

Cargo Loading on Upper Decks or Hatch Covers

Object of Amendment

Rules for the Survey and Construction of Steel Ships Parts A, C, CSR-B&T and CS
Guidance for the Survey and Construction of Steel Ships Parts A
Rules for High Speed Craft
Rules for the Survey and Construction of Passenger Ships
Rules for the Survey and Construction of Inland Waterway Ships

Reason for Amendment

When cargoes are intended to be loaded on the upper decks or hatch covers (hereinafter collectively referred to as “cargo loading on deck”) of bulk carriers, general cargo ships, etc., strength assessments are required to be carried out, and the cargo arrangement is to be determined based on said assessment results.

As cargo loading has become more diversified in recent years, there has been a corresponding increase in the demand for such cargo loading on deck.

Relevant requirements are, therefore, amended to integrate the strength requirements for cargo loading on deck for such ships and to assign class notation for those ships that comply with said requirements.

Outline of Amendment

Add the following requirements related to cargo loading on deck.

- (1) Integrate the strength requirements for cargo loading on deck.
- (2) Assign the class notation for ships which comply with (1) above.

Effective Date and Application

This amendment will apply to ships for which the date of contract for construction is on or after 1 July 2026.

An asterisk (*) after the title of a requirement indicates that there is also relevant information in the corresponding Guidance.

ID:DH25-16

Amended-Original Requirements Comparison Table (Cargo Loading on Upper Decks or Hatch Covers)

Amended	Original	Remarks
<p align="center">RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS</p> <p align="center">Part A GENERAL RULES</p> <p align="center">Chapter 1 GENERAL</p> <p>1.2 Class Notations</p> <p>1.2.4 Hull Construction and Equipment, etc.* 29 For ships intended for the carriage of cargoes having moisture contents which exceed transportable moisture limit in accordance with the provisions of 10.5.1, Part 2-3, Part C, 1.1.3-2, Part CS and 1.1.1-3, Part U, the notation of “<i>Specially Constructed Cargo Ship</i>” (abbreviated to <i>SCCS</i>) is affixed to the Classification Characters.</p> <p>30 For ships intended for the carriage of cargoes on their <u>upper decks or hatch covers in accordance with 10.6.5, Part 2-2, Part C, 10.7, Part 2-5, Part C, Section 7 Chapter 1, Part 2, Part CSR-B&T and 17.5, Part CS</u>, the notation of “<i>Deck Cargoes</i>” (abbreviated to <i>DC</i>) is affixed to the Classification Characters. In addition, the following notation is also affixed according to the target members specified in <u>(1) to (3)</u>. In cases where more than one of the following <u>(1) to (3)</u> are applicable, they are affixed side by side (e.g. DC-UD/CD).</p> <p><u>(1) When cargoes are intended to be loaded on upper decks except for cross decks:</u> <u><i>Deck Cargoes on Upper Deck</i></u> (abbreviated to <i>DC-</i></p>	<p align="center">RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS</p> <p align="center">Part A GENERAL RULES</p> <p align="center">Chapter 1 GENERAL</p> <p>1.2 Class Notations</p> <p>1.2.4 Hull Construction and Equipment, etc.* 29 For ships intended for the carriage of cargoes having moisture contents which exceed transportable moisture limit in accordance with the provisions of 10.5.1, Part 2-3, Part C, 1.1.3-2, Part CS and 1.1.1-3, Part U, the notation of “<i>Specially Constructed Cargo Ship</i>” (abbreviated to <i>SCCS</i>) is affixed to the Classification Characters.</p> <p>(Newly added)</p>	<p align="center">New notation</p>

Amended-Original Requirements Comparison Table (Cargo Loading on Upper Decks or Hatch Covers)

Amended	Original	Remarks
<p><u>UD)</u></p> <p>(2) <u>When the cargoes are intended to be loaded on cross decks:</u> <u>Deck Cargoes on Cross Deck (abbreviated to DC-CD)</u></p> <p>(3) <u>When the cargoes are intended to be loaded on hatch covers:</u> <u>Deck Cargoes on Hatch Cover (abbreviated to DC-HC)</u></p> <p>31 For ships with helidecks as defined in 3.2.26, Part R and subject to the provisions of 10.4.6, Part 1, Part C, the notation of “<i>HELIDK</i>” is affixed to the Classification Characters.</p>	<p>30 For ships with helidecks as defined in 3.2.26, Part R and subject to the provisions of 10.4.6, Part 1, Part C, the notation of “<i>HELIDK</i>” is affixed to the Classification Characters.</p>	

