the hard protective coating in the foremost cargo hold is found to be in GOOD condition, the extent of Close-up Surveys and thickness measurements may be specially considered. 	 6. In application to 202. 6 (2) of the Rules, "the Guidance" means the requirements specified as follows. (1) General (A) ~ (C) <same as="" current="" guidances=""></same> (D) Special consideration (a) Where the hard protective coating in the foremost cargo hold is found to be in GOOD condition, the extent of Close-up Surveys and thickness measurements may be specially considered reduced by sufficiently confirming the actual average condition of the structure under the coating. (2019) 		
Note: For existing bulk carriers, where Owners may elect to coat or recoat cargo holds as noted above, consideration may be given to the extent of the Close-up Surveys and thickness measurement. Prior to the coating of cargo holds of existing ships, scantlings should be ascertained in the presence of a Surveyor.	Note: For existing bulk carriers, where Owners may elect to coat or recoat cargo holds as noted above, consideration may be given to the extent of the Close-up Surveys and thickness measurement. Prior to the coating of cargo holds of existing ships, scantlings should be ascertained in the presence of a Surveyor.		

<hereafter, same as current Guidances>

<hereafter, omitted>

Annex 1-1 Character of Classification

1. Class Notation

1.1 Ship Type and Special Feature Notations

Ship Types	Special Feature Notations	Remarks
'ESP' ⁽²⁻¹⁾ 1. Oil Tanker ⁽²⁻⁰⁾	Crude Product Crude/Product Product/Asphalt Asphalt Asphalt(2-3)	(1): The notations FA, FB, FAC, FAO and FBC in rows 1, 3, 4, 8, 9 and 18 of the first column imply: <omitted> (2-0): See examples given in 2.0 (2-1): The notation "ESP" shall be assigned to ships which are constructed generally with in-</omitted>
(Double hull) ⁽²⁻²⁾ (FAC) ⁽¹⁾ (FAO) ⁽¹⁾ (FBC) ⁽¹⁾ (CSR) ⁽²⁻⁴⁾	Aspiiait	tegral tanks and intended primarily to carry oil in bulk. This type notation shall be assigned to tankers of both single and double hull construction, as well as tankers with alternative structural arrangements, e.g. mid-deck designs. (Typical midship sections are given in Fig 1) Note: Oil Tankers that do not comply with MARPOL I/19 may be subject to international and/or national regulations requiring phase out under MARPOL I/20 and/or MARPOL I/21.
		Fig 1 Typical midship sections of Oil Tanker 'ESP'
		(2-2): The notation "(Double Hull)" shall be assigned to ships which are constructed primarily for the carriage of oil in bulk, which have the cargo tanks 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. (2-3): This notation shall be assigned to ships of which all cargo tanks are independent type and the additional requirements for Oil Tanker 'ESP' and Oil Tanker(Double Hull) 'ESP' specified in Pt 1 of the Rules are not to be applied. (2-4): This notation shall be assigned to ships comply with the requirements specified in Pt 12 or Pt 13 of the Rules.

Amendment

Annex 1-1 Character of Classification

1. Class Notation

1.1 Ship Type and Special Feature Notations

Ship Types	Special Feature Notations	Remarks
1. Oil Tanker ⁽²⁻⁰⁾ (Double Hull) ⁽²⁻²⁾ (Double Hull)(EXP) ⁽²⁻³⁾ (FAC) ⁽¹⁾ (FAO) ⁽¹⁾ (FBC) ⁽¹⁾ (CSR) ⁽²⁻⁵⁾	Crude Product Crude/Product Product/Asphalt Asphalt Asphalt	(2-0) : See examples given in 2.0 (2-1) : The notation "ESP" shall be assigned to ships which are constructed generally with integral tanks and intended primarily to carry oil in bulk. This type notation shall be assigned to tankers of both single and double hull construction, as well as tankers with alternative structural arrangements, e.g. mid-deck designs. (Typical midship sections are given in Fig 1) Note: Oil Tankers that do not comply with MARPOL I/19 may be subject to international and/or national regulations requiring phase out under MARPOL I/20 and/or MARPOL I/21.
		Fig 1 Typical midship sections of Oil Tanker 'ESP' (2-2): The notation "(Double Hull)" shall be assigned to ships which are constructed primarily for the carriage of oil in bulk, which have the cargo tanks 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. In addition, the arrangement of the double hull is to comply with the requirements in Pt 7, Ch 10, 102. 1 of the Guidances (2019) (2-3): Any ships not applicable to (2-2), the notation "(Double Hull)(E)" shall be assigned to ships which are constructed primarily for the carriage of oil in bulk, which have the cargo tanks 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. (2019) (2-4): This notation shall be assigned to ships of which all cargo tanks are independent type and the additional requirements for Oil Tanker 'ESP' and Oil Tanker(Double Hull) 'ESP' specified in Pt 1 of the Rules are not to be applied. (2019) (2-5): This notation shall be assigned to ships comply with the requirements specified in Pt 12
		or Pt 13 of the Rules. (2019)

