### Review of Guidance for the Approval of Materials and Equipment for Marine Use

### **Object of Amendment**

Rules for the Survey and Construction of Steel Ships Parts B, C, D, GF, H, L, N, and X Guidance for the Survey and Construction of Steel Ships Parts B, C, U, W, CS, D, GF, H, K, L, N, S, P, PS, and R

Guidance for Marine Pollution Prevention Systems

Rules / Guidance for Cargo Refrigerating Installations

Rules for Automatic and Remote Control Systems

Guidance for Preventive Machinery Maintenance Systems

Guidance for Centralized Cargo Monitoring and Control Systems

Rules / Guidance for High Speed Craft

Guidance for the Survey and Construction of Passenger Ships

Rules / Guidance for the Survey and Construction of Inland Waterway Ships

Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use

### **Reason for Amendment**

The materials, equipment, etc. used on ships have traditionally required manufacturing process approval, type approval and approval of use, etc. in accordance with the Rules for the Survey and Construction of Steel Ships and other Rules, with specific approval procedures, in principle, being stipulated in the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use (hereinafter referred to as the "Guidance for Approval"). Based on Guidance for Approval, approval work is conducted through the review of drawings and various documents, investigations of manufacturing facilities and testing.

However, the handing of approval is complicated because the difference between "type approval" and "approval of use", as both terms are defined in the Guidance for Approval, is unclear and because there are many terms related to approval. Furthermore, procedures related to the approval of materials, equipment, etc. that should be stipulated in the Guidance for Approval are sometimes stipulated in other Rules.

Accordingly, relevant requirements are amended to clarify the handling of approval.

### **Outline of Amendment**

The main details of this amendment are as follows:

- (1) Revises definitions and terminology.
- (2) Unifies descriptions of the expiration date of certificates of approval.
- (3) Deletes descriptions of the number of copies of documents to be submitted.
- (4) The "General" section is placed in Part 1, and Parts 1 to 4 have been reorganised to match the structure of other rules.
- (5) Adds type approval of materials for insulation used in liquefied gas fuel containment systems as Chapter 7 of Part 5. (Transferred from Annex 1 of Part N and Annex 1 of Part GF)
- (6) Adds type approval of Planned Machinery Maintenance Scheme (PMS) or Condition Based Maintenance Scheme (CBM) for management software as Chapter 1 of Part 6.

- (Transferred from the Annex of Part B)
- (7) Deletes "standardised design for machinery and equipment" from Part 6, Chapter 1. (Transferred to the Annex of Part B)
- (8) In Chapters 1 and 2 of Part 7, changes "inspection and test specification for quality control (including test data)" at the time of application procedure to "information on the manufacturing and quality control standards" in line with other type approvals.
- (9) Adds materials related to quality control standards and usage records to the submission materials in Chapter 3 of Part 7.
- (10) In Chapter 1 of Part 8, changes type tests to type approval, and adds requirements related to submission documents and prior examination in line with other type approvals.

### **Effective Date and Application**

This amendment applies to materials and equipment for marine use for which the application for approval is submitted to the Society on or after 1 July 2026.

ID:DD25-01

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



Amended	Original	Remarks
RULES FOR THE SURVEY AND	RULES FOR THE SURVEY AND	
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS	
Part B CLASS SURVEYS	Part B CLASS SURVEYS	
Chapter 2 CLASSIFICATION SURVEYS	Chapter 2 CLASSIFICATION SURVEYS	
2.1 Classification Survey during Construction	2.1 Classification Survey during Construction	
2.1.6 Coating and Corrosion Resistant Steel Technical Files	2.1.6 Coating and Corrosion Resistant Steel Technical Files	
1 Coating Technical Files	1 Coating Technical Files	Terminology alignment
For the coatings of internal spaces, the coating technical	For the coatings of internal spaces, the coating technical	
files are to include at least (1) to (7) below.	files are to include at least (1) to (7) below.	
(1) A copy of the statement of compliance or approval	(1) A copy of the statement of compliance or type	
certificate.	approval certificate.	
((2) to (7) are omitted.)  2 Corrosion Resistant Steel Technical Files	((2) to (7) are omitted.)  2 Corrosion Resistant Steel Technical Files	Terminology alignment
Corrosion resistant steel technical files are to include at least	Corrosion resistant steel technical files are to include at least	Terminology anginitent
(1) to (3) below.	(1) to (3) below.	
(1) Copy of Approval Certificate.	(1) Copy of <u>Type</u> Approval Certificate.	
((2) and (3) are omitted.)	((2) and (3) are omitted.)	

		Amended Amended	5 p 1 c v w	01 1/1			iginal			Remarks
2.3.1	Alterations Examina	ations of Altered Parts*	2.3		rations Examinat	tions of	Altered P	arts*		
		Table B2.1 Plans and Do	ı ocument	s – Hul	l (Genera	al)			Term	inology alignment
			Approval	Submissio Other	Finished Plans	Finished Plans	Maintained Ship C	On Board onstruction File		
	Name*1	Notes			(Submission)	(On Board)	Ships engaged in international voyages	Ships subject to SOLAS Chapter II-1 Regulation 3-10		
		(On	nitted)							
7.	4 Watertight cable penetra-tion registers	(1) All watertight cable penetrations are to be recorded and identified in the watertight cable penetration register. This is to includes documentation referencing manufacturer manuals for each type of watertight cable penetration installed, type-approval certificates for each type of watertight cable penetration, applicable installation drawings, records of each installed watertight cable penetration documenting the as-built condition after final inspections at shipyards, and sections to record any inspection, modification, repair or maintenance.  ((2) to (4) are omitted.)				0	0	0		
		(On	nitted)							
	marke	nips of not less than 500 gross tonnage engaged in ind d with IMO ship identification numbers. Plans and documents plans approved by the Society or			it is recom	mended su	ıbmitted pans	and documents be		

Amended		Original	,	Remarks	
	Table B2.10 Survey -	- Coating Application		Changes due to	the
Survey Items	·	Details		renaming of	the
1 Technical data sheet*1 and statement of compliance or type approval certificate  2 Coating identification  (Omitted)  Note  *1: "Technical data sheet*	with the "PERFORM.  DEDICATED SEAWATE SIDE SKIN SPACES OF Coatings for Seawater B The statement of complia (c) items.  (a) The Society's approv Approval and Typ (b) Statement of complia (RIME), the Japan Pa (c) Other documents app (2) The technical data sheet with the "PERFORMAN OIL TANKS OF CRUD Coatings for Cargo Oil Ta of compliance or type app (a) The Society's approv Approval and Typ (b) Other documents app (1) The coating identification identified in the technical specified in item 1 above	and statement of compliance or type approval certificate comply ance STANDARD FOR PROTECTIVE COATINGS FOR ER BALLAST TANKS IN ALL TYPE OF SHIPS AND DOUBLE-TO BULK CARRIERS" (IMO Performance Standard for Protective stallast Tanks, etc. / IMO resolution MEPC.215(82) as amended). Indee or type approval certificate is to be one of the following (a) to avail certificate specified in Chapter 4, Part 45 of Guidance for the the Approval of Materials and Equipment for Marine Use ance issued by the Research Institute of Marine Engineering, Japan and Inspection and Testing Association or MARINTEK proved by the Society and statement of compliance or type approval certificate comply and Statement of Compliance or type approval certificate comply are of the OIL TANKERS" (IMO Performance Standard for Protective anks / IMO resolution MEPC.288(87) as amended). The statement proval certificate is to be either of the following (a) or (b) items. Avail certificate specified in Chapter 4, Part 45 of Guidance for the type approval of Materials and Equipment for Marine Use proved by the Society on on representative containers is consistent with the coating data sheet and statement of compliance or type approval certificate (Omitted)		renaming of "Guidance for Approval"  Changes due to reorganization of "Guidance for Approval"	the the the the