Amended-Original Requirements Comparison Table (Cargo Loading on Upper Decks or Hatch Covers)

Amended	Original	Remarks
<p align="center">RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS</p> <p align="center">Part C HULL CONSTRUCTION AND EQUIPMENT</p> <p align="center">Part 1 GENERAL HULL REQUIREMENTS</p> <p align="center">Annex 3.8 ITEMS TO BE INCLUDED IN LOADING MANUAL</p> <p>An1 General</p> <p>An1.3 Standard Loading Conditions</p> <p>An1.3.1 Standard Loading Conditions</p> <p>1 The loading manual is to contain the following loading conditions upon which the approval of the scantlings of hull structural members is based:</p> <p>(1) Container carriers, general cargo ships, roll-on/roll-off ships, refrigerated cargo ships, bulk carriers, ore carriers, car carriers, wood chip carriers, etc.</p> <p>(a) Light load condition</p> <p>(b) Ballast conditions (at arrival and departure)</p> <p>(c) Homogeneous loading conditions of cargo (at arrival and departure)</p> <p>(d) <u>Special loading conditions, e.g. container or light</u></p>	<p align="center">RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS</p> <p align="center">Part C HULL CONSTRUCTION AND EQUIPMENT</p> <p align="center">Part 1 GENERAL HULL REQUIREMENTS</p> <p align="center">Annex 3.8 ITEMS TO BE INCLUDED IN LOADING MANUAL</p> <p>An1 General</p> <p>An1.3 Standard Loading Conditions</p> <p>An1.3.1 Standard Loading Conditions</p> <p>1 The loading manual is to contain the following loading conditions upon which the approval of the scantlings of hull structural members is based:</p> <p>(1) Container carriers, general cargo ships, roll-on/roll-off ships, refrigerated cargo ships, bulk carriers, ore carriers, car carriers, wood chip carriers, etc.</p> <p>(a) Light load condition</p> <p>(b) Ballast conditions (at arrival and departure)</p> <p>(c) Homogeneous loading conditions of cargo (at arrival and departure)</p> <p>(d) <u>All non-homogeneous loading conditions as</u></p>	<p align="center">IACS UR S1 Annex1</p> <p align="center">Clarify that the deck cargo conditions are to</p>

Amended-Original Requirements Comparison Table (Cargo Loading on Upper Decks or Hatch Covers)

Amended	Original	Remarks
<p><u>load conditions at less than the maximum draught, heavy cargo, empty holds or non-homogeneous cargo conditions deck cargo conditions, etc., where applicable</u></p> <p>(e) Specially approved loading conditions for short voyages or in smooth water, where <u>applicable</u></p> <p>(f) Temporary severe loading conditions during cargo loading or unloading, where <u>applicable</u></p> <p>(g) Conditions for entering dry dock while afloat</p> <p>(2) Tankers</p> <p>(a) Light load condition</p> <p>(b) Ballast conditions (at arrival and departure)</p> <p>(c) Homogeneous loading conditions of cargo (at arrival and departure)</p> <p>(d) All non-homogeneous loading conditions as given in this specifications (at arrival and departure)</p> <p>(e) Conditions that largely differ from the standard ballast condition due to tank cleaning or other work while the ship is at sea</p> <p>(f) Temporary severe loading conditions during cargo loading or unloading, where <u>applicable</u></p> <p>(g) Conditions for entering dry dock while afloat</p> <p>(3) Ships carrying dangerous chemicals in bulk</p> <p>(a) Light load condition</p> <p>(b) Ballast conditions (at arrival and departure)</p> <p>(c) Homogeneous loading conditions of cargo (at arrival and departure)</p> <p>(d) All non-homogeneous loading conditions as given in this specifications (at arrival and</p>	<p><u>given in this specifications (at arrival and departure)</u></p> <p>(e) Specially approved loading conditions for short voyages or in smooth water, where <u>necessary</u></p> <p>(f) Temporary severe loading conditions during cargo loading or unloading, where <u>necessary</u></p> <p>(g) Conditions for entering dry dock while afloat</p> <p>(2) Tankers</p> <p>(a) Light load condition</p> <p>(b) Ballast conditions (at arrival and departure)</p> <p>(c) Homogeneous loading conditions of cargo (at arrival and departure)</p> <p>(d) All non-homogeneous loading conditions as given in this specifications (at arrival and departure)</p> <p>(e) Conditions that largely differ from the standard ballast condition due to tank cleaning or other work while the ship is at sea</p> <p>(f) Temporary severe loading conditions during cargo loading or unloading, where <u>necessary</u></p> <p>(g) Conditions for entering dry dock while afloat</p> <p>(3) Ships carrying dangerous chemicals in bulk</p> <p>(a) Light load condition</p> <p>(b) Ballast conditions (at arrival and departure)</p> <p>(c) Homogeneous loading conditions of cargo (at arrival and departure)</p> <p>(d) All non-homogeneous loading conditions as given in this specifications (at arrival and</p>	<p>be included in the standard loading conditions.</p>