2. ~ 5. <omitted>

Ship Types	Special Feature Notations	Remarks
6. Cargo Ship	- HC ⁽¹²⁾ General Dry Cargo ⁽¹⁵⁻¹⁾ Wood Chip Carrier ⁽¹⁵⁻²⁾ Cement Carrier ⁽¹⁵⁻³⁾ Livestock Carrier ⁽¹⁵⁻⁴⁾ Deck Cargo Ship ⁽¹⁵⁻⁵⁾ General Dry Cargo(Double Skin) ⁽¹⁵⁻⁶⁾ Liquid Cargo(Category OS only) ⁽¹⁵⁻⁷⁾ <newly added=""></newly>	15-1): This notation shall be assigned to all self-propelled general dry cargo ships of 500 GT and above carrying solid cargoes and the additional requirements for General Dry Cargo Ship specified in Pt 1, Ch 2, Sec 14 of the Rules are to be applied. However the following ships are to be omitted. - bulk carriers and double skin bulk carriers subject to the enhanced survey programme(ESP) - dedicated container carriers - ro-ro cargo ships - refrigerated cargo ships - dedicated wood chip carriers (A ship that is specially designed to carry wood chip) ⁽¹⁵⁻²⁾ - dedicated cement carriers (A ship that is specially designed to carry cement) ⁽¹⁵⁻³⁾ - livestock carriers (A ship that is specially designed to carry livestock) ⁽¹⁵⁻⁴⁾ - deck cargo ships (A ship that is designed to carry cargo exclusively above deck without any access for cargo below deck) ⁽¹⁵⁻⁵⁾ - general dry cargo ships of double side-skin construction, with double side-skin extending for the entire length of the cargo area, and for the entire height of the cargo hold to the upper deck ⁽¹⁵⁻⁶⁾ (15-7): This notation shall be assigned to ships carrying only liquid cargoes in bulk classified as pollution category OS, which are not subject to IBC code, specified in Pt 7, Ch 6, Sec 18 of the Rules.
7. ~ 10.	<omitted></omitted>	<omitted></omitted>
11. Container Ship ⁽²⁰⁾	LS ⁽²⁰⁻¹⁾ LS(CL) ⁽²⁰⁻²⁾ LS(CL, RS) ⁽²⁰⁻³⁾ <newly added=""></newly>	 (20): This notation shall be assigned to ships designed and constructed to carry containers exclusively. (20-1): This notation shall be assigned to ships where container securing arrangements are fitted, and design and construction of the system are in accordance with Pt 7, Annex 7-2 of the Guidance. (20-2): This notation shall be assigned to ships where the program for lashing calculations is approved by the Society and installed and maintained onboard in accordance with Pt 7, Annex 7-2 of the Guidance in addition to (20-1) above. (20-3): This notation shall be assigned to ships where the contents related to the application of the specific route reduction factors provided by the Society are included in Cargo Securing Manual and the specific route reduction factors are applicable to onboard lashing program in accordance with Pt 7, Annex 7-2 of the Guidance in addition to (20-2) above.

