TÜRK LOYDU RULE CHANGE SUMMARY

TL NUMBER: 04/2023 DECEMBER 2023

Latest editions of TL Rules incorporate all rule changes. The latest rule revisions of a published rule are shown with a vertical line. Changes after the publication of the rule are written in red colour.

Please note that within this document added items are written in red and for deleted items strikethrough is applied. After the publication of relevant rule, those revisions are to be indicated with a vertical line. Following Rule Changes presented in English are also implemented into Turkish Version of Rules.

RULE CHANGE SUMMARY

CLASSIFICATION AND SURVEYS

No	Item
01	Section 2
02	Section 3

CHAPTER 1 - HULL

01	Section 3
02	Section 6
03	Section 8
04	Section 11
05	Section 12
06	Section 16

07	**Section17**
08	**Section 18**
09	**Section 21**
10	**Section 23**
11	**Section 26**
12	**Section 28**
13	**Section 30**
14	**Section 35**

CHAPTER 7 – HIGH SPEED CRAFTS

01	**Section 3**
02	**Section 7**
03	**Section 14**

CHAPTER 9 – RULES FOR CONSTRUCTION AND CLASSIFICATION of YACHTS

01	**Section 2**

CHAPTER 10 – LIQUEFIED GAS TANKERS

01	**Section 2**
02	**Section 4**
03	**Section 5**
04	**Section 6**
05	**Section 13**
06	**Section 18**

CHAPTER 27 - CONSTRUCTION OF WOODEN PASSENGER VESSELS

01	**Section 1**

CHAPTER 28 - VENTILATION

01	**Section 1**

CHAPTER 35 – TENTATIVE RULES FOR SHIPS LESS THAN 500 GT

01 General Requirements & Definitions

CHAPTER 52 – DIVING SYSTEMS

01 Section 2

CHAPTER 78 – Rules for Classification of Ships Using Gases or Other Low-Flashpoint Fuels

01 Part A

02 Part A-1

03 Part B-1

CHAPTER 101 – RULES FOR THE CLASSIFICATION OF NAVAL SHIPS

01 Section 2

CHAPTER 102 – NAVAL SHIP TECHNOLOGY, HULL STRUCTURES AND SHIP EQUIPMENT

01 Section 12

CHAPTER 104 – NAVAL SHIP TECHNOLOGY, PROPULSION PLANTS

01 Section 3

CHAPTER 105 – NAVAL SHIP TECHNOLOGY, ELECTRICAL INSTALLATIONS

01 Section 4

02 Section 5

03 Section 13

04 Section 14

CHAPTER 106 – NAVAL SHIP TECHNOLOGY, AUTOMATION

01 Section 5

CHAPTER 107 – NAVAL SHIP TECHNOLOGY, SHIP OPERATION INSTALLATIONS AND AUXILIARY SYSTEMS

01 Section 9

ADDITIONAL RULES FOR THE CERTIFICATION, INSTALLATION AND TESTING of LITHIUM BATTERIES

01 Section 1

02 Section 3

03 Section 4

GUIDE FOR CERTIFICATION OF PRIVATE RECRUITMENT AND PLACEMENT SERVICE PROVIDERS

01 GENERAL

GUIDELINE – GUIDELINE FOR EXHAUST GAS CLEANING SYSTEMS

01 General

Guidelines on Cyber Security for Ships and Offshore Units

01 General

TENTATIVE RULES FOR POLYETHYLENE CRAFTS

01 General

ADDITIONAL RULES – SEATING OF PROPULSION PLANTS AND AUXILIARY MACHINERY

01 General

CLASSIFICATION AND SURVEYS

01. Section 02 – Classificaiton

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item C.2.20 was revised according to PR37 Rev.3 as below:

It may include, but is not limited to: boilers, pressure vessels, cargo spaces (cargo holds, or cargo tanks), enclosed cargo space ~~stairways~~ access trunks, ballast tanks, double bottoms, double hull spaces, fuel oil tanks, lube oil tanks, sewage-tanks, pump-rooms, compressor rooms, cofferdams, void spaces, duct keels, inter-barrier spaces, engine crankcases, excavations and pits.

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item C.5.4.5 was revised as below:

5.4.5 Where a ship has been detained following a Flag State or Port State Control inspection on one or more occasions with serious deficiencies found, or been subject to a non-programmed survey with serious deficiencies found, the class will be liable to be suspended or withdrawn, at the discretion of TL ~~Technical~~ Classification Committee. In these cases, a period of notice, but not exceeding 3 months, may be given to owner prior to any suspension or withdrawal of class.

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Table 2.11 was revised as below:

Table 2.11 Ship type notations for floating docks and dock gates

Class Notation	Description	Application	Rule Requirement, Design	Rule Requirement, Survey
FLOATING DOCK Lifting capacity ... t	Notation assigned to the ships complying with relevant TL Rules and indicating lifting capacity in tonnes.	Floating docks	- Part A (Chapter 1 – Hull, Chapter 2 – Material, Chapter 3 – Welding), - Part B (Chapter 4 - Machinery, Chapter 4-1 Automation, Chapter 5 – Electrical Installations), - Part A Chapter 1 Section 35	Classification and Surveys Section 3 and Section 3, K.2
Dock Gate (…)	Notation assigned to the dock gates complying with relevant TL Rules. (…) is to be filled with the service location of the Dock Gate e.g. Dock Gate (HALİÇ Dock No:1).	Dock Gates	- Part A (Chapter 1 – Hull, Chapter 2 – Material, Chapter 3 – Welding), - Part B (Chapter 4 – Machinery)	Classification and Surveys Section 3 and Section 3, K.2

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Table 2.12 was revised as below:

Table 2.12 Ship type notations for special service vessels

Class Notation	Description	Application	Rule Requirement, Design (1)	Rule Requirement, Survey
BARGE	Barges are unmanned or manned vessels, normally without self-propulsion, sailing in pushed or towed units and their cargo holds are suitable for the carriage of dry or liquid cargo. Barges built for the carriage of special cargo (e.g. liquid or ore cargo) are to be assigned the respective class notations (e.g. Oil Barge, Deck CargoBarge, etc.).	Barges	Part A Chapter 1 Section 33	Classification and Surveys Section 3 and Section 3 K.4
SPLIT HOPPER BARGE	Barges specially designed for carrying spoils or dredged material	Hopper Barges	Part A Chapter 1 Section 33	Classification and Surveys Section 3
~~**HOPPER DREDGER**~~	~~Ships specially equipped for dredging activities and carrying spoils or dredged material~~	~~Hoppers Dredgers~~	~~Part A Chapter 1 Section 34~~	~~Classification and Surveys Section 3~~
PUSHER/BARGE	Ships specially intended for pushing and carriage	Pusher/ Barges	Part C Chapter 17 Pusher, Pusher/Barge Units	Classification and Surveys Section 3
BUCKET DREDGER	This notation is assigned to dredgers that are equipped with a continuous chain of buckets, which are carried through a ladder	Bucket Dredger	Part A Chapter 1 Section 34	Classification and Surveys Section 3
SPLIT HOPPER DREDGER	Ships which can split over its longitudinal axis and specially equipped for dredging activities and carrying spoils or dredged material	Split Hoppers Dredgers	Part A Chapter 1 Section 34	Classification and Surveys Section 3
CUTTER SUCTION DREDGER	This notation is assigned to ships equipped with a rotating cutter head cutting hard soil into fragments	Cutter Suction Dredgers	Part A Chapter 1 Section 34	Classification and Surveys Section 3

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Table 2.13a was revised as below:

Class Notation	Description	Application	Rule Requirement, Design (1)	Rule Requirement, Survey
HSC-PASSENGER A	High-speed crafts (up to 450 passengers) meeting the requirements of category A	High-speed crafts	Part C Chapter 7 High Speed Crafts	Classification and Surveys Section 3
HSC-PASSENGER B	High-speed crafts (over 450 passengers) meeting the requirements of category B	High-speed crafts	Part C Chapter 7 High Speed Crafts	
HSC-CARGO	High-speed cargo crafts meeting the requirements of the cargo craft category	High-speed cargo crafts	Part C Chapter 7 High Speed Crafts	
HSDE	High-speed crafts constructed ~~in essential parts according to~~ by using elements of **TL** Rule Chapter 7 and which are not subject to the IMO HSC Code. Details of implementation (e.g. used sections) are specified in the Class Certificate.	High-speed crafts	Part C Chapter 7 High Speed Crafts	
DSC	Ships which were built before 01 January 1996 and complying the main parts of TL Rules, Chapter 7 - High Speed Vessels (1993) and subject to the IMO DSC Code	High-speed crafts	Part C Chapter 7 High Speed Crafts (1993), IMO DSC Code	
(1) *Refer to following TL-I HSCs and TL-I SC137 as applicable;*				

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Table 2.42 was revised as below:

Table 2.42 Notations for emergency response service systems

Class Notation	Description	Application	Rule Requirement, Design	Rule Requirement, Survey
ERS	For ships, the geometry and structural data of which are made available in a database to provide the assistance necessary for limiting damages in case of average with the aid of special computer programs		TL-G 145	Classification and Surveys Section 3

02. Section 03 – Surveys

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item K.16 was added as below:

16. Dredgers

16.1 Annual Surveys

16.1.1 In addition to the surveys as stipulated in B, the following installations, structural elements, items of equipment and outfit, are to be surveyed in order to ensure that they are maintained in satisfactory condition. Prior to inspection, the Surveyor shall examine the documentation required to be kept on board for this type of vessel, as a basis for the survey

16.1.2 The attachments of lifting systems and suction piping to the structure are to be visually examined as far as practicable.

16.1.3 For split hopper dredgers the hinges and blocks of deck house, deck hinges between port and starboard side hopper's deck plating, hydraulic jacks and their piping systems and safety alarms are to be visually examined.

16.1.4 The condition of the dredging machinery space is to be visually examined. Equipment with regard to electrical shocks, protection of rotating machinery again injury, condition of fire and explosion prevention measures are to be checked.

16.1.5 Remote operation of suction pumps, suction pipes and valves from bridge or remote control station are to be tested, as far as practicable.

16.2 Class Renewal Surveys

16.2.1 In addition to the class renewal surveys as stipulated in D and 16.1, the machinery plant and electrical installation are to be subjected to following examination and testing for proper functioning at the surveyor's discretion.

16.2.2 Hopper bottom discharge doors or valves and their attachments are to be visually examined.

16.2.2.1 The attachments are hinges, actuating rods, hydraulic systems etc.

16.2.2.2 The attachments may be opened and inspected internally if deemed necessary by attending surveyor.

16.2.2.3 The bottom doors hinges and hinge brackets are to be NDT examined.

16.2.3 Lining (plating against wear) in hopper space is to be examined to confirm that there are no detachments.

Note: The dredge spoils may migrate between the lining and hull structure at detachments which would cause corrosion on hull plating. In case such detachments are found, the complete lining is to be removed and the whole hull plating beneath is to be visually examined and UT gauged if deemed necessary by attending surveyor.

16.2.4 For split hopper dredger, hinges and blocks of deck house, deck hinges between port and starboard side hopper's deck plating,hydraulic jacks and their pipings system and safety alarms are to be examined.

16.2.5 The suction pumps, are to be internally examined in open condition against possible corrosion by cavitation.

16.2.6 The hinges and blocks of deck house, deck hinges, hydraulic jacks and their pipings systems may be open out and/or future checks may be carried out as deemed necessary by the Surveyor.

PART A – CHAPTER 1 - HULL

01. Section 03 – Design Principles

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item B.7.2.7 was revised as below:

7.2.7 ~~The location of lightening holes shall be such that the distance from hole edge to face plate is not less than 0.3 x web depth.~~

Manholes and lightening holes are to be reinforced unless following requirements are not complied:

- In single skin sections, having depth not exceeding 25% of the web depth and located so that the edges are not less than 40% of the web depth from the faceplate.

- In double skin sections, having depth not exceeding 50% of the web depth and located so that the edges are well clear of cut outs for the passage of stiffeners.

The length of openings is not to be greater than:

- At the mid-span of primary supporting members: the distance between adjacent openings.
- At the ends of the span: 25% of the distance between adjacent openings.

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item E was revised according to UR S14 Rev.7 as below:

E. Testing Procedures of Watertight Compartments

The testing procedures of watertight compartments are to be carried out according to requirements as given below. The requirements are divided into three parts, PART A, PART B and PART C as follows:

• PART A - SOLAS Ships
• PART B - SOLAS Exempt/Equivalent Ships
• PART C - Non-SOLAS Ships

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item E.1.1 was revised according to UR S14 Rev.7 as below:

1. General

1.1 These test procedures are to confirm the watertightness of tanks, ~~and~~ watertight boundaries and the structural adequacy of tanks which ~~consist~~ form part of the watertight subdivisions **(1)** of ships. These procedures may also be applied to verify the weathertightness of structures and shipboard outfitting. The tightness of all tanks and watertight boundaries of ships during new construction and those relevant to major conversions or major repairs **(2)** is to be confirmed by these test procedures prior to the delivery of the ship.