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)

	proval of Materials and Equipment for Marine Use)	T
Amended	Original	Remarks
Annex 2.1.3 APPROVAL OF STANDARDIZED  DESIGN FOR MACHINERY AND  EQUIPMENT	(Newly added)	"APPROVAL OF STANDARDIZED DESIGN FOR MACHINERY AND EQUIPMENT" in Part 6, Chapter 1 of the Guidance
An1.1 Scope		for the Approval and Type Approval of Materials and Equipment for Marine Use will be
The requirements of this chapter deal with the approval of		relocated to Annex of Part B. There are no changes to
the drawings and documents which are submitted in advance		the approval
to the Society as the standardized design designating the		requirements.
construction, dimensions, materials, specifications, etc. on		
machinery and equipment required to obtain approval by		
submitting drawings to the Society in accordance with the requirements of 2.1.3, Part B of the Rules for the Survey		
and Construction of Steel Ships, 2.1.2, Part 2 of the Rules		
for High Speed Craft, 2.1.2, Part 2 of the Rules for the		
Survey and Construction of Inland Waterway Ships,		
2.3.1, Part 1 of the Rules for Lifting Appliances and		
Anchor Handling Winches and 2.2.1 of the Rules for Cargo		
Refrigerating Installations.		
An1.2Application		
An1.2.1 Application Form		
The manufacturer, who intends to obtain the approval of		
standardized design, is to submit the appropriate application		
form (Form 6-1) filled in with necessary data and information		
to the Society (Head Office).		

	proval of Materials and Equipment for Marine Use)	1
Amended	Original	Remarks
An1.2.2 Drawings and Documents  In accordance with the requirements of the rules applicable to the machinery and equipment, drawings and documents, in triplicate, are to be submitted together with the application form specified in An 1.2.1.  An1.3 Approval		
An1.3.1 Notification of Approval  The Society, when satisfied upon examination that the drawings and documents fulfill the requirement concerned, will agree on handling these drawings and documents as the standardized design. Then one copy each of the drawings and documents will be returned to the applicant with approval stamp of the Society, approval date, approval number and term of validity indicated on them.  An1.3.2 Term of Validity  The term of validity of the approval of standardized design will be five years from the date of approval.		
An1.3.3 Renewal of Approval  1 The manufacturer, who intends to have a continuation of the approval of standardized design already expired or to make partial modification on the design, is to submit an application in accordance with the requirements of An 1.2 newly.  2 In case where approval is given for a design with partial modification, expiration date will not be renewed in principle.		

Amended	Original	Remarks
An1.3.4 Revocation of Approval In case where either of the following (1) or (2) applies, the Society will revoke the approval of standardized design, and give a notice to the manufacturer.  (1) In association with the implementation or revision of international conventions, laws and regulations, the machinery and equipment for which the standardized design were approved do not deserve the approval any longer.  (2) Serious shortcomings are found in the machinery and equipment manufactured according to the approved standardized design after being installed in ships.  An1.4Handling after Approval		
An1.4.1 Allocation of Machinery and Equipment to Ships  In case where the machinery and equipment for which the standardized design have been approved are allocated to NK-classed ships, the appropriate application form is to be submitted to the Society (Head Office), in triplicate, in place of the drawings and documents required by the rules.		

Amended	Original	Remarks
(Delete)	Annex 9.1.3 PROCEDURES FOR THE	In order to relocate "PROCEDURES FOR
	APPROVAL OF PMS/CBM MANAGEMENT SOFTWARE	THE APPROVAL OF PMS/CBM
	(Annex 9.1.3 Main text omitted)	MANAGEMENT SOFTWARE" to Chapter 1, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment
		for Marine Use, the current requirement is deleted.

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RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS  Part C HULL CONSTRUCTION AND EQUIPMENT  Part 1 GENERAL HULL REQUIREMENTS  Chapter 3 STRUCTURAL DESIGN PRINCIPLES  3.8 Loading Manual and Loading Instrument  3.8.3 Loading Instrument	Amended	Original	Remarks	
CONSTRUCTION OF STEEL SHIPS  Part C HULL CONSTRUCTION AND EQUIPMENT  Part 1 GENERAL HULL REQUIREMENTS  Chapter 3 STRUCTURAL DESIGN PRINCIPLES  3.8 Loading Manual and Loading Instrument  3.8.3 Loading Manual and Loading Instrument  3.8.3.1 General 1 (Omitted) 2 The loading instrument is to be capable of performing its intended functions in the installed environment. A loading instrument complying with Part 7 of the Guidance for the instrument complying with Part 7 of the Guidance for the foreign content of the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidance for the following instrument complying with Part 7 of the Guidanc	2 333333 313 31		TOMA	
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	Approval of Materials and Equipment for Marine Use is	Approval and Type Approval of Materials and Equipment	Approval"	uic
recommended. for Marine Use is recommended.				
3 (Omitted) 3 (Omitted)	3 (Omitted)	<b>3</b> (Omitted)		

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Amended	Original	Remarks	
Annex 3.2 GUIDANCE FOR THE USE OF	Annex 3.2 GUIDANCE FOR THE USE OF		
FIBRE-REINFORCED PLASTIC (FRP)	FIBRE-REINFORCED PLASTIC (FRP)		
FIBRE-REINFORCED LEASTIC (FRI )	FIBRE-REINFORCED I LASTIC (FM)		
An2 Requirements for FRP Products	An2 Requirements for FRP Products		
An2.1 General Requirements for FRP Products	An2.1 General Requirements for FRP Products		
An2.1.1 General Requirements  1 All FRP products are to be approved by the Society in accordance with Chapter 9, Part 3 of the Guidance for the	An2.1.1 General Requirements  1 All FRP products are to be approved by the Society in accordance with Chapter 9, Part 2 of the Guidance for the	renaming of to "Guidance for to Approval"	the the the
Approval of Materials and Equipment for Marine Use and are to be adequate for the service conditions.	Approval and Type Approval of Materials and Equipment for Marine Use and are to be adequate for the service conditions.	reorganization of	the the the
2 (Omitted)	2 (Omitted)		
An2.2 Requirements for <i>FRP</i> Products Depending on Service and/or Locations	An2.2 Requirements for <i>FRP</i> Products Depending on Service and/or Locations		a.
An2.2.1 Requirements Depending on Service and/or	An2.2.1 Requirements Depending on Service and/or	C	the the
Locations	Locations	C	the
1 (Omitted)	1 (Omitted)	Approval"	
2 (Omitted)	2 (Omitted)		the
3 Where the fire integrity test and the flame spread test	3 Where the fire integrity test and the flame spread test	0	the the
have been approved as the approval tests specified in Chapter	have been approved as the approval tests specified in Chapter	Approval"	tile
9, Part <u>3</u> of the Guidance for the Approval of Materials and	9, Part 2 of the Guidance for the Approval and Type		
Equipment for Marine Use in accordance with ASTM F	Approval of Materials and Equipment for Marine Use in		
3059-14, notwithstanding <b>Table An1</b> , applicable requirements	accordance with ASTM F 3059-14, notwithstanding Table		
for FRP products can be in accordance with ASTM F 3059-	An1, applicable requirements for FRP products can be in		
14.	accordance with ASTM F 3059-14.		
4 Notwithstanding the requirements in -1 and -3 above,	4 Notwithstanding the requirements in -1 and -3 above,		