Amendments

2. ~ 5. <same as current Guidances>

Ship Types	Special Feature Notations	Remarks
6. Cargo Ship (2017)	- HC ⁽¹²⁾ General Dry Cargo ⁽¹⁵⁻¹⁾ Wood Chip Carrier ⁽¹⁵⁻²⁾ Cement Carrier ⁽¹⁵⁻³⁾ Livestock Carrier ⁽¹⁵⁻⁴⁾ Deck Cargo Ship ⁽¹⁵⁻⁵⁾ General Dry Cargo(Double Skin) ⁽¹⁵⁻⁶⁾ Liquid Cargo(Category OS only) ⁽¹⁵⁻⁷⁾ Container ⁽¹⁵⁻⁸⁾ (2019)	15-1): This notation shall be assigned to all self-propelled general dry cargo ships of 500 GT and above carrying solid cargoes and the additional requirements for General Dry Cargo Ship specified in Pt 1, Ch 2, Sec 14 of the Rules are to be applied. However the following ships are to be omitted - bulk carriers and double skin bulk carriers subject to the enhanced survey programme(ESP) - dedicated container carriers - ro-ro cargo ships - refrigerated cargo ships - dedicated wood chip carriers (A ship that is specially designed to carry wood chip)(15-2) - dedicated cement carriers (A ship that is specially designed to carry cement)(15-3) - livestock carriers (A ship that is specially designed to carry livestock)(15-4) - deck cargo ships (A ship that is designed to carry cargo exclusively above deck without any access for cargo below deck)(15-5) - general dry cargo ships of double side-skin construction, with double side-skin extending for the entire length of the cargo area, and for the entire height of the cargo hold to the upper deck(15-6) (15-7): This notation shall be assigned to ships carrying only liquid cargoes in bulk classified as pollution category OS, which are not subject to IBC code, specified in Pt 7, Ch 6, Sec 18 of the Rules. (15-8): Even though cell guides are not installed on ships, but shall be assigned to the ships carrying containers generally by means of approved container securing fittings and stowage method in accordance with Annex 7-2, Pt 7 of the Guidance. (ex, Multi-Purpose Ship) (2019)
7. ~ 10. <sam 11.="" container="" ship<sup="">(20)</sam>	LS ⁽²⁰⁻¹⁾ LS(CL) ⁽²⁰⁻²⁾ LS(CL, RS) ⁽²⁰⁻³⁾ LS(CL, RS+) ⁽²⁰⁻⁴⁾	(20-1): This notation shall be assigned to ships designed and constructed to carry containers exclusively. (20-1): This notation shall be assigned to ships where container securing arrangements are fitted, and design and construction of the system are in accordance with Pt 7, Annex 7-2 of the Guidance. (20-2): This notation shall be assigned to ships where the program for lashing calculations is approved by the Society and installed and maintained onboard in accordance with Pt 7, Annex 7-2 of the Guidance in addition to (20-1) above. (20-3): This notation shall be assigned to ships where the contents related to the application of the specific route reduction factors provided by the Society are included in Cargo Securing Manual and the specific route reduction factors are applicable to onboard lashing program in accordance with Pt 7, Annex 7-2 of the Guidance in addition to (20-2) above. (20-4): This notation shall be assigned to ships where the contents related to the application of the user-specified route reduction factors provided by the Society are included in Cargo Securing Manual and ships equipped with a program that can calculate the route reduction factors for an arbitrary route in accordance with Pt 7, Annex 7-2 of the Guidance in addition to LS(CL above.

12. ~ 14. <omitted>

Ship Types	Special Fe	eature Notations	Remarks	
15-1. Tug Boat	A (Purpose)	B (Requirements for explosion-protected electrical equipment in dangerous zone)	- : Additional notation is not required for tug boats or pushers built only for the purpose of tug or pusher work. (24) : As shown in the following: 1) GA: Regarding the fire fighting equipment for other vessels, this notation shall be	
	- Salvage Supply Anchor Oil Recovery(GA, GB or GC) ⁽²⁵⁾	GA or GC ⁽²⁴⁾	assigned to ships complied with the requirements for explosion-protected electrical equipment in dangerous zone. 2) GC: Regarding the fire fighting equipment for other vessels, this notation shall be assigned to ships not applied to the requirements for explosion-protected electrical equipment in dangerous zone. Type A: permanent connection type	
15-2 Pusher (2018)	- (Type A) (Type B) Pusher/Tug (Type A) (Type B)		Type B: removable connection type	
16. Work Vessel	- Launch Cable Layer Crane Anchor Ice Breaker Supply Oil Recovery(GA, GB or GC)(25) Salvage Repair Work Tender <newly added=""></newly>		 Additional notation is not required for work vessels built only for the purpose of work. (25) : As shown in the following: 1) GA : This notation shall be assigned to ships equipped for recovery and storage of spilled oil, and complied with the requirements for explosion-protected electrical equipment in dangerous zone. 2) GB : This notation shall be assigned to ships equipped for the recovery and storage of spilled oil, and complied with the requirements for explosion-protected electrical equipment at work and storage spaces. 3) GC : This notation shall be assigned to ships equipped for the recovery and storage of spilled oil, and not applied to the requirements for explosion-protected electrical equipment 	