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item E.3.3 was added according to UR S14 Rev.7 as below:

3.3 The 'top of the overflow' is defined as being the top of any overflow system which is used to prevent overfilling of a tank. Such system can be an overflow pipe, airpipe, intermediate tank. For gravity tanks (i.e. sewage, grey water and similar tanks, not filled with pumps) the top of the overflow is to be taken as the highest point of the filling line.

Note: Gauging devices are not considered equivalent to an overflow system with the exception of fuel oil overflow tanks not intended to hold fuel which have been fitted with a level alarm.

Where a tank is fitted with multiple means of preventing overfilling, the decision on which overflow system is to be used to determine the test head is to be based on the highest point to which the liquid may rise in service.

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item E.4.2.1 was revised according to UR S14 Rev.7 as below:

4.2.1 Type and time of test

Where a structural test is specified in Table 3.35 or Table 3.36, a hydrostatic test in accordance with 4.4.1 will be acceptable. Where practical limitations (strength of building berth, light density of liquid, etc.) prevent the performance of a hydrostatic test, a hydropneumatic test in accordance with 4.4.2 may be accepted instead.
A hydrostatic test or hydropneumatic test for the confirmation of structural adequacy may be carried out while the vessel is afloat, provided the results of a leak test are confirmed to be satisfactory before the vessel is afloat.

Alternative equivalent tank testing procedures may be considered for tanks which are constructed from composite materials such as glass reinforced plastic (GRP) and fibre reinforced plastic (FRP) based on the recommendations of the composite manufacturer.

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item E.4.4.1 was revised according to UR S14 Rev.7 as below:

4.4.1 Hydrostatic Test

……

In cases where a tank is designed for cargo densities greater than sea water and testing is with fresh water or sea water, the testing pressure height is to simulate the actual loading for those greater cargo densities as far as practicable~~.~~, but the test pressure shall not exceed the maximum design internal pressure at the top of tank.

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item Table 3.35 was revised according to UR S14 Rev.7 as below:

Table 3.35 Test Requirements for Tanks and Boundaries

Item number	Tank or boundary to be tested	Test type	Test head or pressure	Remarks
1	Double bottom tanks **(4)**	Leak and Structural **(1)**	The greater of - top of the overflow **(10),** - to 2.4m above top of tank **(2)**, or - to bulkhead deck	
2	Double bottom voids **(5)**	Leak	See 4.4.4 through 4.4.6, as applicable	Including pump room double bottom and bunker tank protection double hull required by MARPOL Annex I
3	Double side tanks	Leak and Structural **(1)**	The greater of - top of the overflow **(10)**, - to 2.4m above top of tank **(2)**, or - to bulkhead deck	
4	Double side voids	Leak	See 4.4.4 through 4.4.6,	

Item number	Tank or boundary to be tested	Test type	Test head or pressure	Remarks
			as applicable	
5	Deep tanks other than those listed elsewhere in this table	Leak and Structural **(1)**	The greater of - top of the overflow **(10)**, or - to 2.4m above top of tank **(2)**	
6	Cargo oil tanks	Leak and Structural **(1)**	The greater of - top of the overflow **(10)**, - to 2.4m above top of tank **(2)**, or - to top of tank **(2)** plus ~~setting of any~~ the design vapour pressure ~~relief valve~~	
7	Ballast hold of bulk carriers	Leak and Structural **(1)**	Top of cargo hatch coaming	
8	Peak tanks	Leak and Structural **(1)**	The greater of - top of the overflow **(10)**, or - to 2.4m above top of tank **(2)**	After peak to be tested after installation of stern tube
9	1. Fore peak spaces with equipment	Leak	See 4.4.3 through 4.4.6, as applicable	
	2. Fore peak voids	Leak	See 4.4.4 through 4.4.6, as applicable	
	3. Aft peak spaces with equipment	Leak	See 4.4.3 through 4.4.6, as applicable	
	4. Aft peak voids	Leak	See 4.4.4 through 4.4.6, as applicable	After peak to be tested after installation of stern tube
10	Cofferdams	Leak	See 4.4.4 through 4.4.6, as applicable	
11	1. Watertight bulkheads	Leak **(8)**	See 4.4.3 through 4.4.6, as applicable **(7)**	
	2. Superstructure end bulkheads	Leak	See 4.4.3 through 4.4.6, as applicable	
12	Watertight doors below freeboard or bulkhead deck	Leak **(6)**, **(7)**	See 4.4.3 through 4.4.6, as applicable	
13	Double plate rudder blades	Leak	See 4.4.4 through 4.4.6, as applicable	
14	Shaft tunnels clear of deep tanks	Leak **(3)**	See 4.4.3 through 4.4.6, as applicable	
15	Shell doors	Leak **(3)**	See 4.4.3 through 4.4.6, as applicable	
16	Weathertight hatch covers and closing appliances	Leak **(3)**, **(7)**	See 4.4.3 through 4.4.6, as applicable	Hatch covers closed by tarpaulins and battens excluded
17	Dual purpose tanks/dry cargo hatch covers	Leak **(3)**, **(7)**	See 4.4.3 through 4.4.6, as applicable	In addition to structural test in item 6 or 7
18	Chain lockers	Leak and Structural **(1)**	Top of chain pipe	
19	Lubricating oil sump tanks and other similar tanks/spaces under main engines	Leak	See 4.4.3 through 4.4.6, as applicable	
20	Ballast ducts	Leak and	The greater of	

Item number	Tank or boundary to be tested	Test type	Test head or pressure	Remarks
		Structural **(1)**	- ballast pump maximum pressure, or - setting of any pressure relief valve	
21	Fuel Oil Tanks	Leak and Structural **(1)**	The greater of - top of the overflow **(10)**, - to 2.4m above top of tank **(2)**, or - to top of tank **(2)** plus ~~setting of any~~ the design vapour pressure ~~relief valve~~, or - to bulkhead deck	
22	Fuel oil overflow tanks not intended to hold fuel	Leak and structural **(1)**	The greater of - top of the overflow **(10)**, - to 2.4m above top of tank **(2)**, or - to bulkhead deck	

Notes:

(1) *Refer to item 4.2.2.*

(2) *The top of a tank is the deck forming the top of the tank, excluding any hatchways.*

(3) *Hose Test may also be considered as a medium of the test. See 3.2.*

(4) *Including tanks arranged in accordance with the provisions of SOLAS regulation II-1/9.4.*

(5) *Including duct keels and dry compartments arranged in accordance with the provisions of SOLAS regulation II-1/11.2 and II-1/9.4 respectively, and/or oil fuel tank protection and pump room bottom protection arranged in accordance with the provisions of MARPOL Annex I, Chapter 3, Part A regulation 12A and Chapter 4, Part A, regulation 22 respectively.*

(6) *Where water tightness of a watertight door has not been confirmed by prototype test, testing by filling watertight spaces with water is to be carried out. See SOLAS regulation II-1/16.2 and MSC.1/Circular.~~1464~~1572/Rev.1.*

(7) *As an alternative to the hose testing, other testing methods listed in 4.4.7 through 4.4.9 may be applicable subject to adequacy of such testing methods being verified. See SOLAS regulation II-1/11.1. For watertight bulkheads (item 11.1) alternatives to the hose testing may only be used where a hose test is not practicable.*

(8) *A "Leak and structural test", see 4.2.2 is to be carried out for a representative cargo hold if intended for in-port ballasting. The filling level requirement for testing cargo holds intended for in-port ballasting is to be the maximum loading that will occur in-port as indicated in the loading manual.*

(9) *Where L.O. sump tanks and other similar spaces under main engines intended to hold liquid form part of the watertight subdivision of the ship, they are to be tested as per the requirements of Item 5, Deep tanks other than those listed elsewhere in this table.*

(10) *Refer to item 3.3.*

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item Table 3.36 was revised according to UR S14 Rev.7 as below:

Table 3.36 Additional Test Requirements for Special Service Ships/Tanks

Item number	Type of Ship/Tank	Structures to be tested	Type of Test	Test Head or Pressure	Remarks
1	Liquefied gas carriers	Integral Tanks	Leak and structural	Refer to Türk Loydu Rules Chapter 10 Liquefied Gas Carriers Section 4	
		Hull structure supporting membrane or semi-membrane tanks	Refer to Türk Loydu Rules Chapter 10 Liquefied Gas	Refer to Türk Loydu Rules Chapter 10 Liquefied Gas Carriers Section 4	

			Carriers Section 4		
		Independent tanks type A	Refer to Türk Loydu Rules Chapter 10 Liquefied Gas Carriers Section 4	Refer to Türk Loydu Rules Chapter 10 Liquefied Gas Carriers Section 4	
		Independent tanks type B	Refer to Türk Loydu Rules Chapter 10 Liquefied Gas Carriers Section 4	Refer to Türk Loydu Rules Chapter 10 Liquefied Gas Carriers Section 4	
		Independent tanks type C	Refer to Türk Loydu Rules Chapter 10 Liquefied Gas Carriers Section 5	Refer to Türk Loydu Rules Chapter 10 Liquefied Gas Carriers Section 5	
2	Edible liquid tanks	Independent tanks	Leak and structural **(1)**	The greater of - top of the overflow **(3)**, or - to 0.9m above top of tank **(2)**	
3	Chemical carriers	Integral or independent cargo tanks	Leak and structural **(1)**	The greater of - to 2.4m above top of tank **(2)**, or - to top of tank **(2)**plus ~~setting of any~~ the design vapour pressure ~~relief valve~~	Where a cargo tank is designed for the carriage of cargoes with specific gravities larger than 1.0, ~~an appropriate additional head is to be considered~~ see item 4.4.1

Note:
(1) *Refer to ~~section~~ item 4.2.2*
(2) *Top of tank is deck forming the top of the tank excluding any hatchways.*
(3) *Refer to item 3.3.*

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item E.5 and heading were revised according to UR S14 Rev.7 as below:

Part B ~~– Non-SOLAS Ships and~~ SOLAS Exempt~~ion~~/Equivalent Ships

5. General

5.1 These test procedures are to confirm the watertightness of tanks, ~~and~~ watertight boundaries and the structural adequacy of tanks which ~~consist~~form part of the watertight subdivisions **(1)** of ships. These procedures may also be applied to verify the weathertightness of structures and shipboard outfitting. The tightness of all tanks and watertight boundaries of ships during new construction and those relevant to major conversions or major repairs **(2)** is to be confirmed by these test procedures prior to the delivery of the ship.

5.2 Testing procedures of watertight compartments are to be carried out in accordance with PART B for ~~non-SOLAS ships and~~ those SOLAS ships (including CSR BC & OT) for which:

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item E.6 was revised according to UR S14 Rev.7 as below:

6. Application

6.1 Testing procedures are to be carried out in accordance with the requirements of PART A in association with the following alternative procedures for 4.2.2 of PART A "Testing Schedule for New Construction or Major Structural Conversion"~~and alternative test requirements for PART A Table 3.35~~..

……

6.5 For tanks which are less than 2 m^3 in volume, structural testing may be replaced by leak testing.

6.5~~5~~6 Where the structural adequacy of the tanks and spaces of a vessel were verified by the structural testing required ~~in~~by either ~~Table 3.35~~Part A, or Part B 6.3, subsequent vessels in the series (i.e. sister ships built from the same plans at the same shipyard) may be exempted from structural testing of tanks, provided that:

6.5~~5~~6.1. water-tightness of boundaries of all tanks ~~is~~and spaces are verified by leak tests and thorough inspections are carried out.

6.5~~5~~6.2. structural testing is carried out for at least one tank or space of each type among all tanks/spaces of each sister vessel.

6.5~~5~~6.3. additional tanks and spaces may require structural testing if found necessary after the structural testing of the first tank or if deemed necessary by the attending Surveyor.

For cargo space boundaries adjacent to other compartments in tankers and combination carriers or boundaries of tanks for segregated cargoes or pollutant cargoes in other types of ships, ~~the provisions of paragraph 6.3 shall apply in lieu of paragraph 6.5.2.~~structural tests are to be carried out for at least one tank of a group of tanks having structural similarity (i.e. same design conditions, alike structural configurations with only minor localised differences determined to be acceptable by the attending Surveyor) on each vessel provided all other tanks are tested for leaks by an air test.

6.6~~7~~ Sister ships built (i.e. keel laid) two years or more after the delivery of the last ship of the series, may be tested in accordance with PART B 6.5~~5~~6 at the discretion of **TL**, provided that:

6.6~~7~~.1. general workmanship has been maintained (i.e. there has been no discontinuity of shipbuilding or significant changes in the construction methodology or technology at the yard, shipyard personnel are appropriately qualified and demonstrate an adequate level of workmanship as determined by **TL**); and

6.6~~7~~.2. an NDT plan is implemented and evaluated by the **TL** for the tanks not subject to structural tests. Shipbuilding quality standards for the hull structure during new construction are to be reviewed and agreed during the kick-off meeting. ~~Structural fabrication is to be carried out in accordance with **TL** Additional Rules named, "Shipbuilding and Repair Quality Standard", or a recognised fabrication standard which has been accepted by **TL** prior to the commencement of fabrication/construction.~~ The work is to be carried out in accordance with the Rules and under survey of **TL**.