Amended-Original Requirements Comparison Table (Cargo Loading on Upper Decks or Hatch Covers)

Amended	Original	Remarks
<p>departure)</p> <p>(e) Conditions that largely differ from the standard ballast condition due to tank cleaning or other work while the ship is at sea</p> <p>(f) Temporary severe loading conditions during cargo loading or unloading, where <u>applicable</u></p> <p>(g) Conditions for entering dry dock while afloat</p> <p>(h) Loading conditions specified in the operation manual</p> <p>(i) Loading conditions for cargo items included in the approved list of cargoes, which are of a high density or require heating or isolated stowage.</p> <p>(4) Ships carrying liquefied gases in bulk</p> <p>(a) Light load condition</p> <p>(b) Ballast conditions (at arrival and departure)</p> <p>(c) Homogeneous loading conditions of cargo (at arrival and departure)</p> <p>(d) Loading conditions involving empty or partially loaded tanks</p> <p>(e) Loading conditions where two or more kinds of cargoes with largely different specific gravity are loaded in different tanks</p> <p>(f) Conditions in smooth water where increased vapour pressure is approved</p> <p>(g) Temporary severe loading conditions during cargo loading or unloading, where <u>applicable</u></p> <p>(h) Conditions for entering dry dock while afloat</p> <p>(5) Combination carriers</p> <p>(a) The same conditions as specified in (1) and (2) above</p>	<p>departure)</p> <p>(e) Conditions that largely differ from the standard ballast condition due to tank cleaning or other work while the ship is at sea</p> <p>(f) Temporary severe loading conditions during cargo loading or unloading, where <u>necessary</u></p> <p>(g) Conditions for entering dry dock while afloat</p> <p>(h) Loading conditions specified in the operation manual</p> <p>(i) Loading conditions for cargo items included in the approved list of cargoes, which are of a high density or require heating or isolated stowage.</p> <p>(4) Ships carrying liquefied gases in bulk</p> <p>(a) Light load condition</p> <p>(b) Ballast conditions (at arrival and departure)</p> <p>(c) Homogeneous loading conditions of cargo (at arrival and departure)</p> <p>(d) Loading conditions involving empty or partially loaded tanks</p> <p>(e) Loading conditions where two or more kinds of cargoes with largely different specific gravity are loaded in different tanks</p> <p>(f) Conditions in smooth water where increased vapour pressure is approved</p> <p>(g) Temporary severe loading conditions during cargo loading or unloading, where <u>necessary</u></p> <p>(h) Conditions for entering dry dock while afloat</p> <p>(5) Combination carriers</p> <p>(a) The same conditions as specified in (1) and (2) above</p>	

Amended-Original Requirements Comparison Table (Cargo Loading on Upper Decks or Hatch Covers)

Amended	Original	Remarks
<p align="center">Chapter 6 LOCAL STRENGTH</p> <p>6.2 Design Load Scenarios and Loads of the Ship to Be Assessed</p> <p>6.2.2 Assessment Design Load Scenarios and Loads for Members to be Assessed</p> <p>6.2.2.1 For the plates constituting the boundaries of compartments and the stiffeners supporting such plates listed in Table 6.2.2-1, the strength assessment specified in this Chapter is to be carried out considering the lateral loads and hull girder loads specified in the table. For members/compartments corresponding to multiple conditions, the strength assessment is to be carried out for all applicable loads.</p>	<p align="center">Chapter 6 LOCAL STRENGTH</p> <p>6.2 Design Load Scenarios and Loads of the Ship to Be Assessed</p> <p>6.2.2 Assessment Design Load Scenarios and Loads for Members to be Assessed</p> <p>6.2.2.1 For the plates constituting the boundaries of compartments and the stiffeners supporting such plates listed in Table 6.2.2-1, the strength assessment specified in this Chapter is to be carried out considering the lateral loads and hull girder loads specified in the table. For members/compartments corresponding to multiple conditions, the strength assessment is to be carried out for all applicable loads.</p>	