Amendments

12. ~ 14. <same as current Guidance>

Ship Types	ses Special Feature Notations		Remarks		
15-1. Tug Boat <u>(2019)</u>	A <u>*</u> (Purpose)	B (Requirements for explosion-protected electrical equipment in dangerous zone)	A*: In relation to Special Feature Notation, A(Purpose), Offshore Support Vessel's special feature notations, FFS1, FFS2, FFS3 or FF, shall be assigned to ships if they are complied with the requirements of FFS1, FFS2, FFS3 or FF, which are Special Feature Notations of Offshore Support Vessel. (2019) - : Additional notation is not required for tug boats or pushers built only for the		
	- Salvage Supply Anchor Oil Recovery(GA, GB or GC) ⁽²⁵⁾	GA or GC ⁽²⁴⁾	purpose of tug or pusher work. (24) : As shown in the following: 1) GA : Regarding the fire fighting equipment for other vessels, this notation shall be assigned to ships complied with the requirements for explosion-protected electrical equipment in dangerous zone. 2) GC : Regarding the fire fighting equipment for other vessels, this notation shall be assigned to ships not applied to the requirements for explosion-protected electrical equipment in the fire fighting equipment for other vessels, this notation shall be assigned to ships not applied to the requirements for explosion-protected electrical equipment is not requirement.		
15-2 Pusher <i>(2018)</i>	- (Type A) (Type B) Pusher/Tug (Type A) (Type B)				
16. Work Vessel	- Launch Cable Layer Crane Anchor Ice Breaker Supply Oil Recovery(GA, GB or GC)(25) Salvage Repair Work Tender Drgdging (2019)		 Additional notation is not required for work vessels built only for the purpose of work. (25) : As shown in the following: GA : This notation shall be assigned to ships equipped for recovery and storage of spilled oil, and complied with the requirements for explosion-protected electrical equipment in dangerous zone. (25) : As shown in the following: GA : This notation shall be assigned to ships equipped for the recovery and storage of spilled oil, and complied with the requirements for explosion-protected electrical equipment at work and storage spaces. (3) GC : This notation shall be assigned to ships equipped for the recovery and storage of spilled oil, and not applied to the requirements for explosion-protected electrical equipment 		

Ship Types	Special Feature Notations	Remarks
17. Special Purpose Ship	Newly added> Soil Geological Survey Boat Submersible Support Diving Support Hopper/Waste Waste Hospital Hydro Survey Seismic Survey Fire-Fighting(GA or GC) ⁽²⁴⁾ Buoy Laying Fishery Training Fishery Patrol Fishery Research Patrol Pilot Observation Training Research	

<hereafter, omitted>

Amendments

Ship Types	Special Feature Notations	Remarks
17. Special Purpose Ship	- (2019) Soil Geological Survey Boat Submersible Support Diving Support Hopper/Waste Waste Hospital Hydro Survey Seismic Survey Fire-Fighting(GA or GC)(24) Buoy Laying Fishery Training Fishery Patrol Fishery Research Patrol Pilot Observation Training Research	