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item New part, E.7 and E.8 were added according to UR S14 Rev.7 as below:

Part C –SOLAS Exempt/Equivalent Ships

7. General

7.1 These test procedures are to confirm the watertightness of tanks, watertight boundaries and the structural adequacy of tanks which form part of the watertight subdivisions **(1)** of ships. These procedures may also be applied to verify the weathertightness of structures and shipboard outfitting. The tightness of all tanks and watertight boundaries of ships during new construction and those relevant to major conversions or major repairs **(2)** is to be confirmed by these test procedures prior to the delivery of the ship.

7.2 Testing pocedures of watertight compartments are to be carried out in accordance with PART C for non-SOLAS ships, see SOLAS Chapter I, Regulation 1 and Regulation 3.

8. Application

8.1 Testing procedures are to be carried out in accordance with the requirements of PART A in association with the following alternative procedures for 4.2.2 of PART A “Testing Schedule for New Construction or Major Structural Conversion”.

8.2 The tank boundaries are to be tested from at least one side. The tanks for structural test are to be selected so that all representative structural members are tested for the expected tension and compression.

8.3 The requirements given in Table 3.35 of Part A to structurally test tanks to 2.4 metres above the top of the tank do not apply. Instead, the minimum test pressure for structural testing is to be taken as 0.3D + 0.76 metres above the top of the tank where the top of the tank is the deck forming the top of the tank, excluding any hatchways and D is the depth of the ship. The minimum test pressure need not be taken greater than 2.4 metres above the top of the tank.

8.4 Structural tests are to be carried out for at least one tank of a group of tanks having structural similarity (i.e. same design conditions, alike structural configurations with only minor localised differences determined to be acceptable by the attending Surveyor) on each vessel provided all other tanks are tested for leaks by an air test. The acceptance of leak testing using an air test instead of a structural test does not apply to cargo space boundaries adjacent to other compartments in tankers and combination carriers or the boundaries of tanks for segregated cargoes or pollutant cargoes in other types of ships.

8.5 Additional tanks may require structural testing if found necessary after the structural testing of the first tank.

8.6 For tanks which are less than 2 m^3 in volume, structural testing may be replaced by leak testing.

8.7 Where the structural adequacy of the tanks and spaces of a vessel were verified by the structural testing required by either PART A or PART C section 2.4, subsequent vessels in the series (i.e. sister ships built from the same plans at the same shipyard) may be exempted from structural testing of tanks, provided that:

8.7.1 water-tightness of boundaries of all tanks and spaces are verified by leak tests and thorough inspections are

carried out.

(1) Watertight subdivision means the main transverse and longitudinal subdivisions of the ship.

(2) Major repair means a repair affecting structural integrity.

8.7.2 structural testing is carried out for at least one tank or space among all tanks/spaces of each sister vessel.

8.7.3 additional tanks and spaces may require structural testing if found necessary after the structural testing of the first tank or if deemed necessary by the attending Surveyor.

8.8 Sister ships built (i.e. keel laid) two years or more after the delivery of the last ship of the series, may be tested in accordance with PART C 8.7 at the discretion of **TL**, provided that:

8.8.1 general workmanship has been maintained (i.e. there has been no discontinuity of shipbuilding or significant changes in the construction methodology or technology at the yard, shipyard personnel are appropriately qualified and demonstrate an adequate level of workmanship as determined by **TL**, and

8.8.2 an NDT plan is implemented and evaluated by **TL** for the tanks not subject to structural tests. Shipbuilding quality standards for the hull structure during new construction are to be reviewed and agreed during the kick-off meeting. The work is to be carried out in accordance with the Rules and under survey of **TL**.

02. Section 06 – Longitudinal Strength

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item C.4.3 was added as below:

4.3 The following structural members are not to be considered in the calculation of section modulus:

- Superstructure except as defined in Section 13 item A.2.5.
- Deckhouses
- Vertically corrugated bulkheads
- Bulwarks and gutter plates (Except for the members described in C.4.1)
- Bilge keels
- Sniped or non-continuous longitudinal stiffeners
- Non-continuous hatch coamings

03. Section 08 – Supporting Structures

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Title of item D.3 was revised as below:

3. Pillars and Pillar Bulkheads

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item D.3.2 was revised as below:

I_{pillar} = Net moment of inertia about the weakest axis of the cross section of the pillar in [cm^4]

when calculating I_{pillar} for pillar bulkheads, effective breadth of attached plating is to be taken not greater than 30t, where "t" is to be taken as the minimum bulkhead thickness at the considered section.

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item D.3.3 was added as below:

3.3 Pillar Bulkheads

Bulkheads supporting decks girders or ship side structures supporting web beams are to be regarded as pillar bulkhead. Compressive loads and buckling strength of stiffeners shall be calculated according to 3.1 and 3.2.

In addition **TL** may request buckling analysis if deemed necessary.

04. Section 11 – Watertight Bulkheads

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item A.4.1.5 was revised according to MSC.474(102) as below:

4.1.5 Except as provided in 4.1.6 the collision bulkhead may be pierced below the bulkhead deck of passenger ships and the freeboard deck of cargo ships by not more than one pipe for dealing with fluid in the forepeak tank, provided that the pipe is fitted with a ~~screw-down~~ remotely controlled valve capable of being operated from above the bulkhead deck of passenger ships and the freeboard deck of cargo ships ~~, the valve being located inside the forepeak at the collision bulkhead. TL may, however, authorize the fitting of this valve on the after side of the collision bulkhead provided that the valve is readily accessible under all service conditions and the space in which it is located is not a cargo space. Alternatively, for cargo ships, the pipe may be fitted with a butterfly valve suitably supported by a seat or flanges and capable of being operated from above the freeboard deck.~~ The valve shall be normally closed.

If the remote control system should fail during operation of the valve, the valve shall close automatically or be capable of being closed manually from a position above the bulkhead deck of passenger ships and the freeboard deck of cargo ships. The valve shall be located at the collision bulkhead on either the forward or aft side, provided the space on the aft side is not a cargo space. All valves shall be of steel, bronze or other approved ductile material. Valves of ordinary cast iron or similar material are not acceptable.

05. Section 12 – Tank Structures

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item E.2.3 was revised as below:

2.3 ~~For minimum thickness the requirements of B.2 apply in general.~~ For fuel oil, lubrication oil and freshwater tanks minimum thickness need not to be taken greater than 5 mm.

06. Section 16 – - Hull Outfitting

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Title of Table 16.1 was revised according to MSC.491(104) as below:

Table 16.1 Acceptable arrangements of scuppers~~, inlets~~ and discharges

07. Section 17 – Equipment

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item G.1 was revised according to MSC.474(102) as below:

……

According to the additional requirements for mooring arrangement provided by SOLAS Regulation II-1/3-8, the mooring arrangement is to be designed, and the mooring equipment including lines is to be selected based on MCS.1/Circ.1619.

Mooring equipment, including lines, is to be inspected and maintained in a suitable condition for their intended purposes (MSC.1/Circ.1620).

For implementation of SOLAS Regulation II-1/3-8 see also MSC.1/Circ.1362/Rev.2 (UI SC212).

……

08. Section 18 – Rudder and Manoeuvring Arrangement

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item D.3.1 was revised as below:

ℓ_c = Cone length, refer to Figure 18.9b, ~~not to be taken less than $1.5 \cdot d_o$~~

3.1.2 Cone coupling is to be secured by a slugging nut. The slugging nut itself is to be carefully secured, e.g. by a securing plate as shown in Figure 18.9 and the cone shapes are to fit exactly. The coupling length ℓ, in mm, is to be, in general, not less than $1.5d_0$.

09. Section 21 – Structural Fire Protection

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Notes were added item B.12.2.5 and C.8.2.5 as below:

Note: *Sketches of such arrangements are contained in the Unified Interpretations of SOLAS chapter II-2 (MSC.1/Circ.1276/Rev.1).*

10. Section 23 – Bow, Stern and Side Doors

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item A.1.3 was revised according to MSC.474(102) as below:

1.3 For ro-ro passenger ships ~~subject to the provisions of subparagraphs SOLAS Reg. II-1/17-1 items 1.2 and 1.3~~, all accesses from the ro-ro deck that leads to spaces below the bulkhead deck shall have a lowest point which is not less than 2.5 m above the bulkhead deck, unless the access is covered by the provisions of SOLAS Reg. II-1/17-1 paragraphs 1.2 or 1.3. **(1)**

11. Section 26 – Stability

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Note under item B.6.4.3 was revised according to MSC.1/Circ.1362/Rev.2 as below:

Note: For further details, refer to MSC.1/Circ.1362/Rev.~~1~~2 and TL-I SC297 Amendment to stability/loading information in conjunction with the alterations of lightweight

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item E.1.1 was revised according to MSC.429(98)/Rev.2 as below:

1.1.1 All passenger vessels and all cargo vessels with Ls ≥ 80 m excluding those ships covered by other damage stability regulations in conventions and codes have to fulfill the stability requirements of part B-1 of SOLAS as amended in conjunction with Resolution MSC.429(98) /Rev.~~1~~2 Revised Explanatory Notes to the SOLAS Chapter II-1 Subdivision and Damage Stability Regulations.

Item E.3.8 and 4.4 were revised according to MSC.474(102) as below:

3.8 For openings in watertight ~~bulkheads~~ boundaries below the bulkhead deck in passenger ships refer to ~~Chapter~~ Regulation II-1/13 of SOLAS as amended.

……

4.4 For openings in the shell plating below the bulkhead deck of passenger ships and the freeboard deck of cargo ships refer to ~~Chapter II-1~~ SOLAS Reg. II-1/15, as amended.

12. Section 28 – Tankers

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item D.2.3.1 was revised according to MEPC.343(78) as below:

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

13. Section 30 – Passenger Ships

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item B.3.6.1 was revised according to MSC.474(107) as below:

3.6.1 Except as provided in item 3.6.2, the collision bulkhead may be pierced below the bulkhead deck by not more than one pipe for dealing with fluid in the forepeak tank, provided that the pipe is fitted with a ~~screw-down~~ remotely controlled valve capable of being operated from above the bulkhead deck~~, the valve being located inside the forepeak at the collision bulkhead. TL may, however, authorize the fitting of this valve on the after side of the collision bulkhead provided that the valve is readily accessible under all service conditions and the space in which it is located~~. The valve is to be normally closed. If the remote control system should fail during operation of the valve, the valve is to close automatically or be capable of being closed manually from a position above the bulkhead deck.

The valve shall be located at the collision bulkhead on either the forward or aft side, provided the space on the aft side is not a cargo space. ~~All~~ The valve~~s are~~ is to be of steel, bronze or other approved ductile material. Valves of ordinary cast iron or similar material are not acceptable.

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item C.1 was revised according to MSC.474(107) as below:

C. Openings in Watertight Boundaries

1. General

1.1 The number of openings in watertight ~~bulkheads~~ boundaries are to be reduced to the minimum compatible with the design and proper working of the ship, satisfactory means are to be provided for closing these openings.

1.2 Where pipes, scuppers, electric cables, etc. are carried through watertight subdivision ~~bulkheads~~ boundaries, arrangements are to be made to ensure the watertight integrity of the ~~bulkheads~~ boundaries.

1.3 Valves not forming part of a piping system are not to be permitted in watertight subdivision ~~bulkheads~~ boundaries.

1.4 Lead or other heat sensitive materials are not to be used in systems which penetrate watertight ~~subdivision bulkheads~~ boundaries, where deterioration of such systems in the event of fire would impair the watertight integrity of the bulkheads.

1.5 No doors, manholes, or access openings are permitted in watertight transverse bulkheads dividing a cargo space from an adjoining cargo space, except as provided in items 4 and 5.

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item C.2 was revised according to MSC.474(107) as below:

2.1 Not more than one door, apart from the doors to shaft tunnels, may be fitted in each ~~main transverse~~ watertight bulkhead within spaces containing the main and auxiliary propulsion machinery including boilers serving the needs of propulsion.

All these doors are to be of the sliding type and be so located as to have their sills as high as practicable. The hand gear for operating these doors from above the bulkhead deck is to be situated outside the spaces containing the machinery.

2.2 Portable plates on bulkheads are not to be permitted except in machinery spaces. The Administration may permit not more than one power operated sliding watertight door ~~in each main transverse bulkhead~~ larger than 1.2 m. to be substituted for these portable plates, provided these doors are intended to remain closed during navigation except in case of urgent necessity at the discretion of the master. These doors need not meet the requirements of complete closure by hand operated gear in 90 seconds.

Item C.3.1 and 3.2 was revised according to MSC.474(107) as below:

3.1 Where trunkways or tunnels for access from crew accommodation to the machinery spaces, for piping or for other purpose are carried through watertight bulkheads, they are to be watertight and in accordance with the requirements of SOLAS regulation II-1/16-1. The access to at least one end of each such tunnel or trunkway, if used as a passage at sea, are to be through a trunk extending watertight to a height sufficient to permit access above the bulkhead deck. The access to the other end of the trunkway or tunnel may be through a watertight door ~~of the type required by its location in the ship~~. Such trunkways or tunnels are not to extend through the first subdivision bulkhead abaft the collision bulkhead.

