

Approval of Container Securing Systems

Object of Amendment

Rules for the Survey and Construction of Steel Ships Parts B, C, and CS
Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use

Reason for Amendment

From the viewpoint of the safe operation of ships and the protection of cargoes and personnel, it is essential to secure containerised cargoes properly, and consideration should be given to the strength of the ship's structure and securing devices.

In order to unify the handling of approvals related to such devices among member classification societies, IACS investigated the requirements of each classification society and developed requirements for drawings and tests on products to be subject to approval, and these requirements were adopted as Unified Requirement (UR) C7 in May 2024.

Therefore, relevant requirements are amended based on the UR C7.

Outline of the Amendment

The main contents of this amendment are as follows:

- (1) Specify requirements for the plans that need to be approved for container carriers engaged in international voyages.
- (2) Specify the plans and documents that need to be approved or verified at the time of classification survey during construction and periodical surveys.
- (3) Amends the information to be included in structural drawings for securing fittings in the Guidelines for the Approval and Type Approval of Materials and Equipment for Marine Use.

Effective Date and application

- (1) Part B, C, and CS of Rules for the Survey and Construction of Steel Ships
This amendment applies to ships for which the date of contract for construction is on or after 1 July 2025. This includes those ships to which Part C of the Rules for the Survey and Construction of Steel Ships applied prior to its comprehensive revision.
- (2) Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use
This amendment applies to securing fittings installed in ships for which the date of contract for construction is on or after 1 July 2025. This includes those ships to which Part C of the Rules for the Survey and Construction of Steel Ships applied prior to its comprehensive revision.

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

ID: DH24-09

Amended-Original Requirements Comparison Table (Approval of Container Securing Systems)

Amended	Original	Remarks
<p>RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS</p> <p>Part B CLASS SURVEYS</p> <p>Chapter 1 GENERAL</p> <p>1.2 Specialized Ships, Installations, and Apparatus</p> <p><u>1.2.3 Cargo Securing Manuals</u></p> <p><u>1 Ships carrying cargo other than in bulk and engaged on international voyages are to be provided with approved cargo securing manual to ensure proper stowage and lashing. Application is to be made by means of an application form (APP-CSM(E)).</u></p> <p><u>2 The cargo securing manual specified in the preceding 1 is to include information on proper stowage and securing as indicated in MSC.1/Circ.1353/Rev.2 or equivalent standard in order to avoid damages to the hull structure and inclining of ships due to cargo movement and collapse of cargo and marine pollution due to falling cargo.</u></p>	<p>RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS</p> <p>Part B CLASS SURVEYS</p> <p>Chapter 1 GENERAL</p> <p>1.2 Specialized Ships, Installations, and Apparatus</p> <p>(Newly added)</p>	<p>Specify in accordance with SOLAS Chapter VI Regulation 5</p>

Amended-Original Requirements Comparison Table (Approval of Container Securing Systems)

Amended	Original	Remarks
<p>Chapter 2 CLASSIFICATION SURVEYS</p> <p>2.1.4 Plans and Documents to be Maintained On Board*</p> <p>1 At the completion of a classification survey, the plans and documents specified in (1) to (7) below are to be on board. Duplicate plans and documents are not required.</p> <p>(1) Finished Plans (On Board) specified in Table B2.1 and Table B2.2.</p> <p>(Omitted)</p>	<p>Chapter 2 CLASSIFICATION SURVEYS</p> <p>2.1.4 Plans and Documents to be Maintained On Board*</p> <p>1 At the completion of a classification survey, the plans and documents specified in (1) to (7) below are to be <u>are</u> on board. Duplicate plans and documents are not required.</p> <p>(1) Finished Plans_(On Board) specified in Table B2.1 and Table B2.2.</p> <p>(Omitted)</p>	

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Amended-Original Requirements Comparison Table (Approval of Container Securing Systems)