<hereafter, same as the current Guidances>

Current

	Special Feature Notations			
Ship types	A (Type	B (Loaded cargo name or additional purpose)	Reamkrs	
18. Barge (FAC)(1) (FAO)(1) (FBC)(1)	- Pontoon Integrated Pusher Barge (Type A) (Type B) Hopper (또는 Dump)	Chemical ⁽²⁶⁾ Oil Container Sand Crane Pipe-Laying Piling Cable-Laying Salvage Submersible Accommodation Waste Log Heavy Cargo Oil Recovery(GA, GB 또는 GC) ⁽²⁵⁾ <newly added=""></newly>	- : Additional notation is not required for barge excluding 3 types of barge below, and for barges with hatch opening on the deck and built to carry cargo in cargo holds. (26) : See special feature for chemical tanker as shown in row 3, and examples given in 2.2 Type A: permanent connection type Type B: removable connection type	
19-1 Dredger	<omitted></omitted>		<omitted></omitted>	

<hereafter, omitted>

Amendments

	Sp	ecial Feature Notations		
Ship types	A (Type) B (Loaded cargo name or additional purpose)		Reamkrs	
18. Barge (FAC)(1) (FAO)(1) (FBC)(1)	- Pontoon Integrated Pusher Barge (Type A) (Type B) Hopper (또는 Dump)	Chemical ⁽²⁶⁾ Oil Container Sand Crane Pipe-Laying Piling Cable-Laying Salvage Submersible Accommodation Waste Log Heavy Cargo Oil Recovery(GA, GB 또는 GC) ⁽²⁵⁾ Power Plant (2019) Wind Turbine Transportation (2019)	- : Additional notation is not required for barge excluding 3 types of barge below, and for barges with hatch opening on the deck and built to carry cargo in cargo holds. (26) : See special feature for chemical tanker as shown in row 3, and examples given in 2.2 Type A : permanent connection type Type B : removable connection type	
19-1. Dredger Vessel	<same as="" current="" guidance=""></same>		<same as="" current="" guidance=""></same>	

<hereafter, same as current Guidances>

Current

(Remarks)⁽³⁵⁾: The following Additional Special Feature Notations are to be appended to ships complying with the relevant requirements. The Additional Special Feature Notations are to be located under Service Restriction Notations of Hull after Special Feature Notations regardless whether they are hull items or machinery items.

Additional Special Feature Notations	Relevant Requirements
SeaTrust (DAS1, DAS2, FSA1, FSA2, FSA3, HCM) (2017)	to ship which are constructed through applying a direct structure, fatigue assessment and hull construction monitoring requirements specified in Pt 3, Annex 3-2 to 3-4 of the Guidance. However, SeaTrust(DSA1, DSA2, FSA1, FSA2, FSA3) shall not be assigned for the ships with (CSR) notation. But, for the ship built in accordance with Common Structure Rules for Bulk Carriers and Oil Tankers(PT 13), Hull Construction Monitoring notation, SeaTrust(HCM), shall be assigned mandatory.
SeaTrust (SPR1, SPR2) (2018)	to ships comply with the fatigue strength requirements specified in Guidelines for Fatigue Strength Assessment Including Springing.
WHIP (2017)	to ships comply with the strength requirements speci- fied in Guidance on Strength Assessment of Containerships considering the Whipping Effect
<hereafter, omitted=""></hereafter,>	
CSMS1, CSMS2, CSMS3, CSMS1(C), CSMS2(C), CSMS3(C) (2018)	to ships and companies with the maritime cy- bersecurity management system specified in the Guidance for Maritime Cybersecurity Management System
<newly provided=""></newly>	<newly provided=""></newly>

Amendments

(Remarks)⁽³⁵⁾: The following Additional Special Feature Notations are to be appended to ships complying with the relevant requirements.

The Additional Special Feature Notations are to be located under Service Restriction Notations of Hull after Special Feature Notations regardless whether they are hull items or machinery items.