3.2 Where it is proposed to fit tunnels piercing ~~main transverse~~ watertight bulkheads, these are to be specially considered.

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item C.4 was revised according to MSC.474(107) as below:

4.1 If **TL** is satisfied that such doors are essential, watertight doors of satisfactory construction may be fitted in watertight bulkheads dividing cargo ~~between deck~~ spaces on tween decks. Such doors may be hinged, rolling or sliding doors but are not to be remotely controlled. They are to be fitted at the highest level and as far from the shell plating as practicable, but in no case are the outboard vertical edges be situated at a distance from the shell plating which is less than one fifth of the breadth of the ship, such distance being measured at right angles to the centerline at the level of the deepest subdivision draught.

4.2 Should any of the doors be accessible during the voyage, they are to be fitted with a device which prevents unauthorized opening. When it is proposed to fit such doors, the number and arrangements are to be specially considered by the ~~Society~~ Administration.

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item E.4 and 5 were revised according to MSC.474(102) as below:

4. Access and Cargo Openings

Cargo ports and other similar openings (e.g. ~~G~~gangway~~, cargo~~ and fuelling ports ~~fitted~~ in the side of ships below the bulkhead deck are to be ~~watertight and~~ fitted with doors so designed as to ensure the same watertightness and structural integrity as the surrounding shell plating. Unless otherwise granted by the Administration, these openings are to open outwards. The number of such openings is to be the minimum compatible with the design and proper working of the ship. ~~I~~ In no case these openings are to be so fitted as to have their lowest point below the deepest subdivision draught.

~~**5. Other Openings**~~

~~The inboard opening of each ash-chute, rubbish-chute, etc. is to be fitted with an efficient cover.~~

~~If the inboard opening is situated below the bulkhead deck, the cover is to be watertight, and in addition an automatic non-return valve is to be fitted in the chute in an easily accessible position above the deepest subdivision draught.~~

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item F.1 was revised according to MSC.474(102) as below:

F. Internal Watertight Integrity Above the Bulkhead Deck

1. General

~~All reasonable and practicable measures are to be taken to limit the entry and spread of water above the bulkhead deck. Such measures may include partial bulkheads or webs. When partial watertight bulkheads and webs are fitted on the bulkhead deck, above or immediate vicinity of watertight bulkheads, they are to have watertight shell and bulkhead deck connections so as to restrict the flow of water along the deck when the ship is in a heeled damaged condition. Where the partial watertight bulkhead does not line up with the bulkhead below, the bulkhead deck between is to be made effectively watertight. Where openings, pipes, scuppers, electric cables, etc. are carried through the partial watertight bulkheads or decks within the immersed part of the bulkhead deck, arrangements are to be made to ensure the watertight integrity of the structure above the bulkhead deck.~~

The internal watertight subdivision arrangements to limit the entry and spread of water above the bulkhead deck are to be in accordance with the design arrangements necessary for compliance with the stability requirements in parts B-1, and B-2 if applicable. Where pipes, scuppers, electric cables, etc. are carried through internal watertight boundaries that are immersed at any intermediate or final stage of flooding in damage cases that contribute to the attained subdivision index A, arrangements are to be made to ensure their watertight integrity.

Doors in internal watertight subdivision arrangements above the bulkhead deck, and also above the worst intermediate or final stage of flooding waterlines, are to be capable of preventing the passage of water when immersed in the required range of positive stability for any damage cases contributing to the attained subdivision index A. These doors may remain open provided they can be remotely closed from the navigation bridge. They are to always be ready to be immediately closed.

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item G.1.1 was revised according to MSC.474(102) as below:

1.1 Watertight doors, except as provided in items C,4 and C,5, are to be power-operated sliding doors complying with the requirements of item 2. ~~capable of being closed simultaneously from the central operating console at the navigation bridge in not more than 60 s with the ship in the upright position.~~

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item G.1.3 and 1.4 were revised according to MSC.474(102) as below:

1.3 Watertight door controls, including hydraulic piping and electric cables, are to be kept as close as practicable to the bulkhead in which the doors are fitted, in order to minimize the likelihood of them being involved in any damage which the ship may sustain. The positioning of watertight doors and their controls are to be such that if the ship sustains damage within one fifth of the breadth of the ship, such distance being measured at right angles to the

centerline at the level of the deepest subdivision ~~load line~~ draught, the operation of the watertight doors clear of the damaged portion of the ship is not impaired.

~~**1.4** All power operated sliding watertight doors are to be provided with means of indication which will show at all remote operating positions whether the doors are open or closed. Remote operating positions are only to be at the navigation bridge and at the location where hand operation above the bulkhead deck is required.~~

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item G.2.1.4 and 2.1.5 were revised according to MSC.474(102) as below:

2.1.4 Is to be provided with an individual hand-operated mechanism. It is to be possible to open and close the door by hand at the door itself from either side, and in addition, close the door from an accessible position above the bulkhead deck with an all around crank motion or some other movement providing the same degree of safety. Direction of rotation or other movement is to be clearly indicated at all operating positions. The time necessary for the complete closure of the door, when operating by hand gear, is not to exceed 90 s with the ship in the upright position. Visual indicators to show whether the door is open or closed shall be provided at the accessible position above the bulkhead deck;

2.1.5 It is to be provided with controls for opening and closing the door by power from both sides of the door and also for closing the door by power from the central operating console(s) ~~at the navigation bridge~~ required by item 3.1;

Item G.2.3.1 was revised according to MSC.474(102) as below:

2.3.1 A centralized hydraulic system with two independent power sources each consisting of a motor and pump capable of simultaneously closing all doors. In addition, there are to be for the whole installation hydraulic accumulators of sufficient capacity to operate all the doors at least three times, i.e. closed-open-closed, against an adverse list of 15º. This operating cycle is to be capable of being carried out when the accumulator is at the pump cut-in pressure. The fluid used is to be chosen considering the temperatures liable to be encountered by the installation during its service. The power operating system is to be designed to minimize the possibility of having a single failure in the hydraulic piping adversely affect the operation of more than one door. The hydraulic system is to be provided with a low-level alarm for hydraulic fluid reservoirs serving the power-operated system and a low gas pressure alarm or other effective means of monitoring loss of stored energy in hydraulic accumulators. These alarms are to be audible and visual and are to be situated on the central operating console(s) ~~at the navigation bridge~~ required by item 3.1; or

2.3.2 An independent hydraulic system for each door with each power source consisting of a motor and pump capable of opening and closing the door. In addition, there are to be a hydraulic accumulator of sufficient capacity to operate the door at least three times, i.e. closed-open-closed, against an adverse list of 15º. This operating cycle is to be capable of being carried out when the accumulator is at the pump cut-in pressure. The fluid used is to be chosen considering the temperatures liable to be encountered by the installation during its service. A low gas pressure group alarm or other effective means of monitoring loss of stored energy in hydraulic accumulators is to be provided at the central operating console(s) ~~on the navigation bridge~~ required by item 3.1. Loss of stored energy indication at each local operating position is also to be provided; or

……

2.8 A single electrical failure in the power operating or control system of a power-operated sliding watertight door is not to result in a closed door opening. Availability of the power supply should be continuously monitored at a point in the electrical circuit as near as practicable to each of the motors. Loss of any such power supply should activate an audible and visual alarm at the central operating console(s) ~~on the navigation bridge~~ required by item 3.1.

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item G.3.1 and 3.2 were revised according to MSC.474(102) as below:

3.1 A central operating console for all power-operated sliding watertight doors is to be located in the safety centre in accordance with SOLAS regulation II-2/23. If the safety centre is located in a separate space adjacent to the navigation bridge, a central operating console is also to be located on the navigation bridge. The central operating console(s) ~~at the navigation bridge~~ is to have a "master mode" switch with two modes of control : a "local control" mode which is to allow any door to be locally opened and locally closed after use without automatic closure, and a "door closed" mode which is automatically close any door that is open in not more than 60 s with the ship in an upright position. The "door closed" mode is to permit doors to be opened locally and is to automatically reclose the doors upon release of the local control mechanism. The "master mode" switch is to normally be in the "local control" mode. The "doors closed" mode is to only be used in an emergency or for testing purpose. ~~Special consideration is to be given to the reliability of the "master mode" switch.~~

3.2 The central operating console(s) ~~at the navigation bridge~~ is to be provided with a diagram showing the location of each power-operated sliding watertight door, with visual indicators to show whether each door is open or closed. A red light is to indicate a door is fully open and a green light is to indicate a door is fully closed. When the door is closed remotely, the red light is to indicate the intermediate position by flashing. The indicating circuit is to be independent of the control circuit for each door. Indication shall also be provided to the onboard stability computer, if installed in accordance with SOLAS regulation II-1/8-1.3.1.

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item I.2.1 was revised according to MSC.474(102) as below:

2.1 The design, materials and construction of all watertight closures such as doors, hatches, sidescuttles, gangway and cargo ports, valves~~,~~ and pipes~~, ash chutes and rubbish chutes~~ are to be to the satisfaction to ~~TL~~ the Administration.

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item J.2 was revised according to MSC.474(102) as below:

……

For ships to which regulation SOLAS II-1/8-1.3 applies, the damage control information is to include a reference to activation of damage stability support from the onboard stability computer, if installed, and to shore-based support when provided.

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item K.5 was revised according to MSC.474(102) as below:

5. Watertight doors fitted in watertight bulkheads dividing cargo ~~between~~ spaces on tween decks ~~spaces~~ in accordance with item C,4.1 are to be closed before the voyage commences and are to be kept closed during navigation.

6. Gangway, cargo and fuelling ports fitted below the bulkhead deck and all watertight hatches are to be effectively closed and secured watertight before the voyage commences, and are to be kept closed during navigation. However, the master may permit a watertight hatch to be opened during navigation for a limited period of time sufficient to permit passage or for access. It is to then be closed.

14. Section 35 – Floating Docks

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item A.3 was revised as below:

3. Documentation

The following documents are to be submitted for approval:

- General arrangement plan,
- Longitudinal and transverse sections (including admissible loads and deflections),
- Structural plans of the wing walls and pontoons,
- Structural plans of the decks and bulkheads,
- Tank arrangement plan, (including height of air pipes)
- Calculations and data for longitudinal strength analysis,
- ~~Admissible loads (including typical block arrangement) and deflections,~~
- Full details of the type and arrangement of deflection monitoring systems,
- Pumping arrangement,
- Machinery and electric plans,
- Piping systems,
- Plans of fire protection and extinguishing systems,

- Stability calculations. (The most unfavorable vessels shall be specified, if different from those defined in C.)

- Dock Operation Manual included

  a) Dock's data
  b) Preparations before docking a vessel
  c) Docking operations
  d) Precautions before the dock is left by the personel
  e) If the dock shall be towed in open waters from the port of construction to the port of operation, the corresponding dock condition shall be specified together with route and season of the year for the intended tow.
  f) Deflection monitoring systems arrangement

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item F.2.1 was revised as below:

2.1 Wind Heeling Moment

Wind heeling moment curves shall be included in the Stability Manual for final working condition with typical ships on the blocks, including the most unfavorable ship and may be calculated from the following formula:

Mw = $0{,}613 \cdot 10^{-3} \cdot V^2 \cdot A \cdot H$ [kN.m]

Wind heeling lever, m, shall be calculated as follows:

$$l_w = \frac{M_w}{g \times \Delta}$$

Where:

A: the longitudinal projected area of the exposed surface considered at every stage of inclining exposed areas of docked ship [m^2].

H= ΔH+1/2.d [m]

ΔH: Vertical distance from the center of A to the water line of the dock [m].

d: draught of the dock [m].

V: wind velocity [m/~~sec~~.], the wind velocity is not to be less than 25 m/~~sec~~. in general. However, the values of the wind velocity will depend on the service location and the mode of operation of the dock, and may be considered more precisely in each case.

Δ: displacement (t)

g: gravitational acceleration of 9.81 m/s^2

The point of intersection between the statical stability curve and the wind heeling moment curve is under no circumstance to exceed the angle where any part of the pontoon deck submerges.