Table 6.2.2-1 Assessment Design Load Scenarios and Loads for Members/Compartments to be Assessed

Compartments or members to be assessed	Design load scenario	Load				
		Lateral load	Load type	Load component	Refer to the following:	
					Lateral load (<i>P</i>)	Hull girder load (<i>M_{V-HG}</i> , <i>M_{H-HG}</i>)
Outer shell (including stiffeners)	Maximum load condition	External pressure	Seawater	Static + dynamic loads	4.4.2.2-1	4.4.2.9
Cargo tanks, ballast tanks, ballast holds and other tanks		Internal pressure	Liquid loaded	Static + dynamic loads	4.4.2.2-2	

Amended-Original Requirements Comparison Table (Cargo Loading on Upper Decks or Hatch Covers)

Amended			Original				Remarks
Cargo holds ⁽¹⁾			Dry bulk cargoes	Static + dynamic loads	Greater of the pressures specified in 4.4.2.2-3 and -4		
Cargo holds ⁽²⁾			Others	Static + dynamic loads			
Weather decks (including stiffeners)			Others	Green sea, cargoes on the deck, etc. ⁽⁴⁾			Green sea load, static + dynamic loads
Internal decks ⁽²⁾ (including stiffeners)				Cargoes			Static + dynamic loads
Members constituting compartments subject to hydrostatic testing	Testing condition	Internal pressure	Seawater	Static loads	4.4.3.2	4.4.3.3	
Compartments not carrying liquids ⁽³⁾	Flooded condition	Internal pressure	Seawater	-	4.4.4.1	4.4.4.2	
(Notes) (1) For ships of single-side skin construction for carrying cargoes other than liquids, the outer shell (including stiffeners) may be excluded from the assessment. (2) For ships carrying cargoes other than bulk and liquid cargoes with the cargoes properly fastened or otherwise held in position so that the cargo loads can be deemed as acting only on the inner bottom plating and internal deck, the assessment may be performed only for the inner bottom plating and the internal deck. (3) Not required to be applied to shell plating, stiffeners attached to shell plating, weather deck plating and stiffeners attached to weather deck plating. (4) Green sea loads and deck cargo loads need not be considered simultaneously.							

Clarify the application of loads on deck

Amended-Original Requirements Comparison Table (Cargo Loading on Upper Decks or Hatch Covers)

Amended	Original	Remarks
<p align="center">Chapter 7 STRENGTH OF PRIMARY SUPPORTING STRUCTURES</p> <p>7.2 Simple Girders</p> <p>7.2.1 General</p> <p>7.2.1.1 Assessment Conditions and Loads</p> <p>1 For the members listed in Table 7.2.1-1 and the primary supporting structural strength members constituting the boundaries of compartments, the strength assessments specified in this Chapter are to be carried out considering the lateral loads and hull girder loads specified in the table. For girders corresponding to multiple conditions, the strength assessments are to be carried out under all applicable conditions.</p> <p>2 Simple girders are to be assessed for strength in each of the assessment conditions of the maximum load condition, testing condition and flooded condition.</p> <p>3 For longitudinal hull girder structural members, hull girder loads due to the ship’s longitudinal bending are to be considered in addition to lateral loads on girder members.</p> <p>4 Lateral loads are, in general, assumed to act from one side of the girder members. However, where any loads are constantly acting from the other side, such loads may be taken into account.</p>	<p align="center">Chapter 7 STRENGTH OF PRIMARY SUPPORTING STRUCTURES</p> <p>7.2 Simple Girders</p> <p>7.2.1 General</p> <p>7.2.1.1 Assessment Conditions and Loads</p> <p>1 For the members listed in Table 7.2.1-1 and the primary supporting structural strength members constituting the boundaries of compartments, the strength assessments specified in this Chapter are to be carried out considering the lateral loads and hull girder loads specified in the table. For girders corresponding to multiple conditions, the strength assessments are to be carried out under all applicable conditions.</p> <p>2 Simple girders are to be assessed for strength in each of the assessment conditions of the maximum load condition, testing condition and flooded condition.</p> <p>3 For longitudinal hull girder structural members, hull girder loads due to the ship’s longitudinal bending are to be considered in addition to lateral loads on girder members.</p> <p>4 Lateral loads are, in general, assumed to act from one side of the girder members. However, where any loads are constantly acting from the other side, such loads may be taken into account.</p>	