Amended		Original						Remarks
Table B2.1 Plans and Documents – Hull (General)(excerpt)								
Name*1	Notes	Submission			Maintained On Board			
		Approval	Other	Finished Plans (Submission)	Finished Plans (On Board)	Ship Construction File		
						Ships engaged in international voyages	Ships subject to SOLAS Chapter II-1 Regulation 3-10	
<u>103 Cargo securing manual</u>	(1) For ships that are subject to 1.2.3, Part B of the Rules.	<input type="radio"/>			<input type="radio"/> *2			
<u>104 Drawings of fixed and portable container securing fittings</u>	(1) For ships that are subject to 1.4.2, Part 2-1, Part C of the Rules.	<input type="radio"/>			<input type="radio"/> *2			
<u>105 Arrangement plan for fixed container securing fittings</u>	(1) For ships that are subject to 1.4.2, Part 2-1, Part C of the Rules.	<input type="radio"/>			<input type="radio"/> *2			
<u>106 Drawings of container supporting structures</u>	(1) For ships that are subject to 1.4.2, Part 2-1, Part C of the Rules.	<input type="radio"/>			<input type="radio"/>			
<u>107 Cargo safe access plan</u>	(1) For ships that are subject to 1.4.2, Part 2-1, Part C of the Rules.	<input type="radio"/>			<input type="radio"/> *2			
<u>108 Container stowage plan</u>	(1) For ships that are subject to 1.4.2, Part 2-1, Part C of the Rules.	<input type="radio"/>			<input type="radio"/> *2			
<u>109 Container securing arrangement plan</u>	(1) For ships that are subject to 1.4.2, Part 2-1, Part C of the Rules.	<input type="radio"/>			<input type="radio"/> *2			

Notes

*1 : For ships of not less than 500 *gross tonnage* engaged in international voyages, it is recommended submitted pans and documents be marked with *IMO* ship identification numbers.

*2 : Plans and documents plans approved by the Society or copies thereto.

Amended-Original Requirements Comparison Table (Approval of Container Securing Systems)

Amended	Original	Remarks						
<p align="center">Chapter 3 ANNUAL SURVEYS</p> <p>3.2 Annual Surveys for Hull, Equipment, Fire Extinction, Computer-based Systems and Fittings</p> <p>3.2.1 Examination of Plans and Documents* 1 At Annual Surveys, the management conditions of plans and documents listed in Table B3.1 are to be examined.</p>	<p align="center">Chapter 3 ANNUAL SURVEYS</p> <p>3.2 Annual Surveys for Hull, Equipment, Fire Extinction, Computer-based Systems and Fittings</p> <p>3.2.1 Examination of Plans and Documents* 1 At Annual Surveys, the management conditions of plans and documents listed in Table B3.1 are to be examined.</p>							
<p>Table B3.1 Examination of Plans and Documents</p> <table border="1"> <thead> <tr> <th align="center">Items</th> <th align="center">Examination</th> </tr> </thead> <tbody> <tr> <td align="center" colspan="2">(1 to 16 are omitted.)</td> </tr> <tr> <td>17 Cargo securing manual</td> <td>(1) For ships that are subject to 1.2.3, confirmation as to whether the booklet is kept on board is to be made.</td> </tr> </tbody> </table>			Items	Examination	(1 to 16 are omitted.)		17 Cargo securing manual	(1) For ships that are subject to 1.2.3, confirmation as to whether the booklet is kept on board is to be made.
Items	Examination							
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17 Cargo securing manual	(1) For ships that are subject to 1.2.3, confirmation as to whether the booklet is kept on board is to be made.							

Amended-Original Requirements Comparison Table (Approval of Container Securing Systems)

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 2-1 CONTAINER CARRIERS</p> <p align="center">Chapter 14 EQUIPMENT</p> <p>14.2 Container Securing Systems</p> <p>14.2.1 <u>Application</u> 14.2.1.1 <u>General</u> <u>1 Container ships engaged in international voyages are to comply with this 14.2.</u> <u>2 It is important for the safety of the ship and the protection of the cargo and personnel that the cargo is secured properly especially accounting for strength of the supporting structures and securing fittings. Hereto, a scope containing the following for approval and/or certification of container securing systems is defined:</u> <u>(1) Fixed and portable container securing fittings;</u> <u>(2) Arrangement plan for fixed container securing fittings;</u> <u>(3) Drawings of container supporting structures (container posts, hatch covers, lashing bridges, and</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 2-1 CONTAINER CARRIERS</p> <p align="center">Chapter 14 EQUIPMENT</p> <p>14.2 Container Securing Systems</p> <p>14.2.1 <u>Container Securing Fittings</u> (Newly added)</p>	<p>C7.1</p>

Amended-Original Requirements Comparison Table (Approval of Container Securing Systems)