PART C – CHAPTER 7 – HIGH SPEED CRAFTS

01. Section 03 – Structures

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item K.3.5.7.7 was revised according to UR S14 Rev.7 as below:

h_2 = *distance [m] from load point to top of overflow or to a point located ~~1,5~~2,4 m above the tank top, whichever is greater.*

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item K.3.5.7.8 was revised according to UR S14 Rev.7 as below:

K3.5.7.8 Testing for Tightness

~~***.1*** *Testing of fuel oil, ballast, trimming, feed water, fresh water and antirolling tanks is to be effected by a combination of a leak test by means of air pressure and an operational test by means of water or the liquid for which the tank is intended to be used. The air pressure is not to exceed 0,2 bar gauge. The increased risk of accident while the tanks are subjected to the air pressure is to be observed.*~~

~~***.2*** *Where one tank boundary is formed by the ship's shell, the leak test is to be carried out before launching. For all other tanks leak testing may be carried out after launching. Erection welds as well as welds of assembly openings are to be coated * after the leak test is carried out. This applies also to manual weld connections of bulkheads with the other tanks boundaries and of collaring arrangements at intersections of tank boundaries and e.g. frames, beams, girders, pipes etc. If it is ensured that in adjacent tanks the same type of liquid is carried, e.g. in adjacent ballast tanks, the above mentioned weld connections may be coated * prior to the leak test.*~~

~~*All other welded connections in tank boundaries may be coated prior to the leak test if it is ensured by suitable means (e.g. by visual examination of the welded connections) that the connections are completely welded and the surfaces of the welds do not exhibit cracks or pores.*~~

~~***.3*** *Where the tanks are not subjected to the leak test as per 2. but are leak tested with water the bulkheads are, in general, to be tested from one side. The testing should be carried out prior to launching or in the dock. Subject to approval by **TL**, the test may also be carried out after launching. Water testing may be carried out after application of a coating *, provided that during the visual inspection as per 2. above deficiencies are not noted. The test head shall correspond to a head of water of 2,5 m above the top of tank or to the top of overflow or air pipe, whichever is the greater.*~~

~~*.4 The operational test may be carried out when the ship is afloat or during the trial trip. For all tanks the proper functioning of filling and suction lines and of the valves as well as functioning and tightness of the vent, sounding and overflow pipes is to be tested.*~~

For testing procedures of watertight compartments, see TL Rules, Chapter 1, Section 3, E, Part B.

02. Section 07 – Fire Safety

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Footnote of item 7.17.3.8.1 was revised according to MSC.1/Circ.1395/Rev.6 as below:

* *For cargoes for which a fixed gas fire extinguishing system is ineffective, refer to the List of cargoes in table 2 of MSC.1/Circ.1395/Rev.6.*

03. Section 14 – Radiocommunications

Revision Date: May 2022

Entry into Force Date: 1 July 2022

Section 14 was revised generally according to MSC.499(105).

PART C – CHAPTER 9 - RULES for CONSTRUCTION and CLASSIFICATION of YACHTS

01. Section 02 – Hull Construction - General Requirements

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item A.6 was added according to UR S14 Rev.7 as below:

6. Testing Procedures of Watertight Compartments

For testing procedures of watertight compartments, see TL Rules, Chapter 1, Section 3, E, Part C.

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Items D.1 and D.3.3 were revised according to UR S14 Rev.7 as below:

D. Fuel Tanks

1. General

……

~~Upon completion of construction and fitting of all the pipe connections, tanks are to be subjected to a hydraulic pressure test with a head equal to that corresponding to 2 m above the tank top or that of the overflow pipe, whichever is the greater.~~

~~At the discretion of TL, leak testing may be accepted as an alternative, provided that it is possible, using liquid solutions of proven effectiveness in the detection of air leaks, to carry out a visual inspection of all parts of the tanks with particular reference to pipe connections.~~

~~3.3~~4 Tank Tests

~~3.3~~4.1 General

Upon completion of construction and fitting of all the pipe connections, tanks are to be tested in accordance with Chapter 1 Section 3, E Part C with a head whichever is greater:

- equal to that corresponding to 2 m above the tank top,
- that of the overflow pipe or
- 0.3H + 0.76 which need not to be taken greater than 2.4 meters as detailed in **TL** Rules, Chapter 1, Section 3, E Part C

At the discretion of **TL**, leak testing may be accepted as an alternative, provided that it is possible, using liquid solutions of proven effectiveness in the detection of air leaks, to carry out a visual inspection of all parts of the tanks with particular reference to pipe connections.

~~Prior to their installation on board, tanks are to be subjected to a hydraulic pressure test with a head equal to that corresponding to 2 m above the tank top or that of the overflow pipe, whichever is the greater.~~

~~At the discretion of TL, leak testing may be accepted as an alternative in accordance with the conditions stipulated in 3.3.2.~~

~~3.3.2 Leak Testing~~

~~Leak testing is to be carried out by applying an air pressure of 0,015 MPa. Prior to inspection of the tightness of welding, in the case of metallic tanks and pipe connections, it is recommended that the air pressure is raised to 0,02 MPa and kept at this level for about 1 hour.~~

~~The level may then be lowered to the test pressure before carrying out the welding tightness check of the tank and connections by means of a liquid solution of proven effectiveness in the detection of air leaks. The test may be supplemented by arranging a pressure gauge and checking that the reading does not vary over time.~~

Leak testing is to be performed before any primer and/or coating is applied. In the case of tanks made of composite material, the test is to be carried out before the surface is externally coated with self-extinguishing resin.

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item E.5.6.2 was revised according to UR S14 Rev.7 as below:

5.6.2 Tank Bulkheads

The scantlings of tank bulkheads, plating and associated stiffeners are to be verified assuming as h_T [m] the greater of the following values:

- Vertical distance from rn to a point located at a height h above the highest point of the tank given by:
  $h_T = [1 + 0,05 (L - 50)]$

where the value of L is to be taken no less than 50 m and no greater than 80 m.

- h_2 = 2/3 of the vertical distance from rn to the top of the overflow pipe.

- h_3 = 0.3H + 0.76 which need not to be taken greater than 2.4 meters as detailed in **TL** Rules, Chapter 1, Section 3 E, Part C.

PART C – CHAPTER 10 – LIQUEFIED GAS TANKERS

01. Section 02 – Cargo Containment

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item 2.7.1 was revised according to MSC 492(104) as below:

2.7.1 In any stage of flooding:

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

02. Section 04 – Cargo Containment

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Items 4.20.3.5, 4.20.3.6 and 4.20.3.7 were revised according to UI GC13 Rev.3 as below:

4.20.3.5 The overall performance of the cargo containment system shall be verified for compliance with the design parameters during the first full loading and discharging of the cargo, in accordance with the survey procedure and requirements in 1.4 and the requirements of the Administration or recognized organization acting on its behalf. Records of the performance of the components and equipment essential to verify the design parameters, shall be maintained and be available to the Administration *(For ~~examination~~verifications before and after the first loaded voyage, refer to ~~TL-I~~UI GC13).*

4.20.3.6 Heating arrangements, if fitted in accordance with 4.19.1.5 and 4.19.1.6, shall be tested for required heat output and heat distribution *(For verifications before and after the first loaded voyage, refer to UI GC13).*

4.20.3.7 The cargo containment system shall be inspected for cold spots during, or immediately following, the first loaded voyage. Inspection of the integrity of thermal insulation surfaces that cannot be visually checked shall be carried out in accordance with recognized standards *(For ~~examination~~verifications before and after the first loaded voyage, refer to ~~TL-I~~UI GC13).*

03. Section 05 – Process Pressure Vessels and Liquid, Vapour and Pressure Piping Systems

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item 5.13.2.5 was revised according to UI GC13 Rev.3 as below:

5.13.2.5 All piping systems, including valves, fittings and associated equipment for handling cargo or vapours, shall be tested under normal operating conditions not later than at the first loading operation, in accordance with recognized standards *(For verifications before and after the first loaded voyage, refer to UI GC13)*.

04. Section 06 – Materials of Construction and Quality Control

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item 6.5.3.5.1 was revised according to MSC.476(102) as below:

6.5.3.5 Each test shall satisfy the following requirements:

.1 tensile tests: cross-weld tensile strength shall not be less than the specified minimum tensile strength for the appropriate parent materials. For materials such as aluminium alloys, reference shall be made to 4.18.1.3 with regard to the requirements for weld metal strength of under-matched welds (where the weld metal has a lower tensile strength than the parent metal). In every case, the position of fracture shall be recorded for information;

……

05. Section 13 – Instrumentation and Automation Systems

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item 13.3.5 was revised according to UI GC13 Rev.3 as below:

13.3.5 The position of the sensors in the tank shall be capable of being verified before commissioning. At the first occasion of full loading after delivery and after each dry-docking, testing of high-level alarms shall be conducted by raising the cargo liquid level in the cargo tank to the alarm point *(For verifications before and after the first loaded voyage, refer to UI GC13)*.

06. Section 18 – Operating Requirements

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item 18.10.2.1.5 was added according to UR G5 New as below:

18.10.2.1.5 *When ESD valve in association with the requirement in 18.10.2.1.2, is actuated by hydraulic or pneumatic system, the following shall be complied with.*

- *Audible and visible alarm shall be given in the event of loss of pressure that causes activation of fail-close action. The alarm shall be provided in a normally manned control station (e.g. Cargo Control Room and/or the navigation bridge, etc.).*
- *The following conditions shall also be complied to ensure the fail-close action:*

  - *Failure of hydraulic or pneumatic system shall not lead to loss of fail-close functionality (i.e. activated by spring or weight); or*
  - *Hydraulic or pneumatic system for fail-close action shall be arranged with stored power and separated from normal valve operation.*

PART C – CHAPTER 27 - CONSTRUCTION OF WOODEN PASSENGER VESSELS

01. Section 1 – Hull Construction – General Requirements

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item A.7.4.5 was revised as below:

7.4.5 Pencere ve lumbuz camları

Genel olarak; ISO 21005 standardına uygun olarak, çerçeveli özel tip sertleştirilmiş camlar kullanılacaktır. Çerçevesiz camların kullanımı, **TL** tarafından özel olarak değerlendirilecektir.

Alanları 0,16 m^2'yi aşmayan ve açık güverte altında yer alan l~~L~~umbuz ve pencerelerde kullanılan sertleştirilmiş camlar için gerekli kalınlık, Tablo 1.1'de verilmiştir.

~~Pencerelerde kullanılan sertleştirilmiş camlar için gerekli kalınlık, ISO standartlarında belirtilen net açıklık ölçülerinin bir fonksiyonu olarak, Tablo 1.2'de verilmiştir. Pencere ölçülerinin, Tablo 1.2'de verilenlerden farklı olması durumunda, gerekli kalınlık TL tarafından özel olarak belirlenecektir.~~

Alanları 0,16 m^2'yi aşan ve açık güverte altına konulan lumbuz ve pencerelerin cam kalınlığı aşağıdaki formüle göre hesaplanacaktır:

$$t = 0{,}015 \cdot b\sqrt{\beta \cdot p}$$

Burada;

p = 20 kN/m^2'den az olmamak üzere, pencerenin alt kenarında hesaplanan dizayn basıncı [kN/m^2],

b = Pencerenin kısa kenarı [mm],

β = 0,54 A – 0,078 A2 – 0,17

β = 0,75 A > 3 için,

a = Pencerenin uzun kenarı [mm],

A = a/b oranı

PART C – CHAPTER 28 – VENTILATION

01. Section 1 – Ventilation

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item D.5 was revised as below:

5. Ventilation Ducts

5.1 ~~Ventilation ducts shall be of steels or equivalent material. Short flexible ducts, however, not generally exceeding 2 m in length and with a free crosssectional area not exceeding 0.02 m2 need not be steels or equivalent, subject to the following conditions:~~ Further details for ventilation ducts see Chapter 1, Section 21, B.12 or C.8.

~~**5.1.1** These ducts shall be of any material having low flame spread characteristics which is type approved(2).~~

~~**5.1.2** On ships constructed on or after 1 July 2010, the ducts shall be made of heat resisting noncombustible material, which may be faced internally and externally with membranes having low flamespread characteristics and, in each case, a calorific value (3) not exceeding 45 MJ / m2 of their surface area for the thickness used.~~

~~**5.1.3** They may only be used at the end of the ventilation device.~~

(1) Reference is made to the Fire Test Procedure Code, Annex 1, Part 3, adopted by IMO by Resolution MSC. 307 (88).