Additional Special Feature Notations		Relevant Requirements	
SeaTrust (DAS1, DAS2, FSA1, FSA2, FSA3, HCM, SPR1,	$\overline{FSA2}$	to ship which are constructed through applying a direct structure, fatigue assessment and hull construction monitoring requirements specified in Pt 3, Annex 3-2 to 3-4 of the Guidance. However, SeaTrust(DSA1, DSA2, FSA1, FSA2, FSA3) shall not be assigned for the ships with (CSR) notation. But, for the ship built in accordance with Common Structure Rules for Bulk Carriers and Oil Tankers(PT 13) , Hull Construction Monitoring notation, SeaTrust(HCM), shall be assigned mandatory.	
<u>SPR2)</u> (2019)	SPR1, SPR2	to ships comply with the fatigue strength requirements specified in Guidelines for Fatigue Strength Assessment Including Springing.	
WHIP (2017)		to ships comply with the strength requirements specified in Guidance on Strength Assessment of Containerships considering the Whipping Effect	
	<h< td=""><td>ereafter, same as current Guidances></td></h<>	ereafter, same as current Guidances>	
CSMS1, CSMS2, CSMS3, CSMS1(C), CSMS2(C), CSMS3(C) (2018)		to ships and companies with the maritime cybersecurity management system specified in the Guidance for Maritime Cybersecurity Management System	
<u>CSAP (2019)</u>		to ships comply with the additional requirements specified in Pt. 7 Annex 7-11 Guidelines on providing safe working conditions for securing of containers on deck	

1.2 Additional Installations Notations

The following Additional Installations Notations may be appended to ships complying with the relevant requirements.

Additional Installations Notations		Relevant Requirements		
		<omitted></omitted>		
Hull	SUR, BOU, SAT	to ships where the diving systems specified in Pt 9, Ch 7, 602. 1 of the Rules are provided onboard.		
Items	<newly_added></newly_added>			
		<omitted></omitted>		
	<u>Battery</u> (2018)			
Machinery Items	LNG Bunker	<omitted></omitted>		
	VRS (2018)	<omitted></omitted>		
		<newly added=""></newly>		

<hereafter, omitted>

Amendment

1.2 Additional Installations Notations

The following Additional Installations Notations may be appended to ships complying with the relevant requirements.

Additional Installations Notations		Relevant Requirements		
		<same as="" present="" the=""></same>		
Hull	SUR, BOU, SAT	to ships where the diving systems specified in Pt 9, Ch 7, 602. 1 of the Rules are provided onboard.		
Items	ADUW	to ships where the anchoring systems in deep and unsheltered water specified in Pt 4, Annex 4-3 of the Guidances are installed onboard.		
	<same as="" present="" the=""></same>			
	Battery- M, Battery- A	to ships where the battery system with a capacity of 50 kWh or more specified in Guidance for Battery Systems on Board of Ships are provided onboard.		
Machinery Items	LNG Bunker	<same as="" present="" the=""></same>		
	VRS (2018)	e <same as="" present="" the=""></same>		
	<u>FTS</u> (2019)	to ships where fuel oil treatment system specified in Pt 5, Ch 6, Annex 5-13 of the Guidance are provided onboard.		

<hereafter, same as the present Rules>

	Present			Amendments	
Annex 1-	5 Thickness Measuremen Hull Structural Members		Annex 1-	5 Thickness Measuremer Hull Structural Member	
1) CSR bulk car	riers		1) CSR bulk car	rriers	
Table 3-2 Lo CSR Ships (co	ocation and number of thickness ntinued)	measuring points -	Table 3-2 Lo	ocation and number of thickness	measuring points
Items	location and number of thickness measur- ing points	Figure reference	Items	location and number of thickness measuring points	Figure reference
Single skin bulk carriers: Selected side shell frames in cargo holds	Includes side shell frame, upper and lower end attachments and adjacent shell plating. 25% of frames: one out of four frames should preferably be chosen throughout the cargo hold length on each side. 50% of frames: one out of two frames should preferably be chosen throughout the cargo hold length on each side. "Selected frames" means at least 3 frames on each side of cargo holds	Extent of areas is shown in Annex 1-6, 1 (2) or (6) of the Guidance Locations of points are given in Fig 3	Single skin bulk carriers: Selected side shell frames in cargo holds	Includes side shell frame, upper and lower end attachments and adjacent shell plating. 25% of frames: one out of four frames should preferably be chosen throughout the cargo hold length on each side. 50% of frames: one out of two frames should preferably be chosen throughout the cargo hold length on each side. "Selected frames" means at least 3 frames on each side of cargo holds	Extent of areas is shown in Annex 1-6, 1 (2) or (6) of the Guidance (2019) Locations of points are given in Fig 3
Double skin bulk carriers: Transverse frame in dou- ble skin tank		Fig 1	Double skin bulk carriers: Transverse frame in dou- ble skin tank		Extent of areas is shown in Annex 1-6, 1 (6) of the Guidance (2019) Locations of points argiven in Fig 1 3
<omitted></omitted>			<same as="" current="" guidances=""></same>		
(NOTES) 1. mark: means the location to be measured. 2. ×, ∨ mark: means the point to be measured.				: means the location to be measured. means the point to be measured.	