Amended-Original Requirements Comparison Table (Cargo Loading on Upper Decks or Hatch Covers)

Amended		Original					Remarks
Table 7.2.1-1 Assessment Conditions and Loads for Members/Compartments to Be Assessed							
Compartments/members to be assessed	Typical members	Assessment condition	Loads				
			Lateral load	Load type	Load components	Refer to:	
						Load (P)	Hull girder load (M_{V-HG}, M_{H-HG})
Girders on shell plating	Web frames (including multiple-deck ships), side stringers (single side skin structure)	Maximum load condition	External pressure	Seawater	Static + dynamic loads	4.4.2.2-1	4.4.2.9
	Web frames supporting cantilever beams		Others	Green sea (weather decks only), cargoes on the deck, etc. ⁽⁴⁾	Green sea load, static + dynamic loads	Greater of the pressures specified in 4.4.2.2-3 and -4	
Cargo oil tanks, ballast tanks, ballast holds and other tanks	Stiffening girders, corrugated bulkheads		Internal pressure	Liquid loaded	Static + dynamic loads	4.4.2.2-2	
Cargo holds ⁽¹⁾	Stiffening girders, corrugated bulkheads		Internal pressure	Dry bulk cargoes and others	Static + dynamic loads		
Single-bottomed cargo holds	Girders, floors		Internal pressure	Cargoes on the deck	Static + dynamic loads		
Girders on deck	Deck girders, deck transverses		Others	Green sea (weather decks only), Cargoes on the deck ⁽⁴⁾	Green sea load, static + dynamic loads	Greater of the pressures specified in 4.4.2.2-3 and -4	

Amended-Original Requirements Comparison Table (Cargo Loading on Upper Decks or Hatch Covers)

Amended				Original				Remarks
Internal decks ⁽²⁾	Deck girders, deck transverses			Cargoes on the deck	Static + dynamic loads	4.4.2.2-3		
Members constituting compartments subject to hydraulic testing	Stiffening girders, corrugated bulkheads	Testing condition	Internal pressure	Seawater	Static loads	P_{ST-in1} as specified in 4.4.3.2	4.4.3.3	
Compartments not carrying liquids ⁽³⁾	Stiffening girders, corrugated bulkheads	Flooded condition	Internal pressure	Seawater	-	4.4.4.1	4.4.4.2	
<p>Notes:</p> <p>(1) For ships of a single side skin structure for carrying cargoes other than liquids, girders on the shell plating may be excluded from the assessment.</p> <p>(2) For ships carrying cargoes other than bulk and liquid cargoes with the cargoes properly fastened or otherwise held in position so that the cargo loads can be deemed as acting only on the inner bottom plating and internal deck, the assessment may be performed only for the inner bottom plating and the internal deck.</p> <p>(3) Not required for girders on shell plating and weather deck.</p> <p>(4) <u>Green sea loads and deck cargo loads need not be considered simultaneously.</u></p>								
								Clarify the application of loads on deck

Amended-Original Requirements Comparison Table (Cargo Loading on Upper Decks or Hatch Covers)

Amended	Original	Remarks
<p><u>ships to which Part 2-5 applies that are intended for the carriage of cargoes on their upper decks or hatch covers.</u></p> <p><u>2 Ships intended for the carriage of cargoes on their upper decks or hatch covers to which Part 2-2 and Part 2-5 do not apply are to be at the discretion of the Society.</u></p> <p><u>10.7.1.2 Loading Manuals</u></p> <p><u>When strength assessments are carried out for cargo loading and design loads are given, the local allowable cargo loads and the restrictions on cargo loading, such as load range and cargo height, are to be specified in the loading manual. The design loads by cargo loads and green sea loads are to be clearly distinguished.</u></p> <p><u>10.7.2 Upper Decks</u></p> <p><u>10.7.2.1 Loads</u></p> <p><u>Cargo loads are to be considered as lateral loads as specified in 4.4.2.2-4, Part 1, point loads or line loads.</u></p> <p><u>10.7.2.2 Strength Assessment</u></p> <p><u>1 Plates, stiffeners and primary supporting members subject to the lateral loads specified in 10.7.2.1 are to be assessed in accordance with 6.3, 6.4 and 7.2, Part 1.</u></p> <p><u>2 When point loads or line loads are applied, they are to be assessed by a direct strength method, such as FE analysis.</u></p> <p><u>3 Notwithstanding -1 above, the Society may require a direct strength method, such as FE analysis, be used instead when deemed necessary.</u></p>		