Amended	Original	Remarks
<p>cell guides, if any); <u>(4) Cargo safe access plan;</u> <u>(5) Container stowage and securing plan; and</u> <u>(6) Lashing software.</u></p> <p><u>14.2.2 Fixed and Portable Container Securing Fittings</u> <u>14.2.2.1 Test Certificates for Fixed and Portable Container Securing Fittings</u> Fittings used for container securing (hereinafter, this is to include loose securing fittings and fixed securing fittings except where specified otherwise) are to be provided with either a test certificate issued in accordance with Chapter 9, Part L or a test certificate deemed by the Society as being equivalent thereto.</p> <p><u>14.2.2.2 Drawings of Fixed and Portable Container Securing Fittings</u> <u>Drawings of fixed and portable container securing fittings showing dimensions, materials, design loads, and manufacturer markings are to be submitted to the Society and approved in accordance with 9.1.5, Part L.</u></p> <p><u>14.2.2.3 Arrangement Plan for Fixed Container Securing Fittings</u> <u>A plan detailing the arrangement of the fixed container securing fittings is to be submitted to the Society and approved. The arrangement plan is to include the following for all areas where the fittings are installed:</u> <u>(1) The type of fixed container securing fittings such as container foundations and lashing eye plates.</u></p>	<p>(Newly added) 14.2.1.1 Fittings used for container securing (hereinafter, this is to include loose securing fittings and fixed securing fittings except where specified otherwise) are to be provided with either a test certificate issued in accordance with Chapter 9, Part L or a test certificate deemed by the Society as being equivalent thereto.</p> <p>(Newly added)</p> <p>(Newly added)</p>	<p>C7.2: Covered by Part L and Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use C7.2.2: Prototype Testing C7.2.3: Production Testing</p> <p>C7.2.1</p> <p>C7.2.4</p> <p>Footnote 2</p>

Amended-Original Requirements Comparison Table (Approval of Container Securing Systems)

Amended	Original	Remarks
<p><u>(Container foundations are called twistlock foundations or base foundations in different container securing contexts. Likewise, “foundation” and “socket” are used interchangeably)</u></p> <p><u>(2) Unambiguous location of installed fittings such as their location relative to clearly described locations of the ship structures.</u></p> <p><u>14.2.3 Container Supporting Structures</u> <u>14.2.3.1 Drawings of Container Supporting Structures</u> <u>1 The drawings of the structures necessary for conducting container stowage and securing are to be submitted to the Society and subject to approval.</u> <u>2 The drawings are to be detailed enough to allow their model generation for structural analyses.</u> <u>3 A plan is to be provided showing all relevant design loads for structural assessment of the container supporting structures and their foundations.</u> <u>4 Structures involved in container stowage and securing include the following:</u> <u>(1) Hatch covers;</u> <u>(2) Container posts (Container posts are called container stanchions, container stools, or container pedestals in different container securing contexts.);</u> <u>(3) Lashing bridges; and</u> <u>(4) Cell guides.</u></p> <p><u>14.2.4 Cargo Safe Access Plan</u> <u>14.2.4.1 General</u> <u>The cargo safe access plan is to be examined for its compliance with the requirements prescribed in <i>MSC.1/Circ.1353/Rev.2</i>.</u></p>	<p align="center">(Newly added)</p> <p align="center">(Newly added)</p>	<p align="center">C7.3</p> <p align="center">Footnote 3</p> <p align="center">C7.4</p>

Amended-Original Requirements Comparison Table (Approval of Container Securing Systems)

Amended	Original	Remarks
<p>(5) <u>Relevant properties of securing fittings, including permissible loads;</u></p> <p>(6) <u>Graphical presentation of container and lashing arrangements in each bay on deck and in holds for sample loading conditions in accordance with the Rules of the Society for each container type the ship is allowed to carry;</u></p> <p>(7) <u>Sack total mass and the sequence of masses in a stack; and</u></p> <p>(8) <u>Minimum quantity of fittings required to secure containers for the presented sample loading conditions.</u></p> <p><u>14.2.6 Lashing Software</u> <u>14.2.6.1 General</u> <u>If the ship is equipped with lashing software on board as per 3.3, the approval is to follow the requirements of Annex 3.1.</u></p> <p>Part 2-2 BOX-SHAPED BULK CARRIERS</p> <p>(deleted)</p>	<p align="center">(Newly added)</p> <p>Part 2-2 BOX-SHAPED BULK CARRIERS</p> <p align="center"><u>Chapter 14 EQUIPMENT</u></p> <p><u>14.1 Container Securing Systems</u></p> <p><u>14.1.1 Container Securing Fittings</u> <u>14.1.1.1</u> <u>Fittings used for container securing are to comply with 14.2.1.1, Part 2-1.</u></p>	<p align="center">C7.6</p> <p align="center">Delete as application clarified in UR C7.</p>

Amended-Original Requirements Comparison Table (Approval of Container Securing Systems)