~~**(2)** Reference is made to the Fire Test Procedure Code, Annex 1, Part 5, adopted by IMO by Resolution MSC. 307 (88).~~

~~**(3)** Refer to the recommendations published by the ISO, in particular publication ISO 1716 Determination of calorific potential~~

~~**5.1.4** They shall not be situated less than 600 mm, measured along the duct, from an opening in an "A" or "B" class division including continuous "B" class ceilings.~~

~~**5.2** Flexible bellows of combustible material may be used for connecting fans to the ducting in air conditioning or fan rooms.~~

~~**5.3** Ducts provided for the ventilation of machinery spaces of category A, galleys, vehicle spaces, ro-ro cargo spaces or special category spaces shall not pass through accommodation spaces, service spaces or control stations unless the ducts are either:~~

~~**5.3.1** constructed of steel having a thickness of at least 3 mm and 5 mm for ducts the widths or diameters of which are up to and including 300 mm and 760 mm and over respectively and, in the case of such ducts, the widths or diameters of which are between 300 mm and 760 mm having a thickness to be obtained by interpolation,~~

~~**5.3.2** suitably supported and stiffened, 5.3.3 fitted with automatic fire dampers close to the boundaries penetrated and~~

~~**5.3.4** insulated to "A-60" standard from the machinery spaces, galleys, vehicle spaces, ro-ro cargo spaces or special category spaces to a point at least 5 m beyond each fire damper; or~~

~~**5.3.5** constructed of steel suitable supported and stiffened (see 5.3.1) and insulated to "A-60" standard throughout the accommodation spaces, service spaces or control stations.~~

~~**5.4** Ducts provided for the ventilation to accommodation spaces, service spaces or control stations shall not pass through machinery spaces of category A, galleys, vehicle spaces, ro-ro cargo spaces or special category spaces unless either:~~

~~**5.4.1** the ducts where they pass through a machinery space of category A, galley, vehicle space, ro-ro cargo space or special category space are constructed of steel, suitable supported and stiffened (see 5.3.1),~~

~~**5.4.2** automatic fire dampers are fitted close to the boundaries penetrated and~~

~~**5.4.3** the integrity of the machinery space, galley, vehicle space, ro-ro cargo space or special category space boundaries is maintained at the penetrations or~~

~~**5.4.4** the ducts where they pass through a machinery space of category A, galley, vehicle space, ro-ro cargo space or special category space are constructed of steel, suitable supported and stiffened (see 5.3.1) and~~

~~**5.4.5** Such ducts are insulated to "A-60" standard within the machinery spaces of category A, galleys, vehicle spaces, ro-ro cargo spaces or special category spaces.~~

5.5~~5~~**2** Ducts are to be routed in such a way that neither machinery nor switchgear can be endangered by condensation or spray water. Where necessary, water traps, baffles and similar devices are to be fitted.

Effective water traps are to be provided with appositely directed baffle plates. The lowermost baffle of the water trap is to be provided with a drainage pipe.

5.6~~**3**~~ Natural ventilating systems shall not employ a branched ducting system.

~~**5.7 Duct penetrations**~~

~~**5.7.1** Duct penetrations through "A" class divisions shall be of an approved type (4). Where steel sleeves are directly joined to ventilation ducts by means of riveted or screwed flanges or by welding, the approval is not required.~~

~~**5.7.2** Where a thin plated duct with a free crosssectional area equal to, or less than, 0.02 m2 passes through "A" class bulkheads or decks, the opening shall be lined with a steel sheet sleeve having a thickness of at least 3 mm and a length of at least 200 mm, divided preferably into 100 mm on each side of the bulkhead or, in the case of the deck, wholly laid on the lower side of the decks pierced.~~

~~**5.7.3** Where ventilation ducts with a free crosssectional area exceeding 0.02 m2 pass through "A" class bulkheads or decks, the opening shall be lined with a steel sheet sleeve. However, where such ducts are of steel construction and pass through a deck or bulkhead, the ducts and sleeves shall comply with the following:~~

~~**5.7.4** The sleeves shall have a thickness of at least 3 mm and a length of at least 900 mm. When passing through bulkheads, this length shall be divided preferably into 450 mm on each side of the bulkhead.~~

~~These ducts, or sleeves lining such ducts, shall be provided with fire insulation. The insulation shall have at least the same fire integrity as the bulkhead or deck through which the duct passes.~~

~~**5.7.5** Ducts with a free cross-sectional area exceeding 0.075 m2 shall be fitted with fire dampers in addition to the requirements of 5.7.4. The fire damper shall operate automatically, but shall also be capable of h an indicator which shows whether the damper is open or closed.~~

~~Fire damperbeing closed manually from both sides of the bulkhead or deck. The damper shall be provided wits are not required, however, where ducts pass through spaces surrounded by "A" class divisions, without serving those spaces, provided those ducts have the same fire integrity as the dixisions which they pierce.~~

~~**5.7.6** Ventilation ducts with a free cross-sectional area exceeding 0.02 m2 passing through "B" class bulkheads shall be lined with steel sheet sleeves of 900 mm in length divided preferably into 450 mm on each side of the bulkheads unless the duct is of steel for this length.~~

5.8~~**4**~~ **Insulation of duct penetrations**

The fire protection insulation of air ducts and sleeves is to be in accordance with the space group pairings indicated in tables, see Hull Rules, Section 22, Table 22.1 to 22.8. The tables relating to the bulkhead are likewise applicable to ducts routed through decks.

A space pairing refers to the spaces separated by a bulkhead or deck, irrespective of any other spaces served by the duct in question.

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item D.5. was revised according to MSC.1/Circ.1276/Rev.1 as below:

5.4 Insulation of duct penetrations

The fire protection insulation of air ducts and sleeves is to be in accordance with the space group pairings indicated in tables, see Hull Rules, Section 21, Table 21.1 to 21.8.

The tables relating to the bulkhead are likewise applicable to ducts routed through decks.

A space pairing refers to the spaces separated by a bulkhead or deck, irrespective of any other spaces served by the duct in question.

With respect to the application of items 5.3 and 5.4 for determining fire insulation for trunks and ducts which pass through an enclosed space, the term "pass through" pertains to the part of the trunk/duct contiguous to the enclosed space. See Figure 1.2 for examples of ducts contiguous to enclosed space. (MSC.1/1276/Rev.1).

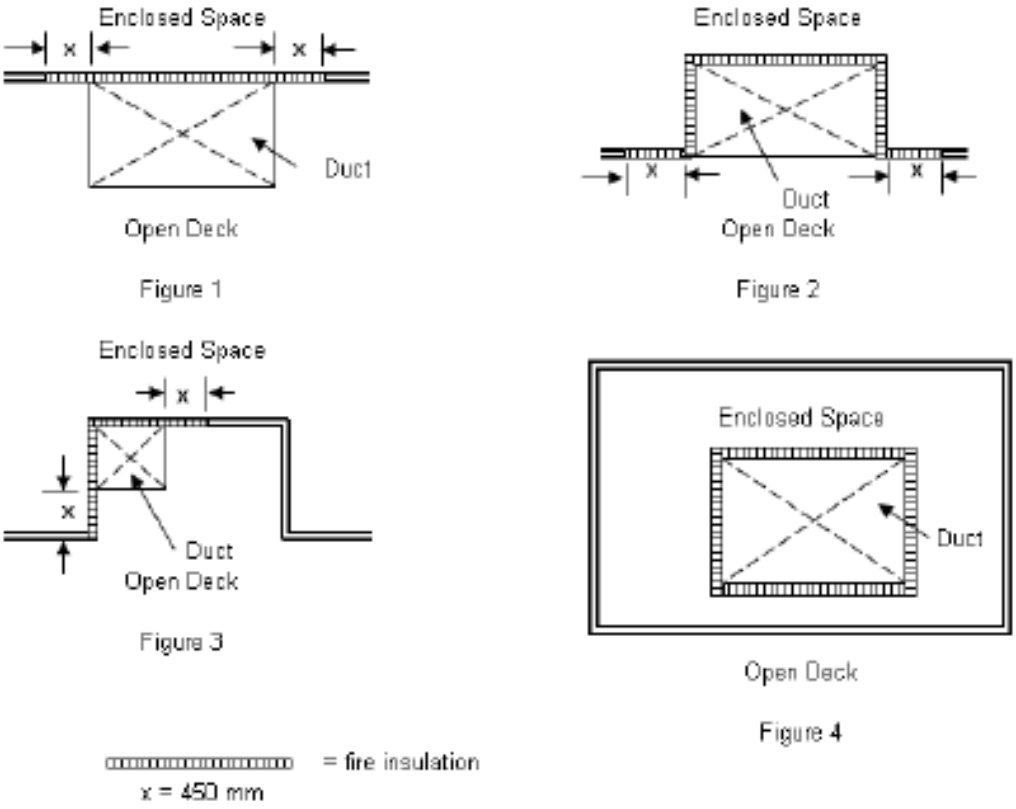

Figure 1.2 Examples of ducts contiguous to enclosed space

PART C – CHAPTER 35 – TENTATIVE RULES FOR SHIPS LESS THAN 500 GT

01. General Requirements & Definitions

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item A.11 was revised as below:

11. Testing Procedures of Watertight Compartments

For testing procedures of watertight compartments, see **TL** Rules, Chapter 1, Section 3, E, Part ~~B~~ C.

PART D – CHAPTER 52 – Diving Systems

01. Section 2 - Rules for Construction of Diving Systems

Revision Date: Oct 2023

Entry into Force Date: 1 January 2024

Item B.3 was revised according to MSC 548(107) as below:

- The International Code of Safety for Diving Operations, 2023 (2023 Diving Code) (MSC.548(107)

Item C.1.1, 1.14 and 1.19 was revised according to MSC 548(107) as below:

1.1 Mating Device

The equipment necessary for the connection and disconnection of a diving bell or an HBSC to a surface compression chamber**.**

1.14 Diving bell

A submersible pressure vessel for human occupancy (PVHO), including its ancillary equipment, for transfer of divers under pressure between the work location and the decompression chamber.

1.19 Wet bell

A diver deployment and recovery device as a minimum fitted with a gas filled dome, a main supply umbilical from the surface (providing breathing gas and other service to a manifold inside the device), and diver excursion umbilicals terminated at the device.

Item C.1.21 and 1.22 was added according to MSC 548(107) as below:

1.21 Hyperbaric survival craft (HBSC)

A pressure vessel for human occupancy (PVHO) and associated support plant and equipment whereby divers under pressure can be safely evacuated from a diving unit until recovered to a position where planned decompression can be completed.

1.22 Pressure vessel for human occupancy (PVHO)

A container intended to be occupied by one or more persons that is capable of withstanding an internal or external pressure differential exceeding 0.14 bar (2 psi).

Revision Date: Oct 2023

Entry into Force Date: 1 January 2024

Item J.1.2.2.3 was revised according to MSC 548(107) as below:

1.2.2.3 Close to the lifting point, the diving bell is to be provided with spare connections for hot water (¾" NPT female thread) and breathing gas (½" NPT female thread).

The manifold should also incorporate connectors for the following:

- internal pressure;
- sampling of internal gas;
- communication; and
- electrical power.

The manifold is to be clearly marked and effectively protected.

PART D – CHAPTER 78 – Rules for Classification of Ships Using Gases or Other Low-Flashpoint Fuels

01. Part A

Revision Date: Oct 2023

Entry into Force Date: 1 January 2024

Item 2.2.42 was added according to MSC MSC 458(101) as below:

2.2.42 *Ship constructed on or after 1 January 2024* means:

.1 for which the building contract is placed on or after 1 January 2024; or
.2 in the absence of a building contract, the keels of which are laid or which are at a similar stage of construction on or after 1 July 2024; or
.3 the delivery of which is on or after 1 January 2028

02. Part A-1 – SPECIFIC REQUIREMENTS FOR SHIPS USING NATURAL GAS AS FUEL

Revision Date: Oct 2023

Entry into Force Date: 1 January 2024

Item 5.3.4 was revised according to MSC 458(101) as below:

5.3.4 As an alternative to 5.3.3.1 above, the following calculation method may be used to determine the acceptable location of the fuel tanks:

……..

f_v is calculated by use of the formulations for factor v contained in SOLAS regulation II-1/7-2.6.1.1 and reflects the probability that the damage is ~~not~~ extending vertically above the lowermost boundary of the fuel tank. The formulations to be used are:

……..

Revision Date: Oct 2023

Entry into Force Date: 1 January 2024

Note of item 5.8 Note was revised according to MSC.1/Circ.1667 as below:

5.8 Regulations for fuel preparation room design

Fuel preparation rooms shall be located on an open deck, unless those rooms are arranged and fitted in accordance with the regulations of this Code for tank connection spaces.

Note:
1 Fuel preparation rooms, regardless of location, shall be arranged to safely contain cryogenic leakages.
2 The material of the boundaries of the fuel preparation room shall have a design temperature corresponding with the lowest temperature it can be subjected to in a probable maximum leakage scenario unless the boundaries of the space, i.e. bulkheads and decks, are provided with suitable thermal protection.
3 The fuel preparation room shall be arranged to prevent surrounding hull structure from being exposed to unacceptable cooling, in case of leakage of cryogenic liquids.
4 The fuel preparation room shall be designed to withstand the maximum pressure build up during such a leakage. Alternatively, pressure relief venting to a safe location (mast) can be provided.
5 The following interpretation provides clarification on applying certain tank connection space requirements to the design of a fuel preparation room not located on an open deck in compliance with 5.8.
- Access Arrangements amd Associated Hazardous Areas (5.11.3 and 12.5.3.2)

- *The bolted hatch requirement in 5.11.3 and the associated Zone 2 hazardous area requirement in 12.5.3.2 do not apply to a fuel preparation room located below deck unless that space can also be defined as a tank connection space using the definition in 2.2.15.3.*
- *A fuel preparation room opening into another enclosed space on the ship which is a non-hazardous space is required to be fitted with an airlock according to 5.11.2.*
- *A fuel preparation room with direct access onto an open deck, or to a semi-enclosed space on deck, does not require an airlock. In the absence of an airlock, the area outside the door will be classified as a hazardous area according to 12.5.2.4 and 12.5.3.1.*

- Bilge Well Requirements (15.3.2)

- *The bilge well requirements in 15.3.2 only apply to a fuel preparation room located below deck if that fuel preparation room handles fuel in its liquid phase.*

Revision Date: Oct 2023

Entry into Force Date: 1 January 2024

Item 6.7.1.1 was revised according to MSC 475(102) as below:

6.7.1.1 All fuel storage tanks shall be provided with a pressure relief system appropriate to the design of the

fuel containment system and the fuel being carried. Fuel storage hold spaces, interbarrier spaces and tank connection spaces ~~and tank cofferdams~~, which may be subject to pressures beyond their design capabilities, shall also be provided with a suitable pressure relief system. Pressure control systems specified in 6.9 shall be independent of the pressure relief systems.