Table 4 Extent of thickness measurements at Special Survey - General Ships (continued)

No. of Special Survey	Extent and location of measurement
Special Survey No. 4 and Subsequent	<omitted></omitted>

(NOTES)

: Thickness gaugings for deck plates

: Thickness gaugings for side shell plates

: Thickness gaugings for the transverse section(ap-

plied for plates only)

Thickness gaugings for the transverse section(including longitudinal members, for transversely framed vessels including adjacent frames and their end connections in way of transverse sections)

- 1) In application to this table, General Ships means ships except Other Ships in **Table 1.2.4, 2.** of the Rules.
- 2) Thickness measurement locations are to be selected to provide the best representative sampling of areas likely to be most exposed to corrosion, considering cargo and ballast history and arrangement and condition of protective coatings.
- 3) Thickness measurements of internals may be <u>specially considered</u> by the Surveyor if the hard protective coating is in GOOD condition.
- 4) For ships more than 100 meters in length, at Special Survey No. 3, thickness measurements of exposed deck plating within amidship 0.5L may be required.

<omitted>

Amendment

Table 4 Extent of thickness measurements at Special Survey - General Ships (continued)

No. of Special Survey	Extent and location of measurement
Special Survey No. 4 and Subsequent	<same as="" current="" guidances=""></same>

(NOTES)

Thickness gaugings for deck plates

: Thickness gaugings for side shell plates

Thickness gaugings for the transverse section(ap-

plied for plates only)

Thickness gaugings for the transverse section(including longitudinal members, for transversely framed vessels including adjacent frames and their end connections in way of transverse sections)

- 1) In application to this table, General Ships means ships except Other Ships in **Table 1.2.4, 2.** of the Rules.
- 2) Thickness measurement locations are to be selected to provide the best representative sampling of areas likely to be most exposed to corrosion, considering cargo and ballast history and arrangement and condition of protective coatings.
- 3) Thickness measurements of internals may be specially considered reduced to extent of measurement points that is sufficient to confirm the actual average condition of the structure under the coating by the Surveyor if the hard protective coating is in GOOD condition. (2019)
- 4) For ships more than 100 meters in length, at Special Survey No. 3, thickness measurements of exposed deck plating within amidship $0.5\,L$ may be required.

<same as current Guidances>

Amendment

Table 7 Extent of thickness measurements at Special Survey - Liquefied Gas Carriers (continued)

No. of Special Survey	Extent and location of measurement
Special Survey No. 3	<omitted></omitted>
Special Survey No. 4 and Subsequent	<omitted></omitted>

Table 7 Extent of thickness measurements at Special Survey - Liquefied Gas Carriers (continued)

(NOTES) Thickness gaugings for deck plates Thickness gaugings for side shell plates Thickness gaugings for the transverse section(applied for plates only) Thickness gaugings for the transverse section(including longitudinal members, for transversely framed vessels including adjacent frames and their end connections in way of transverse sections)

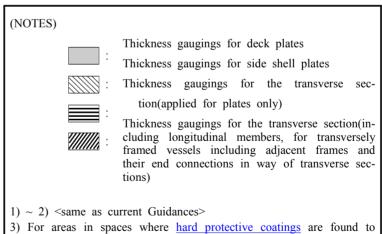
- 1) \sim 2) <omitted>
- 3) For areas in spaces where <u>protective coatings</u> are found to be in GOOD condition, the extent of thickness measurements may be <u>specially considered</u> by the Society.