(Revie	ew of Guidance for the App	proval c	of Materi	als and Equ	ipment f	or Mai	rine Use)		
Amend	led			Origi	inal			Remarks	
FRP products used for safe access are to be tested and approved by with the fire integrity test specifically approved by the Guidance for the Equipment for Marine Use, the specified in 9.4.2-3(2), the smoke 9.4.2-4(2), and the toxicity test so the Guidance for the Equipment for Marine Use, the specified in 9.4.2-3(2), the smoke 9.4.2-4(2), and the toxicity test so that the control of the Guidance for the Equipment for Marine Use, the specified in 9.4.2-3(2), the smoke 9.4.2-4(2), and the toxicity test so that the control of the Equipment for Marine Use, the specified in 9.4.2-3(2), the smoke 9.4.2-4(2), and the toxicity test so that the control of the Equipment for Marine Use, the specified in 9.4.2-3(2), the smoke 9.4.2-4(2), and the toxicity test so that the control of the Equipment for Marine Use, the specified in 9.4.2-3(2), the smoke 9.4.2-4(2), and the toxicity test so that the control of the Equipment for Marine Use, the specified in 9.4.2-3(2), the smoke 9.4.2-4(2), and the toxicity test so that the control of the Equipment for Marine Use, the specified in 9.4.2-3(2), the smoke 9.4.2-4(2), and the toxicity test so the control of the Equipment for Marine Use, the specified in 9.4.2-3(2), the smoke 9.4.2-4(2), and the toxicity test so the control of the Equipment for Marine Use, the specified in 9.4.2-3(2), the smoke 9.4.2-4(2), and the toxicity test so the control of the Equipment for Marine Use, the specified in 9.4.2-3(2), the smoke 9.4.2-4(2), and the toxicity test so the control of the Equipment for Marine Use, the	by the Society in accordance fied in 9.4.2-1(4), Chapter 9, Approval of Materials and the surface flammability test are generation test specified in	are to be with the Part 2 Approx surface generate specific	oe tested a e fire integ of the val of Mat flammabi	and approved grity test specificals and Edulity test specified in 95(1).	by the Soified in 9. or the Aquipment ified in 9.	ociety i 4.2-1(4) pprova for Ma .4.2-3(2	n accordance), Chapter 9, and Type arine Use, the 2), the smoke e toxicity test		
Landing	Table An1 Applicable Requ	rirements	for FRP	Flame Spread	Smoke	T:	1	Changes due to renaming of "Guidance for	the the
Location	Service	Integrity	Retardance	and Surface Flammability	Generation	Toxicity		Approval"	the
Cargo Pump Rooms	All personnel walkways, catwalks, ladders, platforms, or access areas	$L_1$	0	0	_	_		Changes due to reorganization of	the the
	Walkways or areas that may be used for escape, or access for firefighting, emergency operation, or rescue	$V_1$	0	_	_	_		"Guidance for Approval"	the
Cargo Holds	Walkways, catwalks, ladders, platforms, or access areas other than those described above	_	0	_	_	-			
Cargo Tanks	All personnel walkways, catwalks, ladders, platforms, or access areas	See Note (3)	0	-	_	_			
Fuel Oil Tanks	All personnel walkways, catwalks, ladders, platforms, or access areas	See Note (3)	0	_	_	_			
Ballast Water Tanks	All personnel walkways, catwalks, ladders, platforms, or access areas	See Note (4)	0	_	_	_			
Cofferdams, void spaces, double bottoms, pipe tunnels, etc.	All personnel walkways, catwalks, ladders, platforms, or access areas	See Note (4)	0	-	_	_			
Accommodation, service spaces and control rooms	All personnel walkways, catwalks, ladders, platforms, or access areas	$L_1$	0	0	0	_			

Amended			Original				Remarks	
Lifeboat embarkation or safe refuge stations in open deck areas	All personnel walkways, catwalks, ladders, platforms, or access areas	$L_2$	0	_	_	_		
Open decks or semi-	Walkways or areas which may be used for escape or access for firefighting, emergency operation, or rescue <sup>(6)</sup>	$L_3^{(5)}$	0	_	_	_		
enclosed areas	Walkways, catwalks, ladders, platforms, or access areas other than those described above	_	0	_	_	_		
(Notes)						•		
1 1								
for Marin  -: Not applica  (2) Abbrevia  L1: L1 is the  specified  Equipme  L2: L2 is the ab  in 9.1.2(3  Equipme  L3: L3 is the ab  in 9.1.2(2  Equipme  (3) Fire inte  FRP of 1  (4) Fire inte  FRP of 1  (5) Vessels for	<ul> <li>FRP of L<sub>1</sub> is to be applied.</li> <li>(4) Fire integrity is not required in principle. However, if these spaces are normally entered and exited when underway, FRP of L<sub>3</sub> is to be applied.</li> </ul>							

Amended	Original Original	Remarks
Chapter 14 EQUIPMENT	Chapter 14 EQUIPMENT	
14.5 Equipment Numbers and Emergency Towing Arrangements	14.5 Equipment Numbers and Emergency Towing Arrangements	
14.5.2 Emergency Towing Arrangements	14.5.2 Emergency Towing Arrangements	
<ul> <li>14.5.2.4 Soundness of Emergency Towing Arrangement     The emergency towing arrangement is to comply with the following (1) or (2).</li> <li>(1) Where a prototype of the emergency towing arrangement is arranged in the same manner as it is to be installed on board the ship, the prototype test is to be carried out in accordance with the requirements specified in Chapter 6, Part 3 of Guidance for the Approval of Materials and Equipment for Marine Use and a production test of individual components is to be carried out in accordance with the same requirements.</li> <li>(2) (Omitted)</li> </ul>	be installed on board the ship, the prototype test is to be carried out in accordance with the requirements specified in Chapter 6, Part 2 of Guidance for the Approval and Type Approval of Materials and	Changes due to the renaming of the "Guidance for the Approval" Changes due to the reorganization of the "Guidance for the Approval"