Revision Date: Oct 2023

Entry into Force Date: 1 January 2024

Item 6.8.3 was added according to MSC 458(101) as below:

6.8.3 For ships constructed on or after 1 January 2024, in cases where the tank insulation and tank location make the probability very small for the tank contents to be heated up due to an external fire, special considerations may be made to allow a higher loading limit than calculated using the reference temperature, but never above 95%.

Revision Date: Oct 2023

Entry into Force Date: 1 January 2024

Item 9.2 was revised according to MSC.1/Circ.1670 as below:

9.2 Functional requirements

This chapter is related to functional requirements in 3.2.1 to 3.2.6, 3.2.8 to 3.2.11 and 3.2.13 to 3.2.17. In particular the following apply:

.1 the fuel supply system shall be so arranged that the consequences of any release of fuel will be minimized, while providing safe access for operation and inspection;

.2 the piping system for fuel transfer to the consumers shall be designed in a way that a failure of one barrier cannot lead to a leak from the piping system into the surrounding area causing danger to the persons on board, the environment or the ship; and

.3 fuel lines outside the machinery spaces shall be installed and protected so as to minimize the risk of injury to personnel and damage to the ship in case of leakage.

Note: To comply with paragraphs 9.2.2, 9.6.1 and 7.3.6.3, two independent safety barriers should be in place, while, as far as practicable, using a minimum of flange connections. There should be, no single common flange or other component where one single failure itself may overcome both primary and secondary barriers and may result in a gas leak into the surrounding area causing danger to the persons on board, the environment or the ship.

A single common flange (with two sealing systems) may be accepted at the fuel connection to the gas consumers including GCUs, boilers and components on the engine, such as gas regulating units

Revision Date: Oct 2023

Entry into Force Date: 1 January 2024

Items 9.5.3, 9.5.4 9.5.5 and 9.5.6 were added according to MSC 458(101) as below:

9.5.3 The requirements in 9.5.4 to 9.5.6 shall apply to ships constructed on or after 1 January 2024 in lieu of the requirements in 9.5.1 and 9.5.2.

9.5.4 Where gaseous fuel pipes pass through enclosed spaces in the ship, they shall be protected by a

secondary enclosure. This enclosure can be a ventilated duct or a double wall piping system. The duct or double wall piping system shall be mechanically under pressure ventilated with 30 air changes per hour, and gas detection as required in 15.8 shall be provided. Other solutions providing an equivalent safety level may also be accepted by the Administration.

9.5.5 The requirement in 9.5.4 need not be applied for fully welded fuel gas vent pipes led through mechanically ventilated spaces.

9.5.6 Liquefied fuel pipes shall be protected by a secondary enclosure able to contain leakages. If the piping system is in a fuel preparation room or a tank connection space, the Administration may waive this requirement. Where gas detection as required in 15.8.1.2 is not fit for purpose, the secondary enclosures around liquefied fuel pipes shall be provided with leakage detection by means of pressure or temperature monitoring systems, or any combination thereof. The secondary enclosure shall be able to withstand the maximum pressure that may build up in the enclosure in case of leakage from the fuel piping. For this purpose, the secondary enclosure may need to be arranged with a pressure relief system that prevents the enclosure from being subjected to pressures above their design pressures.

Revision Date: Oct 2023

Entry into Force Date: 1 January 2024

Item 10.3.1.1.1 were added according to MSC 458(101) as below:

10.3.1.1.1 For ships constructed on or after 1 January 2024, the exhaust system shall be equipped with explosion relief systems unless designed to accommodate the worst case overpressure due to ignited gas leaks or justified by the safety concept of the engine. A detailed evaluation of the potential for unburnt gas in the exhaust system is to be undertaken covering the complete system from the cylinders up to the open end. This detailed evaluation shall be reflected in the safety concept of the engine.

Revision Date: Oct 2023

Entry into Force Date: 1 January 2024

Item 11.3.1 Note was revised according to UI GF13 Rev.1 as below:

11.3.1 Any space containing equipment for the fuel preparation such as pumps, compressors, heat exchangers, vaporizers and pressure vessels shall be regarded as a machinery space of category A for fire protection purposes.

Note 1: *Fire protection in 11.3.1 means structural fire protection, not including means of escape.*
Note 2: *Notwithstanding Note 1, any enclosed spaces containing equipment for fuel preparation such as pumps or compressors or other potential ignition sources are to comply with 11.8.*

Revision Date: Oct 2023

Entry into Force Date: 1 January 2024

Item 11.3.3 was revised and 11.3.3.1 was added according to MSC 458(101) as below:

11.3.3 The space containing fuel containment system shall be separated from the machinery spaces of category A or other rooms with high fire risks. The separation shall be done by a cofferdam of at least 900 mm with insulation of

A-60 class. When determining the insulation of the space containing fuel containment system from other spaces with lower fire risks, the fuel containment system shall be considered as a machinery space of category A, in accordance with SOLAS regulation II-2/9. ~~The boundary between spaces containing fuel containment systems shall be either a cofferdam of at least 900 mm or A-60 class division.~~ For type C tanks, the fuel storage hold space may be considered as a cofferdam.

11.3.3.1 Notwithstanding the last sentence in 11.3.3, for ships constructed on or after 1 January 2024, the fuel storage hold space may be considered as a cofferdam provided that:

.1 the type C tank is not located directly above machinery spaces of category A or other rooms with high fire risk; and
.2 the minimum distance to the A-60 boundary from the outer shell of the type C tank or the boundary of the tank connection space, if any, is not less than 900 mm.

Revision Date: Oct 2023

Entry into Force Date: 1 January 2024

Item 11.8 was added according to MSC 475(102) as below:

11.8 Regulation for fuel preparation room fire-extinguishing systems

11.8.1 For ships constructed on or after 1 January 2024, fuel preparation rooms containing pumps, compressors or other poential ignition sources shall be provided with a fixed fire-extinguishing system complying with the provisions of SOLAS regulation II-2/10.4.1.1 and taking into account the necessary concentrations/application rate required for extinguishing gas fires.

03. Part B-1

Revision Date: Oct 2023

Entry into Force Date: 1 January 2024

Item 16.3.3.5 was revised according to MSC 475(102) as below:

16.3.3.5 Each test shall satisfy the following:

.1 tensile tests: cross-weld tensile strength is not to be less than the specified minimum tensile strength for the appropriate parent materials. For materials such as aluminium alloys, reference shall be made to 6.4.12.1.1.3 with regard to the regulations for weld metal strength of under-matched welds (where the weld metal has a lower tensile strength than the parent metal). In every case, the position of fracture shall be recorded for information;

PART E – CHAPTER 101 – RULES FOR THE CLASSIFICATION OF NAVAL SHIPS

01. Section 02 – Class Designation

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item C.3.1.2, Table 2.5 and Table 2.14 were revised as below:

Examples for such Notations are:

PATROL BOAT
ATTACK BOAT
OFFSHORE PATROL VESSEL

Table 2.5 Ship type notations

Notation	Characteristics	Underlying rules
MINE WARFARE VESSEL	This type includes mine countermeasure vessels, mine hunters and mine laying ships	
PATROL	This type of naval ship is a patrol ship/vessel/ boat/unit with a length L ≥ 24 m. If the length L would reach about 80 m special agreement with **TL** will become necessary for some design aspects. The tasks are similar to patrol boats, but may include a wider range of the possible activities.	TL Rules, Chapter 34, Rules for the Classification of Special Crafts - Patrol Boat
PATROL BOAT	Small naval, coast guard or police vessel, smaller in size than a corvette, commonly engaged in military patrol and reconnaissance missions, border protection roles, including anti-smuggling, anti-terrorist, anti-piracy, fishery patrols and law enforcement. It is also often used rescue operations and can be diversified in smaller Inshore Patrol Vessels and larger Offshore Patrol Vessels. It is assumed that the length L of a patrol boat/vessel/unit is < 24 m.	TL Rules, Chapter 34, Rules for the Classification of Special Crafts - Patrol Boat
ATTACK BOAT	Attack boats are fast, agile, offensive, naval ships armed with anti-ship missiles, gun or torpedoes. They are commonly used to protect strategic waterways, conduct coastal patrols, and support amphibious operations restrict enemy movement in anti-access and area balancing strategies.	TL Naval Ship Rules TL Rules, Chapter 7, High Speed Crafts

Table 2.14 Summary of notations for naval surface ships

Chapter 101 Classification and Surveys	Chapter 102 Hull Structures and Ship Equipment	Chapter 104 Propulsion Plants	Chapter 105/106 Electrical Installations / Automation	Chapter 107 Ship Operation, Installations and Auxiliary Systems
Ship type: **CORVETTE** **FRIGATE** **DESTROYER** **CRUISER** **MINE WARFARE VESSEL** **AMPHIBIOUS WARFARE SHIP** **AIRCRAFT CARRIER** **PATROL** **PATROL BOAT** **ATTACK BOAT** **OFFSHORE PATROL VESSEL** **SUPPLY VESSEL** **RESEARCH VESSEL** **CADET TRAINING SHIP** **ACİL MÜDAHALE VE DALIŞ EĞİTİM BOTU** **MOSHIP** Submarine Rescue Mother Ship **RATSHIP** Rescue and Towing Ship **LCT** Landing Craft Tank **LCM** Landing Craft Mechanized **LST** Landing Ship Tank **LPD** Landing Platform Dock **LHD** Landing Helicopter Dock **LCVP** Landing Craft, Vehicle and Personnel **PRODUCT TANKER** **TUG** **ESCORT TUG (p,V)** **SUBMARINE** Special types, e.g.: **HYDROFOIL** **CATAMARAN** **WATER JET** **AIR CUSHION** High speed craft: **HSC-N** **HSDE** Certificate of Conformity: **CoC** Naval Ship Code: **NSC** Laid-up ships: **LAID-UP SHIP** Auxiliary ship-Navy: **AUX-NH** **AUX-NM** TL Common Structural Rules: **CSR**	Ambient conditions: **AC1** **ACS** Material: **(HIGHER STRENGTH HULL STRUCTURAL STEEL)** **ALUMINIUM** **FRP** Residual strength after military effects: **RSM** Rational ship design: **RSD (F25)** **RSD (F30)** **RSD (ACM)** In-water survey: **IWS** Structural fire protection: **SFP** Navigation in ice: **ICE-B, ICE-B1, ICE-B2, ICE-B3, ICE-B4, PC7, PC6, PC5, PC4, PC3, PC2, PC1** Bridge design: **NAV** **NAV-INS** Novel design: **EXP** Emergency response service: **ERS** Service range: **Y** **K50/K20** **K6** Dynamic loads: **SHOCK** **NOISE** **VIBR** Towing arrangement: **TA1 (TA2, TA3)** Corrosion Protection: **PCWBT** Loading Instrument: **LI**	Redundant propulsion: **RP1** x % **RP2** x % **RP3** x % Dynamic positioning: **DK1** **DK2** **DK3** Fuel Cell Systems: **FC-xxx** **with FC** Novel design: **EXP**	Automation: **AUT-N** **AUT-Nnh** **AUT-N-C** Remote control: **RC** Degaussing: **DEG** Electromagnetic Compatibility: **EMC** Dangerous goods: **DG** Quality of Electrical Power Supplies: **ELS** Integrated Computer Control: **ICC**	Flight operation: **FO** **FO (HELIW)** **FO (HELIL)** **FO (HELILF)** **FO (DRONE)** Lifting appliances: **LA** **LA (CRANE)** **LA (CL)** **LA (CR)** **LA (PL)** Replenishment at sea: **RAS** NBC protection: **NBC** Diving systems: **DI** Environmental Passport: **EP** Operation in ice: **ICEOPS** Ballast water management: **BMW** Stabilization in seaway: **SEAKEEP** Condition monitoring stern tube: **CM-PS** Ammunition storage: **SAM** Fire Fighting : **FF0** **FF1** **FF2** **FF3** **FF1/2** **FF1/3**

PART E – CHAPTER 102 – NAVAL SHIP TECHNOLOGY, HULL STRUCTURES AND SHIP EQUIPMENT

01. Section 12 – Rudder and Manoeuvring Arrangement

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item E.3.1 was revised as below:

3.1.1 Cone couplings ~~should have a taper c on diameter of 1:8-1: 12.~~ without hydraulic arrangements for mounting and dismounting the coupling shall have a taper c on diameter of 1:8 to 1:12.

$$c = \frac{d_o - d_u}{\ell_c}$$

according Figure 12.9 and 12.9b.