Amended	Original	Remarks
<p>(Deleted)</p>	<p>Part 2-5 GENERAL CARGO SHIPS AND REFRIGERATED CARGO SHIPS</p> <p style="text-align: center;"><u>Chapter 14 EQUIPMENT</u></p> <p><u>14.1 Container Securing Systems</u></p> <p><u>14.1.1 Container Securing Fittings</u></p> <p><u>14.1.1.1</u> <u>Fittings used for container securing are to comply with 14.2.1.1, Part 2-1.</u></p>	<p>Delete as application clarified in UR C7.</p>

Amended-Original Requirements Comparison Table (Approval of Container Securing Systems)

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 23 EQUIPMENT</p> <p>23.4 Container Securing Systems</p> <p>23.4.1 <u>General</u> <u>Cargo securing systems</u> for container ships engaged in international voyages are to comply with 14.2, Part 2-1, Part C.</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 23 EQUIPMENT</p> <p>23.4 Container Securing Systems</p> <p>23.4.1 <u>Container Securing Fittings</u> <u>Fittings used</u> for container securing are to comply with 14.2.1.1, Part 2-1, Part C.</p>	<p>The requirements specified in UR C7 are taken into Part C and the relevant requirements are referenced from Part CS.</p>
<p align="center">The effective date of the amendment is according to EFFECTIVE DATE AND APPLICATION (A)</p>		

Amended-Original Requirements Comparison Table (Approval of Container Securing Systems)

Amended	Original	Remarks
<p align="center">GUIDANCE FOR THE APPROVAL AND TYPE APPROVAL OF MATERIALS AND EQUIPMENT FOR MARINE USE</p> <p align="center">Part 2 EQUIPMENT</p> <p align="center">Chapter 12 APPROVAL OF CONTAINER SECURING FITTINGS</p> <p>12.2 Application Procedures</p> <p>12.2.2 Reference Data to be Submitted</p> <p>1 Manufacturers are to submit an application for approval together with the following documents in addition to the application form and test plan.</p> <ol style="list-style-type: none"> (1) Manufacturing method outline (2) Details on the quality control system of the manufacturing plant (3) Details on the product type, model name and other specifications (including safe working load (“SWL”), design breaking load and proof test load) (4) Structural drawings (including <u>materials, design loads, manufacturer markings, dimensions and tolerances</u>) (5) Data on materials used (including test certificates) (6) Details on coating and corrosion protection (if applicable) (7) Instruction manuals as specified by the manufacturer (8) For fully automatic twist locks, documents 	<p align="center">GUIDANCE FOR THE APPROVAL AND TYPE APPROVAL OF MATERIALS AND EQUIPMENT FOR MARINE USE</p> <p align="center">Part 2 EQUIPMENT</p> <p align="center">Chapter 12 APPROVAL OF CONTAINER SECURING FITTINGS</p> <p>12.2 Application Procedures</p> <p>12.2.2 Reference Data to be Submitted</p> <p>1 Manufacturers are to submit an application for approval together with the following documents in addition to the application form and test plan.</p> <ol style="list-style-type: none"> (1) Manufacturing method outline (2) Details on the quality control system of the manufacturing plant (3) Details on the product type, model name and other specifications (including safe working load (“SWL”), design breaking load and proof test load) (4) Structural drawings (including dimensions and tolerances) (5) Data on materials used (including test certificates) (6) Details on coating and corrosion protection (if applicable) (7) Instruction manuals as specified by the manufacturer (8) For fully automatic twist locks, documents 	<p align="center">C7.2.1</p>

Amended-Original Requirements Comparison Table (Approval of Container Securing Systems)

Amended	Original	Remarks
<p>describing the proper position of the twist lock lower coupling when attached to the corner fitting, the mechanism for preventing the twist lock from falling out, and the mechanism for automatic release from the corner fitting</p> <p>(9) Certificates of approval by other classification societies and related documents (if any).</p> <p>(10) Details of product inspections (including dimensional measurements, strength tests, mechanical tests and non-destructive testing)</p> <p>(11) Welding procedure manuals and workmanship certificates (if the welding process is included in the manufacture of the product)</p> <p>(12) Copies of certificates showing compliance with the Rules for Approval of Manufacturers and Service Suppliers or the equivalent thereto, or copies of <i>ISO 9000</i> series certification (if already certified by the Society).</p> <p>(13) Other documents deemed necessary by the Society</p>	<p>describing the proper position of the twist lock lower coupling when attached to the corner fitting, the mechanism for preventing the twist lock from falling out, and the mechanism for automatic release from the corner fitting</p> <p>(9) Certificates of approval by other classification societies and related documents (if any).</p> <p>(10) Details of product inspections (including dimensional measurements, strength tests, mechanical tests and non-destructive testing)</p> <p>(11) Welding procedure manuals and workmanship certificates (if the welding process is included in the manufacture of the product)</p> <p>(12) Copies of certificates showing compliance with the Rules for Approval of Manufacturers and Service Suppliers or the equivalent thereto, or copies of <i>ISO 9000</i> series certification (if already certified by the Society).</p> <p>(13) Other documents deemed necessary by the Society</p>	
<p>The effective date of the amendment is according to EFFECTIVE DATE AND APPLICATION (B)</p>		