Amended	Original	Remarks
RULES FOR THE SURVEY AND	RULES FOR THE SURVEY AND	
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS	
Part D MACHINERY INSTALLATIONS  Chapter 2 RECIPROCATING INTERNAL	Part D MACHINERY INSTALLATIONS  Chapter 2 RECIPROCATING INTERNAL	
COMBUSTION ENGINES	COMBUSTION ENGINES	
2.1 General	2.1 General	
<ul> <li>2.1.1 General*</li> <li>3 For each type of reciprocating internal combustion engines, type approval is to be obtained by the engine designer (hereinafter referred to "licensor" in this Chapter) as specified separately by the Society.</li> <li>2.1.3 Drawings and Data*</li> </ul>	<ul> <li>2.1.1 General*</li> <li>3 For each type of reciprocating internal combustion engines, an approval of use is to be obtained by the engine designer (hereinafter referred to "licensor" in this Chapter) as specified separately by the Society.</li> <li>2.1.3 Drawings and Data*</li> </ul>	Terminology alignment
2 The drawings and data for the inspection and testing specified in -1 (the items represented by the mark ○ in Table D2.1(a) and Table D2.1(b), hereinafter indicated the same way throughout this Chapter) are to be submitted in accordance with 2.1.4-1 by the engine manufacturer producing engines with the drawings and data whose type approval has been obtained in accordance with 2.1.1-3 (hereinafter referred to as "licensee" in this Chapter). Such drawings and data, however, may be submitted by the licensor in accordance with 2.1.4-2.	2 The drawings and data for the inspection and testing specified in -1 (the items represented by the mark ○ in Table D2.1(a) and Table D2.1(b), hereinafter indicated the same way throughout this Chapter) are to be submitted in accordance with 2.1.4-1 by the engine manufacturer producing engines with the drawings and data whose approval of use has been obtained in accordance with 2.1.1-3 (hereinafter referred to as "licensee" in this Chapter). Such drawings and data, however, may be submitted by the licensor in accordance with 2.1.4-2.	Terminology alignment

Table D2.1(a) Drawings and Data for Approval  Items  Gomitted)  (b) Category B turbochargers i) Sectional assembly (including principal dimensions and materials of housing components for containment evaluation.) ii) Documentation of containment in the event of the disc fracture specified in 2.5.1-6 iii) Documentation of following operational data and limitations · Maximum permissible operating speed (rpm) · Maximum permissible exhaust gas temperature at the turbine inlet · Minimum lubrication oil inlet pressure · Maximum permissible vibration levels (self- and externally generated vibrations) · Alarm level for exhaust gas temperature at the turbine inlet (levels are also to be indicated)	ent
(Omitted)  (b) Category B turbochargers i) Sectional assembly (including principal dimensions and materials of housing components for containment evaluation.) ii) Documentation of containment in the event of the disc fracture specified in 2.5.1-6 iii) Documentation of following operational data and limitations · Maximum permissible operating speed (rpm) · Maximum permissible exhaust gas temperature at the turbine inlet · Minimum lubrication oil inlet pressure · Maximum permissible vibration levels (self- and externally generated vibrations) · Alarm level for exhaust gas temperature at the turbine inlet (levels are also to be indicated	
i) Sectional assembly (including principal dimensions and materials of housing components for containment evaluation.)  ii) Documentation of containment in the event of the disc fracture specified in 2.5.1-6  iii) Documentation of following operational data and limitations  · Maximum permissible operating speed (rpm)  · Maximum permissible exhaust gas temperature at the turbine inlet  · Minimum lubrication oil inlet pressure  · Maximum permissible vibration levels (self- and externally generated vibrations)  · Alarm level for exhaust gas temperature at the turbine inlet (levels are also to be indicated)	
on engine control system diagrams)  • Lubrication oil inlet pressure low alarm set point (levels are also to be indicated on engine control system diagrams)  • Lubrication oil outlet temperature high alarm set point (levels are also to be indicated on engine control system diagrams)  iv) Diagram of lubrication oil systems (diagrams included in piping arrangements fitted to engines may be accepted instead)  v) Test report of type approval test (only for type approval tests)  vi) Test procedure (only for type approval tests)  (Omitted)	
(Omitted)	
Table D2.1(b) Drawings and Data for Reference  Terminology alignm	ent
Items For inspection and testing	
(Omitted)	
(31) Certification of an approval of use a type approval for environmental tests, control components <sup>(2)</sup>	
(Omitted)	

Amended	Original	Remarks
T Interior C	O'II SIII III	Temans
2.1.4 Approval of Reciprocating Internal Combustion Engines	2.1.4 Approval of Reciprocating Internal Combustion Engines	
1 Reciprocating internal combustion engines are to be	1 Reciprocating internal combustion engines are to be	
approved in accordance with the following (1) to (6):	approved in accordance with the following (1) to (6):	
(1) Development of documents and data for engine	(1) Development of documents and data for engine	
production	production	
(a) (Omitted)	(a) (Omitted)	
(b) Each type of reciprocating internal combustion	(b) Each type of reciprocating internal combustion	
engine is to be provided with a certificate of type	engine is to be provided with a certificate of	
approval obtained by the licensor in accordance	approval of use obtained by the licensor in	Terminology alignment
with 2.1.1-3. For the first engine of a type or for	accordance with <b>2.1.1-3</b> . For the first engine of a	
those with no service records, the process of an	type or for those with no service records, the	
approval of use and the approval process for	process of an approval of use and the approval	
production by the licensee may be performed	process for production by the licensee may be	
simultaneously.	performed simultaneously.	
(c) The licensor is to review the drawings and data of	(c) The licensor is to review the drawings and data of	m : 1 1:
the reciprocating internal combustion engine	the reciprocating internal combustion engine	Terminology alignment
whose type approval has been obtained for the	whose approval of use has been obtained for the	
application and develop, if necessary, application	application and develop, if necessary, application	
specific drawings and data for production of	specific drawings and data for production of	
reciprocating internal combustion engines for the use of the licensee in developing the	reciprocating internal combustion engines for the use of the licensee in developing the	
reciprocating internal combustion engine specific	reciprocating internal combustion engine specific	
production drawings and data for the inspection	production drawings and data for the inspection	
and testing specified in 2.1.3-1.	and testing specified in 2.1.3-1.	
(d) If substantive modifications to the drawings and	(d) If substantive modifications to the drawings and	
data of the reciprocating internal combustion	data of the reciprocating internal combustion	Terminology alignment
engine whose type approval has been obtained	engine whose approval of use has been obtained	
have been made in the drawings and data of	have been made in the drawings and data of	
reciprocating internal combustion engines to be	reciprocating internal combustion engines to be	

	proval of Materials and Equipment for Marine Ose)	
Amended	Original	Remarks
produced, the affected drawings and data are to	produced, the affected drawings and data are to	
be resubmitted to the Society as specified	be resubmitted to the Society as specified	
separately by the Society.	separately by the Society.	
(2) Drawings and data for the inspection and testing of	(2) Drawings and data for the inspection and testing of	
reciprocating internal combustion engines	reciprocating internal combustion engines	
(a) The licensee is to develop the drawings and data	(a) The licensee is to develop the drawings and data	
for the inspection and testing specified in 2.1.3-1	for the inspection and testing specified in 2.1.3-1	
and a comparison list of these drawings and data	and a comparison list of these drawings and data	Terminology alignment
to the drawings and data of the reciprocating	to the drawings and data of the reciprocating	
internal combustion engine whose type approval	internal combustion engine whose approval of	
has been obtained by the licensor and submit	use has been obtained by the licensor and submit	
these drawings and the comparison list to the	these drawings and the comparison list to the	
Society.	Society.	
(b) As for the drawings and data for the inspection	(b) As for the drawings and data for the inspection	
and testing specified in 2.1.3-1, if there are	and testing specified in 2.1.3-1, if there are	Terminology alignment
differences in the technical content on the	differences in the technical content on the	
licensee's production drawings and data of the	licensee's production drawings and data of the	
reciprocating internal combustion engine	reciprocating internal combustion engine	
compared to the drawings and data of the	compared to the drawings and data of the	
reciprocating internal combustion engine whose	reciprocating internal combustion engine whose	
type approval has been obtained by the licensor,	<u>approval of use</u> has been obtained by the licensor,	
the licensee is to submit "Confirmation of the	the licensee is to submit "Confirmation of the	
licensor's acceptance of licensee's	licensor's acceptance of licensee's	
modifications" approved by the licensor and	modifications" approved by the licensor and	
signed by the licensee and licensor. If the licensor	signed by the licensee and licensor. If the licensor	
acceptance is not confirmed, the reciprocating	acceptance is not confirmed, the reciprocating	
internal combustion engine manufactured by the	internal combustion engine manufactured by the	
licensee is to be regarded as a different engine	licensee is to be regarded as a different engine	
type and is 2.1.1-3 is to apply to the reciprocating	type and is 2.1.1-3 is to apply to the reciprocating	
internal combustion engine.	internal combustion engine.	
((c) to (e) are omitted.)	((c) to (e) are omitted.)	