Amended-Original Requirements Comparison Table (Cargo Loading on Upper Decks or Hatch Covers)

Amended	Original	Remarks
<p><u>10.7.3 Hatch Covers</u></p> <p><u>10.7.3.1 Loads</u> <u>Cargo loads are to be considered the distributed loads specified in 4.10.2.3(1), Part 1, point loads specified in 4.10.2.3(2), Part 1 or line loads.</u></p> <p><u>10.7.3.2 Strength Assessment</u> <u>1 Plates and stiffeners subject to the lateral loads specified in 10.7.3.1 are to be assessed in accordance with 14.6.5, Part 1.</u> <u>2 When the point loads or line loads specified in 10.7.3.1 are applied, they are to be assessed by a method deemed appropriate by the Society.</u></p> <p><u>10.7.4 Vehicle Loading</u></p> <p><u>10.7.4.1</u> <u>When vehicles are loaded on upper decks or hatch covers, structural members are to be assessed in accordance with 10.1, Part 2-6. However, if appropriate measures (such as the installation of dunnage) are taken so that the cargo loads are uniformly transmitted to the deck structures, such loads can be regarded as the lateral loads specified in 10.7.3.1.</u></p>		

Amended-Original Requirements Comparison Table (Cargo Loading on Upper Decks or Hatch Covers)

Amended	Original	Remarks
<p align="center">RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS</p> <p>Part CSR-B&T COMMON STRUCTURAL RULES FOR BULK CARRIERS AND OIL TANKERS</p> <p align="center">Part 2 SHIP TYPES</p> <p align="center">Chapter 1 BULK CARRIERS</p> <p><u>Section 7 SHIPS WITH CARGOES LOADED ON UPPER DECKS OR HATCH COVERS</u></p> <p><u>1. General</u></p> <p><u>1.1 Application</u></p> <p><u>1.1.1</u> <u> This section applies to bulk carriers which are intended for the carriage of cargoes on their upper decks or hatch covers.</u></p> <p><u>1.2 Upper Decks</u></p> <p><u>1.2.1 Loads</u> <u> Cargo loads are to be considered the distributed loads specified in Pt 1, Ch 4, Sec 5, 2.3.1, concentrated loads specified in Pt 1, Ch 4, Sec 5, 2.3.2 or line loads.</u></p>	<p align="center">RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS</p> <p>Part CSR-B&T COMMON STRUCTURAL RULES FOR BULK CARRIERS AND OIL TANKERS</p> <p align="center">Part 2 SHIP TYPES</p> <p align="center">Chapter 1 BULK CARRIERS</p> <p align="center">(Newly added)</p>	<p>Add Section 7 in Chapter 1, Part 2 and clarify the requirements for deck loading conditions.</p>

Amended-Original Requirements Comparison Table (Cargo Loading on Upper Decks or Hatch Covers)

Amended	Original	Remarks
<p><u>1.2.2 Hull local scantling</u> <u>Plates, stiffeners and primary supporting members subject to the lateral pressures specified in 1.2.1 are to be assessed in accordance with Pt 1, Ch 3, Sec 6, 5 and Ch 6. However, the Society may require a direct strength method, such as FE analysis, be used instead when deemed necessary.</u></p> <p><u>1.2.3 Direct Strength Analysis</u> <u>When concentrated loads or line loads are applied, they are to be assessed by a direct strength method, such as FE analysis.</u></p> <p><u>1.3 Hatch Covers</u></p> <p><u>1.3.1 Loads</u> <u>Cargo loads are to be considered distributed loads as specified in Sec 5, 4.1.4, concentrated loads or line loads.</u></p> <p><u>1.3.2 Strength assessments</u> <u>Plates and stiffeners subject to the distributed loads specified in 1.3.1 are to be assessed in accordance with Sec 5, 5. When concentrated loads or line loads are applied, they are to be assessed by a method deemed appropriate by the Society.</u></p> <p><u>1.4 Vehicle Loading</u></p> <p><u>1.4.1</u> <u>When vehicles are loaded on upper decks or hatch covers, structural members are to be assessed in accordance with 10.1, Part 2-6, Part C. However, if appropriate measures (such as the installation of dunnage) are taken so that the cargo loads are uniformly transmitted to the deck structures, such loads can be regarded as the lateral loads specified in 1.2.1 and 1.3.1.</u></p>		

Amended-Original Requirements Comparison Table (Cargo Loading on Upper Decks or Hatch Covers)