<omitted>

Table 7 Extent of thickness measurements at Special Survey - Liquefied Gas Carriers (continued)

No. of Special Survey	Extent and location of measurement
Special Survey No. 3	<same as="" current="" guidances=""></same>
Special Survey No. 4 and Subsequent	<same as="" current="" guidances=""></same>

Table 7 Extent of thickness measurements at Special Survey – Liquefied Gas Carriers (continued)



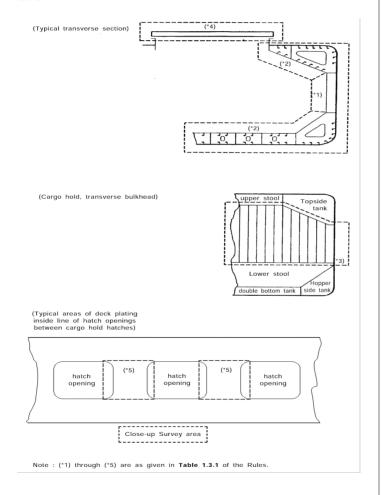
3) For areas in spaces where <u>hard protective coatings</u> are found to be in GOOD condition, the extent of thickness measurements may be <u>specially considered reduced to extent of measurement points</u> that is sufficient to confirm the actual average condition of the <u>structure under the coating</u>. (2019)

<same as current Guidances>

Annex 1-6 Areas of Close-up Survey, etc.

1. <omitted>

- (1) <omitted>
- (2) Areas of Close-up Survey for Bulk Carriers with ESP notation



Amendments

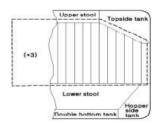
Annex 1-6 Areas of Close-up Survey, etc.

1. <omitted>

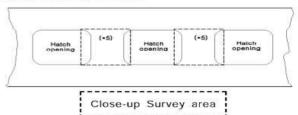
- (1) <omitted>
- (2) Areas of Close-up Survey for Bulk Carriers with ESP notation

(Typical transverse section)

(Cargo hold, transverse bulkhead)



Typical areas of deck plating and underdeck structure inside line of hatch openings between cargo hold hatches



Note: i*1) through (*5) are as given in Table 1.3.1 of the Rules.

Current

Annex 1-12 Hull Survey for Classification Survey during Construction

1. \sim 10. <omitted>

Table 1	Table 1 Surveyable Items Activities Table									
Reference	Shipbuilding function	Survey Requirement s for Classificat ion	Survey Method required for Classification	IACS referen ce*	Statutory requiremen ts and relevant reference	Documentation available to classification Surveyor during construction	Documentation for ship construction file	Specific activities	Classification Society proposals for the project	
7 (2019)	Corrosion prevention systems, e.g. coatings, cathodic protection, impressed current except for coating system subject to PSPC	ballast tanks with	Review and report on builder's & manufacturer's documentation	UI		Manufacturer's and builder's specification	Corrosion prevention specifications	Verify that applied coatings are approved and review records of application Verify that adequate records have been maintained and copied to the ship construction file		
	Application Antifouling Systems		Review			Painting Specification	Painting Specification and Mfg Declaration	Verify that adequate records have been maintained and copied to the ship construction file		

Amendments

Annex 1-12 Hull Survey for Classification Survey during Construction

1. ~ 10. <same as current Guidances>

Table 1 Surveyable Items Activities Table									
Reference	Shipbuilding function	Survey Requirement s for Classificat ion	required for	IACS referen ce*	Statutory requiremen ts and relevant reference	Documentation available to classification Surveyor during construction	Documentation for ship construction file	Specific activities	Classification Society proposals for the project
7 (2019)	Corrosion protection systems, e.g. coatings, cathodic protection, impressed current except for coating system subject to PSPC	ballast tanks with boundaries formed by the hull envelope, and also bulk carrier hold internal surfaces, coamings and hatch covers shall have an efficient protective coating. Safety aspects of cathodic systems to be dealt with separately.		and Z9, UI SC122, UR F1	II-1/3-2 of SOLAS as amended	and builder's specification	Corrosion prevention specifications	Verify that applied coatings are approved and review records of application Verify that adequate records have been maintained and copied to the ship construction file	
	Application Antifouling Systems		Review			Painting Specification	Painting Specification and Mfg Declaration	Verify that adequate records have been maintained and copied to the ship construction file	