Original	Remarks
	Terminology alignment
sub-supplied.	
2.6 Tests	
261 Shon Tooto*	
±	
1	
(c) Temperature of hot surface insulation	
` ' -	
	Terminology alignment
1 0 0	
<u> </u>	
	2.6.1 Shop Tests*  2 For reciprocating internal combustion engines, the purpose of the shop trials is to verify design premises such as engine power, safety against fire, adherence to approved limits such as maximum pressure, and functionality as well as to establish reference values or base lines for later reference in the operational phase. The programme is to be in accordance with the following:  ((1) to (5) are omitted.)  (6) The following (a) to (c) are to be inspected. However, a part of or all of these inspections may be postponed until shipboard testing when agreed to by the Society.  (a) (Omitted)  (b) (Omitted)  (c) Temperature of hot surface insulation  Random temperature readings are to be compared with corresponding readings obtained during the type

Amended	Original	Remarks
by the type approval test.	<u>test</u> .	
In the case of reciprocating internal combustion	In the case of reciprocating internal combustion	
engine with an application for approval of use dated	engine with an application for approval of use dated	
before 1 July 2016 which is an engine type that does	before 1 July 2016 which is an engine type that does	
not have the results of temperature measurements	not have the results of temperature measurements	
required by the type approval test, temperature	required by the type test, temperature measurements	
measurements are to be performed by a procedure	are to be performed by a procedure deemed	
deemed appropriate by the Society.	appropriate by the Society.	
((7) and (8) are omitted.)	((7) and (8) are omitted.)	

Amended	Original	Remarks
Table D2.7 Programme f	1 6	Changes due to the
`	omitted.)	"Guidance for the
(Table is Notes:  (1) After testing has been completed, the fuel delivery stand 100 % power, unless intermittent overload possible also driving power take-off generators, the fuel delipower) can be given in service and the electrical prengine stalls.  (2) After testing has been completed, the fuel delivery given in service after installation on board so that the protective devices of the fuel delivery given in service after installation on board so that the protective devices of the fuel delivery given in service after installation on board so that the protective devices of the fuel delivery given in service after installation on board so that the protective devices of the fuel delivery given in service after installation on board so that the protective devices of the fuel delivery given in service after installation on board so that the protective devices of the fuel delivery given in service after installation on board so that the protective devices of the fuel delivery given in service after installation on board so that the given in service after installation on board so that the given in service after installation on board so that the given in service after installation on board so that the given in service after installation on board so that the given in service after installation on board so that the generator of the generator in service after installation on board so that the generator in service after installation on board so that the generator in service after installation on board so that the generator in service after installation on board so that the generator in service after installation on board so that the generator in service after installation on board so that the generator in service after installation on board so that the generator in service after installation on board so that the generator in service after installation on board so that the generator in service after installation on board so that the generator in service after installation on board so that the generator in service after in	system is to be blocked so as to limit the engines to run at not more wer is approved by the Society. In the case of propulsion engines very system is to be adjusted so that overload of generator (110 % otection of downstream system components is activated before the system is to be adjusted such that overload (110 % power) can be the governing characteristics (including the activation of generator required in accordance with 2.6.1-3(2).  It turbocharger configurations proving their compatibility for overfor the 110 % power run.  It take-off generators, tests are to be carried out at no for 15 minutes acturer.  Provided that the time specified in 2.6.1-2(3) is allowed.  Ses.  Approved, and tests are to be for the duration agreed upon with the seemed appropriate by the surveyor. The omission of the open-up led that all of the following (a) through (g) are met:  Set to the turbocharger approval test specified in Chapter 8, Part 6 of	renaming of the
(b) No abnormality is found in the temperature me	proval of Materials and Equipment for Marine Use. easurement for each bearing of the main bearings and the crank pin inspection of the inner surfaces of the cylinder liners from the	
inspection ports of the crankcase. (In the case	of a 2-stroke engine, the cylinder liners, pistons, piston rings and	

Amended	Original	Remarks
piston rods are to be inspected from the scaver	nging space.)	
(c) No abnormality is found in the visual inspec	tion of the lubrication oil after the load test (including the visual	
inspection of the filter in cases where the open	-up of the strainer is reasonable).	
(d) Flushing of the parts through which the lubrica	ation oil passes is carried out during the manufacturing process.	
(e) The manufacturer of the reciprocating internal	combustion engine is approved by the Society in accordance with	
the Rules for Approval of Manufacturers an	d Service Suppliers.	
(f) There is agreement between the involved parti	es. (manufacturer, shipyard, prospective owner, etc.)	
(g) Other items deemed necessary by the Society.		
Chapter 12 PIPES, VALVES, PIPE FITTINGS AND AUXILIARIES	Chapter 12 PIPES, VALVES, PIPE FITTINGS AND AUXILIARIES	
THE HEALTH AND THE STATE OF THE	TATOMETATES	
12.4 Connection and Forming of Piping Systems	12.4 Connection and Forming of Piping Systems	
12.4.1 Welding of Piping Systems	12.4.1 Welding of Piping Systems	
2 Welding consumables used for the welding work of	2 Welding consumables used for the welding work of	
pipes belonging to Group I and Group II are to be approved	pipes belonging to Group I and Group II are to be type-	Terminology alignment
by the Society in accordance with the requirements in Part M,	approved by the Society in accordance with the requirements	
as specified in 11.1.1-2. In cases where compliance with this		
requirement, however, is deemed impractical, welding	with this requirement, however, is deemed impractical,	
consumables that satisfy the following (1) and (2) may be	welding consumables that satisfy the following (1) and (2)	
accepted:	may be accepted: ((1) and (2) are omitted.)	
((1) and (2) are omitted.)		