Amended	Original	Remarks
<p align="center">RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS</p> <p align="center">Part CS HULL CONSTRUCTION AND EQUIPMENT OF SMALL SHIPS</p> <p align="center">Chapter 17 DECKS</p> <p><u>17.5 Ships with Cargoes Loaded on Upper Decks or Hatch Covers</u></p> <p><u>17.5.1 General</u> <u>This 17.5 applies to ships which are intended for the carriage of cargoes on their upper decks or hatch covers.</u></p> <p><u>17.5.2 Upper Deck</u></p> <p><u>1</u> Cargo loads are to be considered the lateral loads specified in <u>17.1.1</u>, point loads or line loads.</p> <p><u>2</u> Deck plating, deck girders, stiffeners, etc. subject to the lateral loads specified in <u>1</u> above are to be assessed in accordance with relevant requirements in <u>Chapter 7, Chapter 8, Chapter 10, Chapter 11, Chapter 12, and Chapter 17.</u></p> <p><u>3</u> When point loads or line loads are applied, they are to be assessed by a direct strength method, such as FE analysis.</p>	<p align="center">RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS</p> <p align="center">Part CS HULL CONSTRUCTION AND EQUIPMENT OF SMALL SHIPS</p> <p align="center">Chapter 17 DECKS</p> <p align="center">(Newly added)</p>	<p>Add 17.5 in Chapter 17 and clarify the requirements for deck loading conditions.</p>

Amended-Original Requirements Comparison Table (Cargo Loading on Upper Decks or Hatch Covers)

Amended	Original	Remarks
<p><u>17.5.3 Hatch Cover</u></p> <p><u>1</u> Cargo loads are to be considered the distributed loads specified in 19.2.4(3)(a), point loads specified in 19.2.4(3)(b) or line loads.</p> <p><u>2</u> Plates and stiffeners subject to the lateral loads specified in 1 above are to be assessed in accordance with 19.2.5.</p> <p><u>3</u> When the point loads or line loads specified in 1 above are applied, they are to be assessed by a method deemed appropriate by the Society.</p>		

Amended-Original Requirements Comparison Table (Cargo Loading on Upper Decks or Hatch Covers)

Amended	Original	Remarks
<p>RULES FOR HIGH SPEED CRAFT</p> <p>Part 1 GENERAL RULES</p> <p>Chapter 1 GENERAL</p> <p>1.2 Class Notations</p> <p>1.2.4 Hull Construction and Equipment, etc. 7 Craft complying with the requirements of Part GF of the Rules for the Survey and Construction of Steel Ships applied in accordance with the requirements of 1.1.8 are to be in accordance with the requirements of 1.2.4-34, Part A of the Rules for the Survey and Construction of Steel Ships.</p>	<p>RULES FOR HIGH SPEED CRAFT</p> <p>Part 1 GENERAL RULES</p> <p>Chapter 1 GENERAL</p> <p>1.2 Class Notations</p> <p>1.2.4 Hull Construction and Equipment, etc. 7 Craft complying with the requirements of Part GF of the Rules for the Survey and Construction of Steel Ships applied in accordance with the requirements of 1.1.8 are to be in accordance with the requirements of 1.2.4-33, Part A of the Rules for the Survey and Construction of Steel Ships.</p>	<p>Change of reference number.</p>

Amended-Original Requirements Comparison Table (Cargo Loading on Upper Decks or Hatch Covers)

Amended	Original	Remarks
<p>RULES FOR THE SURVEY AND CONSTRUCTION OF PASSENGER SHIPS</p> <p>Part 1 GENERAL</p> <p>Chapter 1 GENERAL</p> <p>1.2 Class Notations</p> <p>1.2.4 Hull Construction and Equipment, etc.* 7 Ships complying with the requirements of Part GF of the Rules for the Survey and Construction of Steel Ships applied in accordance with the requirements of 1.1.6 are to be in accordance with the requirements of 1.2.4-34, Part A of the Rules for the Survey and Construction of Steel Ships.</p>	<p>RULES FOR THE SURVEY AND CONSTRUCTION OF PASSENGER SHIPS</p> <p>Part 1 GENERAL</p> <p>Chapter 1 GENERAL</p> <p>1.2 Class Notations</p> <p>1.2.4 Hull Construction and Equipment, etc.* 7 Ships complying with the requirements of Part GF of the Rules for the Survey and Construction of Steel Ships applied in accordance with the requirements of 1.1.6 are to be in accordance with the requirements of 1.2.4-33, Part A of the Rules for the Survey and Construction of Steel Ships.</p>	<p>Change of reference number.</p>