Amended-Original Requirements Comparison Table (Approval of Container Securing Systems)

Amended	Original	Remarks
EFFECTIVE DATE AND APPLICATION (A)		
<ol style="list-style-type: none"> 1. The effective date of the amendments is 1 July 2025. 2. Notwithstanding the amendments to the Amendments, the current requirements apply to ships for which the date of contract for construction* is before the effective date. 3. For ships subject to Part C of the Rules for the Survey and Construction of Steel Ships and the Guidance for the Survey and Construction of Steel Ships prior to its comprehensive revision by Rule No.62 on 1 July 2022 and Notice No.47 on 1 July 2022 (herein after referred to as “old Part C of the Rules” and “old Part C of the Guidance”), and which the date of contract for construction* is on and after the effective date, this amendment also applies to following requirements. <div style="margin-left: 40px;">32.15, old Part C of the Rules (new)</div> <p style="margin-left: 40px;">* “contract for construction” is defined in the latest version of IACS Procedural Requirement (PR) No.29.</p>		
IACS PR No.29 (Rev.0, July 2009)		
<ol style="list-style-type: none"> 1. The date of “contract for construction” of a vessel is the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding. 2. The date of “contract for construction” of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder. For the purpose of this Procedural Requirement, vessels built under a single contract for construction are considered a “series of vessels” if they are built to the same approved plans for classification purposes. However, vessels within a series may have design alterations from the original design provided: <ol style="list-style-type: none"> (1) such alterations do not affect matters related to classification, or (2) If the alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the alterations are submitted to the Society for approval. The optional vessels will be considered part of the same series of vessels if the option is exercised not later than 1 year after the contract to build the series was signed. 3. If a contract for construction is later amended to include additional vessels or additional options, the date of “contract for construction” for such vessels is the date on which the amendment to the contract, is signed between the prospective owner and the shipbuilder. The amendment to the contract is to be considered as a “new contract” to which 1. and 2. above apply. 4. If a contract for construction is amended to change the ship type, the date of “contract for construction” of this modified vessel, or vessels, is the date on which revised contract or new contract is signed between the Owner, or Owners, and the shipbuilder. <p>Note: This Procedural Requirement applies from 1 July 2009.</p>		
EFFECTIVE DATE AND APPLICATION (B)		
<ol style="list-style-type: none"> 1. The effective date of the amendments is 1 July 2025. 2. Notwithstanding the amendments to the Amendments, the current requirements apply to securing fittings installed in ships for which the date of contract for construction* is before the effective date. 		

Amended-Original Requirements Comparison Table (Approval of Container Securing Systems)

Amended	Original	Remarks
<p>* “contract for construction” is defined in the latest version of IACS Procedural Requirement (PR) No.29.</p> <p style="text-align: center;">IACS PR No.29 (Rev.0, July 2009)</p> <ol style="list-style-type: none"> 1. The date of “contract for construction” of a vessel is the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding. 2. The date of “contract for construction” of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder. For the purpose of this Procedural Requirement, vessels built under a single contract for construction are considered a “series of vessels” if they are built to the same approved plans for classification purposes. However, vessels within a series may have design alterations from the original design provided: <ol style="list-style-type: none"> (1) such alterations do not affect matters related to classification, or (2) If the alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the alterations are submitted to the Society for approval. <p>The optional vessels will be considered part of the same series of vessels if the option is exercised not later than 1 year after the contract to build the series was signed.</p> 3. If a contract for construction is later amended to include additional vessels or additional options, the date of “contract for construction” for such vessels is the date on which the amendment to the contract, is signed between the prospective owner and the shipbuilder. The amendment to the contract is to be considered as a “new contract” to which 1. and 2. above apply. 4. If a contract for construction is amended to change the ship type, the date of “contract for construction” of this modified vessel, or vessels, is the date on which revised contract or new contract is signed between the Owner, or Owners, and the shipbuilder. <p>Note: This Procedural Requirement applies from 1 July 2009.</p>		