Amended Original			emarks	
Table D12.8 Application Classifications of Mechanical Joints <sup>(1)</sup>		Changes renaming "Guidance		the the the
(Table is omitted.)			•	
Notes:				
(1) +: Application is allowed; -: Application is not allowed				
(2) Fire endurance test in accordance with 9.3.2(6), Part 6 of Guidance Use.	e for the Approval <del>and Type Approval</del> of Materials and Equipment for Marine			
(3) If mechanical joints include any components which readily deterio	rate in case of fire, the following (4) to (7) apply.			
(4) Fire endurance test is to be applied when mechanical joints are inst	talled in pump rooms and open decks.			
	(5) Slip-on joints are not accepted inside machinery spaces of category <i>A</i> or accommodation spaces. May be accepted in machinery spaces other than those of category <i>A</i> provided that the joints are located in easily visible and accessible positions (refer to <i>MSC/Circ</i> .734).			
(6) Fire resistant types approved by the Society except in cases where	(6) Fire resistant types approved by the Society except in cases where such mechanical joints are installed on open decks as defined in 9.2.3-2(10), Part			
R of the Rules; this excludes spaces in the cargo areas of tankers	ships carrying liquefied gases in bulk and ships carrying dangerous chemicals in			
	but not used for fuel oil lines, fire extinguishing systems and fire mains.			
(7) Fire endurance test is to be applied when mechanical joints are inst	talled inside machinery spaces of category A			
(8) Only above the freeboard deck.				
(9) Slip type slip-on joints as shown in Fig. D12.1 may be used for pip				
(10) Piping where mechanical joints are used is also to comply with the				
(11) Piping where slip joints are used is also to comply with the require	ments specified in 13.2.4-6.			
wet" tests are required. If a connection has passed the "8 min dry-	itable also for applications for which the "8 min dry + 22 min wet" and/or "30 min +22 min wet" test, it is considered suitable also for applications for which the "30			
	itable also for applications for which the "8 min dry + 22 min wet" and/or "30 min			

(	Review of	Guidance 1	for the Approva	al of Materia	als and Eq	juipment f	for Marine	e Use)

Amended	Original Original	Remarks
Chapter 16 WINDLASSES AND MOORING WINCHES  16.2 Windlasses  16.2.3 Materials and Fabrication* 2 Welded fabrication Welded fabrication is to comply with the following requirements: ((1) to (3) are omitted.) (4) Welding consumables are to be approved by the Society in accordance with the requirements in Part M. In cases where compliance with this requirement, however, is deemed impractical, welding consumables that satisfy the following (a) and (b) may be accepted.	Chapter 16 WINDLASSES AND MOORING WINCHES  16.2 Windlasses  16.2.3 Materials and Fabrication* 2 Welded fabrication Welded fabrication is to comply with the following requirements: ((1) to (3) are omitted.) (4) Welding consumables are to be type-approved by the Society in accordance with the requirements in Part M. In cases where compliance with this requirement, however, is deemed impractical, welding consumables that satisfy the following (a) and (b) may be accepted.	Terminology alignment
((a) and (b) are omitted.)  Chapter 18 AUTOMATIC AND REMOTE CONTROL  18.7 Tests  18.7.2 Type Approval	((a) and (b) are omitted.)  Chapter 18 AUTOMATIC AND REMOTE CONTROL  18.7 Tests  18.7.2 Approval of Use	Terminology alignment
1 In cases where automatic devices and automatic equipment have passed the environmental tests specified in 18.7.1, they will receive type approval from the Society; and,	18.7.2 Approval of Use  1 In cases where automatic devices and automatic equipment have passed the environmental tests specified in 18.7.1, they will receive approval of use from the Society; and,	Terminology alignment

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Amended Original		Remarks
upon request from the manufacturer, the Society will make	upon request from the manufacturer, the Society will make	
this information public.	this information public.	
2 With respect to all automatic devices and automatic	2 With respect to all automatic devices and automatic	Terminology alignment
equipment which have already received type approval from	equipment which have already received approval of use from	
the Society, a part or all of the environmental test specified in	the Society, a part or all of the environmental test specified in	
18.7.1(1) may be omitted.	18.7.1(1) may be omitted.	



(Review of Guida	nce for the App	roval of Material	ls and Equipme	nt for Marine Use)

Amended	Original	Remarks
RULES FOR THE SURVEY AND	RULES FOR THE SURVEY AND	
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS	
Part GF SHIPS USING LOW- FLASHPOINT FUELS	Part GF SHIPS USING LOW- FLASHPOINT FUELS	
Annex 1.1.3-3 GAS-FUELLED ENGINES	Annex 1.1.3-3 GAS-FUELLED ENGINES	
Chapter 2 CONSTRUCTION AND EQUIPMENT OF GAS-FUELLED ENGINES	Chapter 2 CONSTRUCTION AND EQUIPMENT OF GAS-FUELLED ENGINES	
2.2 Construction and Strength	2.2 Construction and Strength	
2.2.3 Crankcase	2.2.3 Crankcase	
1 Crankcase explosion relief valves are to be installed in accordance with 2.4.3, Part D of the Rules. Refer also to 10.3.1-2, Part GF of the Rules. For engines not covered by 2.4.3, Part D of the Rules, the detailed evaluation required by 8.3, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use is to determine if crankcase explosion relief valves are necessary.	1 Crankcase explosion relief valves are to be installed in accordance with 2.4.3, Part D of the Rules. Refer also to 10.3.1-2, Part GF of the Rules. For engines not covered by 2.4.3, Part D of the Rules, the detailed evaluation required by 8.3, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use is to determine if crankcase explosion relief valves are necessary.	Changes due to the renaming of the "Guidance for the Approval"

Amended	Original	Remarks
2.4 Accessory Equipment	2.4 Accessory Equipment	
<ul> <li>2.4.1 Charge Air Systems and Exhaust Gas Systems</li> <li>6 Explosion relief devices for air inlet and exhaust manifold are to be type approved according to Chapter 13, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.</li> <li>8 The arrangement of the explosion relief devices is to be determined in the risk analysis required by 8.3, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use and reflected in the safety</li> </ul>	2.4.1 Charge Air Systems and Exhaust Gas Systems 6 Explosion relief devices for air inlet and exhaust manifold are to be approved according to Chapter 13, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  8 The arrangement of the explosion relief devices is to be determined in the risk analysis required by 8.3, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use and reflected in	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment Changes due to the renaming of the "Guidance for the Approval"
2.4.2 Gas Pipes  5 For piping attached to gas-fuelled engines, the following (1) to (8) also apply.  (1) (Omitted)  (2) Other connections as mentioned in 7.3.6-4(4), Part GF of the Rules may be accepted subject to type approval in accordance with the requirements of Chapter 9, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.  ((3) to (8) are omitted.)	the safety concept.  2.4.2 Gas Pipes  5 For piping attached to gas-fuelled engines, the following (1) to (8) also apply.  (1) (Omitted)  (2) Other connections as mentioned in 7.3.6-4(4), Part GF of the Rules may be accepted subject to approval	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment

Amended	Original	Remarks
Chapter 4 TESTS	Chapter 4 TESTS	
4.1 Type Approval	4.1 Approval of Use	Terminology alignment
For each type of gas-fuelled engine, <u>type approval</u> is to be obtained by the engine designer (licensor) in accordance with requirements specified in Chapter 8, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	For each type of gas-fuelled engine, <u>approval of use</u> is to be obtained by the engine designer (licensor) in accordance with requirements specified in Chapter 8, Part 6 of the Guidance for the Approval <u>and Type Approval</u> of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment