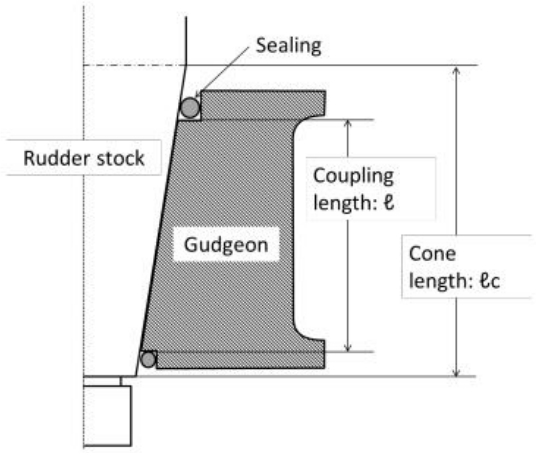

Figure 12.9b Cone length and coupling length

The accuracy of the cone shapes must be controlled by a colour print. The cone coupling is to be secured by a slugging nut. The nut is to be carefully secured, e.g. by a securing plate as shown in Figure 12.9.

PART E – CHAPTER 104 – NAVAL SHIP TECHNOLOGY, PROPULSION PLANTS

01. Section 03 – Internal Combustion Engines

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item K.5.4.1 and K.5.4.2 were revised according to UR M 77 Rev.4 as below:

5.4.1 General

The NOx Technical Code, in 2.2.5 and elsewhere, provides for the use of NOx Reducing Devices of which Selective Catalytic Reduction (SCR) is one option. SCR requires the use of a reductant which may be a urea/water solution or,

in exceptional cases, aqueous ammonia or even anhydrous ammonia. These requirements apply to the arrangements for the storage and use of SCR reductants ~~which are typically carried on board in bulk quantities.~~

5.4.2 Reductant using urea based ammonia (e.g. 40%/60% urea/water solution)

The following requirements apply to SCR reductants with tank volume over 500 litres.

PART E – CHAPTER 105 – NAVAL SHIP TECHNOLOGY, ELECTRICAL INSTALLATIONS

01. Section 04 – Installation Protection and Power Distribution

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item H.10 was revised as below:

10. Emergency Shutdown Facilities

Emergency shutdown facilities placed outside the sites at which the equipment is installed shall be provided for the following consumers. The consumers may be arranged in groups, provided that redundant consumers are allocated to at least two electrically independent groups.

For emergency shutdown facility that is generally de-energized (i.e., normally open circuits), a wiring break monitoring device is to be supplied.

The design of the emergency shutdown system is to be such that no single failure will cause loss of essential equipment such as fuel and lubricating oil pumps which may cause loss of main power generation or main propulsion.

Emergency shutdown facilities shall be provided for e.g.

02. Section 05 – Installation Protection and Power Distribution

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item C.1.1 was revised as below:

C. Construction

1. General Requirements

1.1 All devices, instruments, ~~and~~ operating devices and electrical cables shall be permanently identified by name plates. Wherever possible, clear text shall be used. Fuse current ratings shall be stated. The setpoints of adjustable protective devices shall be marked. The rated operating parameters of all measuring instruments shall be marked in red, either on the scales or on plates fixed nearby.

03. Section 13 – Additional Rules for Electrical Main Propulsion Plants

Revision Date: Dec 2023

Entry into Force Date: 1 January 2024

Item D.2.1 was revised as below:

2.1 Change-over shall be possible within a reasonably short time. The local control station shall receive the highest priority, and it shall be possible to select this control station locally.

This control station shall be connected directly to the corresponding static converter.

It shall be ensured that control is only possible from one control station at any time. Transfer of command from one control station to another shall only be possible when the respective control levers are in the same position and when a signal to accept the transfer is given from the selected control station.

The loss of control (e.g., when control taken over by a local control station, due to a malfunction, and reboot one of the propulsion sides (PS or SB)) at the concerned control station is to be signalled optically and audibly.

04. Section 14 – Installation Protection and Power Distribution

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Table 14.1 was revised, and item B.4.3.10.7 was deleted as below:

Table 14.1 Summary of tests to be carried out

No	Tests	AC generators		Motors	
		Type test (1)	Routine test (2)	Type test (1)	Routine test (2)
1	Technical documentation check, visual inspection	x	x	x	x
2	Insulation resistance measurement	x	x	x	x
3	Winding resistance measurement	x	x	x	x
4	Verification of the voltage regulation system	x	x **(3)**		
5	Rated load test and temperature rise measurements	x		x	
6	Overload, overcurrent test	x	x **(4)**	x	x **(4)**

7	Verification of steady short circuit condition **(5)**	x			
8	Overspeed test	x	x	x ~~**(6)**~~	x ~~**(6)**~~
9	Dielectric strength test	x	x	x	x
10	No-load test	x	x	x	x
11	Verification of degree of protection	x		x	
12	Verification of bearings	x	x	x	x

(1) *Type tests on prototype machine or tests on at least the first batch of machines*.

(2) *The report of machines routine tested is to contain the manufacturer's serial number of the machine which has been type tested and the test result.*

(3) *Only functional test of voltage regulator system.*

(4) *Only applicable for machine of essential services rated above 100kW.*

(5) *Verification of steady short circuit condition applies to synchronous generators only*.

~~**(6)** *Not applicable for squirrel cage motors*~~

……

~~**4.3.10.7** The overspeed test may be dispensed with in the case of squirrel-cage machines.~~

PART E – CHAPTER 106 – NAVAL SHIP TECHNOLOGY, AUTOMATION

01. Section 05 – Main Propulsion Plant

Revision Date: Dec 2023

Entry into Force Date: 1 January 2024

Item A.1.14 was revised as below:

1.14 The take of control independent of the accept signal, stated in 1.13, shall only be possible in the machinery space.

The loss of control (e.g. when control taken over by a local control station, due to a malfunction, and reboot one of the propulsion sides (PS or SB)) at the concerned control station is to be signalled audibly and visually.

PART E – CHAPTER 107 – NAVAL SHIP TECHNOLOGY, SHIP OPERATION INSTALLATIONS AND AUXILIARY SYSTEMS

01. Section 09 – Fire Protection and Fire Extinguishing Equipment

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Note **(9)** under item J.1.2 was revised according to MSC.1/Circ.1430/Rev.3 as below:

(9) *Pressure water spraying systems deviating from these requirements may be used if approved as equivalent by **TL.** See IMO MSC.1/Circ.1430/Rev.3, "Revised Guidelines for the Design and Approval of Fixed Water- Based Fire-Fighting Systems for Ro-Ro Spaces and Special Category Spaces.*

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item J.2.14 was revised according to MSC.1/Circ.1276/Rev.1 as below:

2.14 The objects to be protected are to be covered with a grid of nozzles subject to the nozzle arrangementparameters indicated in the type approval Certificate (maximum horizontal nozzle spacing, minimum and maximum vertical distance from the protected object, minimum lateral distance from the protected object).

……

Illustrative sketches of acceptable nozzle arrangements are shown for clarity in MSC.1/Circ.1276/Rev.1.

ADDITIONAL RULES - ADDITIONAL RULES FOR THE CERTIFICATION, INSTALLATION AND TESTING OF LITHIUM BATTERIES

01. Section 01 – General

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Table 1.1 was revised as below:

Table 1.1 Documents to be submitted for Li-BATTERY additional class notation

No	Designation of documents	Approval type	Explanation
1.1	Test Plan and Test procedures	I	Test programs related to factory test, onboard tests, sea trials. Test plan for the battery installation on board. Test procedures for battery installation and the FAT, HAT or IT and SAT phase.

No	Designation of documents	Approval type	Explanation
1.2	Functional description	I	Functional description of the controls and mechanisms to enhance battery safety, such as battery management system (BMS),power management system (PMS) and Energy management system (EMS), shutdown mechanism, etc. An overall description of the propulsion and power installation for all relevant operating modes, including charging.
1.3	Technical specification	I	Nominal voltage and operational limits for battery system (e.g., voltage, current, and temperature), safety devices, cell/batteries configuration, battery chemistry, method of activation, discharge and recharge rates for the batteries, Shore charging connection requirements etc.
1.4	Load analysis	A	Load analysis (energy and power) including size of battery system, battery converter capacity and discharge/recharge capacity. The load analysis shall reflect capacity calculation for intended ~~application~~ operation and the service area of the vessel. The minimum safe operating speed shall be indicated in decleration given by designer or not be less than 7 knots. Remaining available propulsion and essential service loads power after a single failure shall be calculated.

Revision Date: Dec 2023

Entry into Force Date: 1 January 2024

Table 1.2 was revised according to revised standard IEC 62620:2014/AMD1:2023 as below:

Table 1.2 Documents to be submitted for certification

No	Designation of documents	Approval type	Explanation
1.1	General Arrangement	I	- Arrangement of the materials and general construction, view of the detail. - Installation of the terminal contacts with structure and dimension. - Types and size of internal wiring. - Relevant parts list detailing all material used - Venting and pressure relief arrangement - Detailed mechanical and forced ventilation - Cell and battery designation as specified with IEC 62620+AMD1 5.2 and 5.3 - Gas Analysis test procedure details all material used.

02. Section 03 – Battery System Installation

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item A 4.1 was revised as below:

4. Battery Capacity

4.1 The capacity of the batteries is to be sufficient for the intended operation and service area of the vessel, when the batteries are used in place of the required main sources of power as specified in Ch.5, Sec.3, B, 1 Electrical Installation Rules.

03. Section 04 – Certification, Testing and Inspection

Revision Date: Dec 2023

Entry into Force Date: 1 January 2024

Item A 4 was revised according to revised standard IEC 62620:2014/AMD1:2023 as below:

4. Batteries are to be subjected to functional and safety tests according to IEC Publication 62620+AMD1 and 62619 or in accordance with other equivalent national or international standards recognized by **TL.**

GUIDELINE – GUIDE FOR CERTIFICATION OF PRIVATE RECRUITMENT AND PLACEMENT SERVICE PROVIDERS

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item A.1.3 was revised as below:

1.3 CERTIFICATION

.....

Initial and periodical audits as detailed in 1.3.2 and 1.3.3 will be conducted by using "ST453" checklist form developed by TL and available on request.

GUIDELINE – GUIDELINE FOR EXHAUST GAS CLEANING SYSTEMS

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item 6.2.3.1 was revised according to UR M77 Rev.4 as below:

6.2.3.1 Reductant using urea based ammonia (e.g. 40%/60% urea/water solution)

The following requirements apply to SCR reductants with tank volume over 500 litres.

GUIDELINES – Guidelines on Cyber Security for Ships and Offshore Units

01. Section 01 – General

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item A.8 and item D.2 were revised according to UR E27 & E26 Rev.1 as below:

8. This Guideline seeks to support IACS UR ~~TL G~~E26: "Cyber resilience of ships". Should any difference be found between this document and IACS UR ~~TL G~~E26 when addressing the same topic, for ships in which this Guideline is applied the requirements in IACS UR ~~TL G~~E26 shall prevail.

Note: IACS UR ~~TL G~~E26 , currently as a guideline, will be implemented by TL on ships contracted for construction on or after 1 July ~~January~~ 2024 as a mandatory requirement. This guideline therefore refers to IACS UR ~~TL G~~E26 to encourage its early application and to be inline with latest revision of IACS Rec.166 (see also D,1).

D. Reference Guidelines and Standards

.....

- IACS UR ~~TL G~~E26, "Cyber resilience of ships"~~, July 2022 (Reflection of IACS UR E26)~~
- IACS UR ~~TL G~~E27, "Cyber resilience of on-board systems and equipment"~~, July 2022 (Reflection of IACS UR E27)~~

ADDITIONAL RULES – TENTATIVE RULES FOR POLYETHYLENE CRAFTS

01. General

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item C.4.2.2.5 was revised as below:

4.2.2.5 Scantling of stiffeners is to be adequate with intended service of craft and to withstand loads to which the craft may encounter. The scantlings of primary and secondary stiffenining members are to be determined by direct calculation. For this purpose direct calculations are to be submitted to Türk Loydu attached to plans.

~~The scantlings of primary and secondary stiffenining members are to be determined by direct calculation where the craft is of unusual design, form or proportions~~. In addition TL may request buckling analysis if deemed necessary.

ADDITIONAL RULES – SEATING OF PROPULSION PLANTS AND AUXILIARY MACHINERY

Revision Date: Nov 2023

Entry into Force Date: 1 January 2024

Item 2.2.1 was revised according to as below:

2.2.1 A resilient mounting is a connection of the plant components to the ship's structural foundations using resilient mounting components.

Resilient mounts are to be type approved by **TL**.

For further information:
Bekir Sıtkı TÜRKMEN
Division Manager, Rule Development and Statutory Legislation
Tel: +90- 216 581 37 83
Fax: +90- 216 581 38 40
E-mail: tl_kural@turkloydu.org
Web: www.turkloydu.org

Form No: PL 084-01/12.02.2016