Amended-Original Requirements Comparison Table (Cargo Loading on Upper Decks or Hatch Covers)

Amended	Original	Remarks
<p align="center">RULES FOR THE SURVEY AND CONSTRUCTION OF INLAND WATERWAY SHIPS</p> <p align="center">Part 1 GENERAL RULES</p> <p align="center">Chapter 1 GENERAL</p> <p>1.2 Class Notations</p> <p>1.2.3 Hull Construction and Equipment</p> <p>5 Ships complying with the requirements of Part GF of the Rules for the Survey and Construction of Steel Ships applied in accordance with the requirements of 1.1.8 are to be in accordance with the requirements of 1.2.4-34, Part A of the Rules for the Survey and Construction of Steel Ships.</p>	<p align="center">RULES FOR THE SURVEY AND CONSTRUCTION OF INLAND WATERWAY SHIPS</p> <p align="center">Part 1 GENERAL RULES</p> <p align="center">Chapter 1 GENERAL</p> <p>1.2 Class Notations</p> <p>1.2.3 Hull Construction and Equipment</p> <p>5 Ships complying with the requirements of Part GF of the Rules for the Survey and Construction of Steel Ships applied in accordance with the requirements of 1.1.8 are to be in accordance with the requirements of 1.2.4-33, Part A of the Rules for the Survey and Construction of Steel Ships.</p>	<p>Change of reference number.</p>

Amended-Original Requirements Comparison Table (Cargo Loading on Upper Decks or Hatch Covers)

Amended	Original	Remarks
<p align="center">GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS</p> <p align="center">Part A GENERAL RULES</p> <p align="center">A1 GENERAL</p> <p>A1.2 Class Notations</p> <p>A1.2.4 Hull Construction and Equipment</p> <p>8 In applying 1.2.4-<u>34</u>, Part A of the Rules, the kinds of fuels are listed as follows:</p> <p>(1) Natural gas used as fuel: “<i>Gas or Low-flashpoint Fuel / Natural Gas</i>” (abbreviated as <i>GLF/NG</i>)</p> <p>(2) Others than (1) above used as fuel: According to “Guidelines for Ships Using Alternative Fuels”</p> <p>9 In applying 1.2.4-<u>35</u>, Part A of the Rules, the kinds of fuels listed as follows:</p> <p>(1) Natural gas used as fuel: “<i>Cargo as Fuel / Natural Gas</i>” (abbreviated as <i>CF/NG</i>)</p> <p>(2) Others than (1) above used as fuel: According to “Guidelines for Ships Using Alternative Fuels”</p>	<p align="center">GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS</p> <p align="center">Part A GENERAL RULES</p> <p align="center">A1 GENERAL</p> <p>A1.2 Class Notations</p> <p>A1.2.4 Hull Construction and Equipment</p> <p>8 In applying 1.2.4-<u>33</u>, Part A of the Rules, the kinds of fuels are listed as follows:</p> <p>(1) Natural gas used as fuel: “<i>Gas or Low-flashpoint Fuel / Natural Gas</i>” (abbreviated as <i>GLF/NG</i>)</p> <p>(2) Others than (1) above used as fuel: According to “Guidelines for Ships Using Alternative Fuels”</p> <p>9 In applying 1.2.4-<u>34</u>, Part A of the Rules, the kinds of fuels listed as follows:</p> <p>(1) Natural gas used as fuel: “<i>Cargo as Fuel / Natural Gas</i>” (abbreviated as <i>CF/NG</i>)</p> <p>(2) Others than (1) above used as fuel: According to “Guidelines for Ships Using Alternative Fuels”</p>	<p>Change of reference number.</p>

Amended-Original Requirements Comparison Table (Cargo Loading on Upper Decks or Hatch Covers)

Amended	Original	Remarks
<p>EFFECTIVE DATE AND APPLICATION</p> <ol style="list-style-type: none"> 1. The effective date of the amendments is 1 July 2026. 2. Notwithstanding the amendments, the current requirements apply to ships for which the date of contract for construction* is before the effective date. 3. Notwithstanding the provision of the preceding 2., the amendments may apply to ships for which the date of contract for construction is before the effective date upon requests. 4. For ships subject to Part C of the Rules for the Survey and Construction of Steel Ships prior to its comprehensive revision by Rule No. 62 on 1 July 2022 (hereinafter referred to as “old Part C of the Rules”), this amendment also applies to the following of old Part C of the Rules/Guidance. 17.6 of the Rules 		