Amended	Original Original	Remarks
RULES FOR THE SURVEY AND	RULES FOR THE SURVEY AND	
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS	
Part HELECTRICAL INSTALLATIONS	Part HELECTRICAL INSTALLATIONS	
Annex 2.11.1-2 Accumulator Battery Systems	Annex 2.11.1-2 Accumulator Battery Systems	
1.1 General	1.1 General	
<ul> <li>1.1.3 Submission of Drawings and Documents</li> <li>2 The drawings for approval and documents for reference to be submitted to the Society for the designs of accumulator battery systems and their components (e.g. cells and modules) are as follows. However, other drawings and documents may be required when deemed necessary by the Society. <ol> <li>(1) (Omitted)</li> <li>(2) Documents for reference</li> <li>(a) Test reports for cells or modules (not required for cells or modules of types used in accumulator battery systems which have already received type approval)</li> <li>(b) Test reports for accumulator battery systems (not required for accumulator battery systems of a type which has received type approval)</li> <li>(c) (Omitted)</li> </ol> </li></ul>	<ul> <li>1.1.3 Submission of Drawings and Documents</li> <li>2 The drawings for approval and documents for reference to be submitted to the Society for the designs of accumulator battery systems and their components (e.g. cells and modules) are as follows. However, other drawings and documents may be required when deemed necessary by the Society. <ol> <li>(1) (Omitted)</li> <li>(2) Documents for reference</li> <li>(a) Test reports for cells or modules (not required for cells or modules of types used in accumulator battery systems which have already received approval of use)</li> <li>(b) Test reports for accumulator battery systems (not required for accumulator battery systems of a type which has received approval of use)</li> <li>(c) (Omitted)</li> </ol> </li></ul>	Terminology alignment

	proval of Materials and Equipment for Marine Use)	
Amended	Original	Remarks
1.3 Additional Requirements for Electrical Propulsion, Main Electrical Power Source or Emergency Electrical Power Source Purposes	1.3 Additional Requirements for Electrical Propulsion, Main Electrical Power Source or Emergency Electrical Power Source Purposes	
1.3.7 Shop Tests  1 The electrical equipment specified below is to be tested in accordance with 18.7.1, Part D at manufacturing plants or other locations. However, with respect to equipment which has been already received type approval from the Society, some or all of the environmental tests specified in 18.7.1(1), Part D may be omitted.  ((1) and (2) are omitted.)	1.3.7 Shop Tests  1 The electrical equipment specified below is to be tested in accordance with 18.7.1, Part D at manufacturing plants or other locations. However, with respect to equipment which has been already received approval of use from the Society, some or all of the environmental tests specified in 18.7.1(1), Part D may be omitted.  ((1) and (2) are omitted.)	Terminology alignment
1.4 Accumulator Battery Systems	1.4 Accumulator Battery Systems	
1.4.3 Shop Tests 1 Cells and modules of accumulator battery systems are to be tested as specified in Table 1 at manufacturing plants or other locations. However, all the tests may be omitted for cells and modules of types used in accumulator battery systems that have already received approval of use from the Society in accordance with Chapter 9, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use.	1.4.3 Shop Tests 1 Cells and modules of accumulator battery systems are to be tested as specified in Table 1 at manufacturing plants or other locations. However, all the tests may be omitted for cells and modules of types used in accumulator battery systems that have already received approval of use from the Society in accordance with Chapter 9, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval"
2 Control and protection functions of <i>BMS</i> for accumulator battery systems are to be tested as specified in <b>Table 2</b> at manufacturing plants or other locations. However, all the tests may be omitted for accumulator battery systems that have already received approval of use from the Society in accordance with <b>Chapter 9</b> , <b>Part 7 of the Guidance for the</b>	2 Control and protection functions of <i>BMS</i> for accumulator battery systems are to be tested as specified in <b>Table 2</b> at manufacturing plants or other locations. However, all the tests may be omitted for accumulator battery systems that have already received approval of use from the Society in accordance with <b>Chapter 9</b> , <b>Part 7 of the Guidance for the</b>	Changes due to the renaming of the "Guidance for the Approval"

(	Review or	f Guidance	for the Appro	oval of Mate	erials and	Equipme	nt for Marine	Use)
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Amended	Original	Remarks
Approval of Materials and Equipment for Marine Use.	ials and Equipment for Marine Use. Approval and Type Approval of Materials and Equipment	
	for Marine Use.	
4 Accumulator battery systems are to be tested as	4 Accumulator battery systems are to be tested as	
specified in 18.7.1, Part D at manufacturing plants. It is	specified in 18.7.1, Part D at manufacturing plants. It is	
acceptable for environmental tests to use only those elements	acceptable for environmental tests to use only those elements	
(e.g. battery packs) of accumulator battery systems installed	(e.g. battery packs) of accumulator battery systems installed	
on board ships that have the minimum functions required for	on board ships that have the minimum functions required for	Terminology alignment
verification of tests. However, some of all of the	verification of tests. However, some of all of the	C, C
environmental tests specified in 18.7.1(1), Part D may be	environmental tests specified in 18.7.1(1), Part D may be	
omitted for accumulator battery systems which have already	omitted for accumulator battery systems which have already	
received type approval from the Society.	received approval of use from the Society.	

(Review of Guidance for the Approval of Materials and Equipment for Marine Us
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Amended	Original	Remarks	
RULES FOR THE SURVEY AND	RULES FOR THE SURVEY AND		
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS		
Part L EQUIPMENT	Part L EQUIPMENT		
Chapter 2 ANCHORS	Chapter 2 ANCHORS		
2.2 Anchors Used for Positioning Systems	2.2 Anchors Used for Positioning Systems		
2.2.4 Processes of Manufacture and Constructions 2 For anchors intended for use on vessels or floating offshore facilities fixed or positioned at specific sea areas for long periods of time, detailed data relating to performance, etc. are to be submitted for Society approval in accordance with Chapter 1A, Part 3 of the Guidance for the Approval of Materials and Equipment for Marine Use.	2.2.4 Processes of Manufacture and Constructions 2 For anchors intended for use on vessels or floating offshore facilities fixed or positioned at specific sea areas for long periods of time, detailed data relating to performance, etc. are to be submitted for Society approval in accordance with Chapter 1A, Part 2 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	renaming of "Guidance for Approval" Changes due to reorganization of	the the the the the
<ul> <li>2.2.10 Visual Inspections and Non-destructive Tests* <ol> <li>Anchors are to be subjected to and pass visual inspections and the non-destructive tests specified in (1) to (4) below. Such inspections and tests are, however, to be carried out after proof tests are completed.</li> <li>((1) to (3) are omitted.)</li> <li>(4) For anchors complying with the requirements in Chapter 1A, Part 3 of the Guidance for the Approval of Materials and Equipment for Marine</li> </ol> </li></ul>	<ul> <li>2.2.10 Visual Inspections and Non-destructive Tests* <ol> <li>Anchors are to be subjected to and pass visual inspections and the non-destructive tests specified in (1) to (4) below. Such inspections and tests are, however, to be carried out after proof tests are completed. <ol> <li>to (3) are omitted.)</li> <li>For anchors complying with the requirements in Chapter 1A, Part 2 of the Guidance for the Approval and Type Approval of Materials and</li> </ol> </li> </ol></li></ul>	renaming of "Guidance for Approval" Changes due to reorganization of	the the the the the

Amended	Original	Remarks
Use or 2.2.9-4 above, ultrasonic testing is to be carried	Equipment for Marine Use or 2.2.9-4 above,	
out for all full penetration welding in addition to the	ultrasonic testing is to be carried out for all full	
tests specified in (3) above.	penetration welding in addition to the tests specified	
	in (3) above.	



Amended	Original	Remarks	
RULES FOR THE SURVEY AND	RULES FOR THE SURVEY AND		
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS		
Part N SHIPS CARRYING LIQUEFIED GASES IN BULK	Part N SHIPS CARRYING LIQUEFIED GASES IN BULK		
Annex 16.1.1-3 GAS-FUELLED ENGINES	Annex 16.1.1-3 GAS-FUELLED ENGINES		
Chapter 2 CONSTRUCTION AND EQUIPMENT OF GAS-FUELLED ENGINES	Chapter 2 CONSTRUCTION AND EQUIPMENT OF GAS-FUELLED ENGINES		
2.2 Construction and Strength	2.2 Construction and Strength		
2.2.3 Crankcase	2.2.3 Crankcase		
1 Crankcase explosion relief valves are to be installed in accordance with 2.4.3, Part D of the Rules. Refer also to 10.3.1-2, Part GF of the Rules. For engines not covered by 2.4.3, Part D of the Rules, the detailed evaluation required by 8.3, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use is to determine if crankcase explosion relief valves are necessary.	1 Crankcase explosion relief valves are to be installed in accordance with 2.4.3, Part D of the Rules. Refer also to 10.3.1-2, Part GF of the Rules. For engines not covered by 2.4.3, Part D of the Rules, the detailed evaluation required by 8.3, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use is to determine if crankcase explosion relief valves are necessary.	renaming of	the the the

Amended	Original	Remarks
2.4 Accessory Equipment	2.4 Accessory Equipment	
<ul> <li>2.4.1 Charge Air Systems and Exhaust Gas Systems</li> <li>6 Explosion relief devices for air inlet and exhaust manifold are to be type approved according to Chapter 13, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.</li> <li>8 The arrangement of the explosion relief devices is to be determined in the risk analysis required by 8.3, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use and reflected in the safety concept.</li> </ul>	2.4.1 Charge Air Systems and Exhaust Gas Systems 6 Explosion relief devices for air inlet and exhaust manifold are to be approved according to Chapter 13, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  8 The arrangement of the explosion relief devices is to be determined in the risk analysis required by 8.3, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use and reflected in the safety concept.	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment Changes due to the renaming of the "Guidance for the Approval"
2.4.2 Gas Pipes  4 For piping attached to gas-fuelled engines, the following (1) to (8) also apply.  (1) (Omitted)  (2) Other connections as mentioned in 7.3.6-4(4), Part GF of the Rules may be accepted subject to type approval in accordance with the requirements of Chapter 9, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.  ((3) to (8) are omitted.)	2.4.2 Gas Pipes  4 For piping attached to gas-fuelled engines, the following (1) to (8) also apply.  (1) (Omitted)  (2) Other connections as mentioned in 7.3.6-4(4), Part GF of the Rules may be accepted subject to approval of use in accordance with the requirements of Chapter 9, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  ((3) to (8) are omitted.)	Changes due to the renaming of the "Guidance for the Approval"

Amended	Original	Remarks
Chapter 5 TESTS	Chapter 5 TESTS	
		Tomical and its answer
5.1 Type Approval	5.1 Approval of Use	Terminology alignment
For each type of gas-fuelled engine, type approval is to be obtained by the engine designer (licensor) in accordance with requirements specified in Chapter 8, Part 6 of the Guidance for the Approval of Materials and Equipment	Guidance for the Approval and Type Approval of	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment
for Marine Use.	Materials and Equipment for Marine Use.	1 criminology angilinent

Amended	Original	Remarks
RULES FOR THE SURVEY AND	RULES FOR THE SURVEY AND	
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS	
Part X COMPUTER-BASED SYSTEMS	Part X COMPUTER-BASED SYSTEMS	
Chapter 2 PLANS, DOCUMENTS AND TESTS	Chapter 2 PLANS, DOCUMENTS AND TESTS	
2.1 Submission of Plans and Documents	2.1 Submission of Plans and Documents	
<ul> <li>2.1.1 Submission of Plans and Documents The following drawings and data are, in principle, to be submitted. (1) Plans and documents for approval: (a) Plans and documents for computer-based systems subject to Chapter 3 that are required to be submitted for approval purposes are specified in 2.2.1 according to system category. Summaries of said plans and documents are shown in Tables X2.1 and X2.2. However, for computer-based systems type approved in accordance with Chapter 8, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use, plans and documents submitted for the type approval may be reutilized. (b) Plans and documents for computer-based systems subject to Chapter 4 that are required to</li></ul>	<ul> <li>2.1.1 Submission of Plans and Documents The following drawings and data are, in principle, to be submitted. (1) Plans and documents for approval: (a) Plans and documents for computer-based systems subject to Chapter 3 that are required to be submitted for approval purposes are specified in 2.2.1 according to system category. Summaries of said plans and documents are shown in Tables X2.1 and X2.2. However, for computer-based systems approved for use in accordance with Chapter 8, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use, plans and documents submitted for the approval of use may be reutilized. (b) Plans and documents for computer-based systems subject to Chapter 4 that are required to</li></ul>	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment

	Amended	Original	Remarks
	be submitted for approval purposes are specified in 4.4.1(1), (2), (3), (4) and (6). Summaries of said plans and documents are shown in Table X2.3. However, for computer-based systems type	in 4.4.1(1), (2), (3), (4) said plans and docume X2.3. However, for c	al purposes are specified and (6). Summaries of onts are shown in Table computer-based systems and the computer of the compute
( )	approved in accordance with Chapter 10, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use, where appropriate "Test Reports" specified in 4.4.1(10) are submitted, plans and documents submitted for the type approval may be reutilized except for "Computer-based Systems Asset Inventory" specified in 4.4.1(1) and "Topology Diagram" specified in 4.4.1(2).  (omitted)  (omitted)	Part 7 of the Guidance  Type Approval of Marine Use, who Reports" specified in 4 plans and documents sure of use may be reutilized based Systems Asset 14.4.1(1) and "Topology 4.4.1(2).  (c) (omitted)	Terminology alignment
(2) Plan (a)	Plans and documents for reference: Plans and documents for computer-based systems subject to Chapter 3 that are required to be submitted for reference purposes are specified in 2.2.1 according to system category. Summaries of said plans and documents are shown in Tables X2.1 and X2.2. However, for computer-based systems type approved in accordance with Chapter 8, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use, plans and documents submitted for the type approval may be reutilized except for the "list of system categorisations" specified in 2.2.1-3(3). Plans and documents for computer-based	be submitted for reference in 2.2.1 according to system of said plans and documents and X2.2. However, and X2.2. However, and X2.2 and X2.2 and X2.2 However, and X2.2 and X2.	ce purposes are specified tem category. Summaries ents are shown in Tables wer, for computer-based use in accordance with the Guidance for the proval of Materials and rine Use, plans and rethe approval of use may for the "list of system ed in 2.2.1-3(3).

Amended	Original	Dom	narks	
		I.		-/1
systems subject to Chapter 4 that are required to	systems subject to Chapter 4 that are required to	renaming "Guidance	of for	the
be submitted for reference purposes are specified	be submitted for reference purposes are specified	Approval"	101	the
in 4.4.1(5), (7), (8) and (9). Summaries of said		Terminology	, alionme	ent
plans and documents are shown in Table X2.3.	plans and documents are shown in Table X2.3.	remmeregy	ungillik	7111
However, for computer-based systems type	However, for computer-based systems approved			
approved in accordance with Chapter 10, Part 7				
of the Guidance for the Approval of Materials	the Guidance for the Approval and Type			
and Equipment for Marine Use, where	Approval of Materials and Equipment for			
appropriate "Test Reports" specified in 4.4.1(10)	Marine Use, where appropriate "Test Reports"			
are submitted, plans and documents submitted for	specified in 4.4.1(10) are submitted, plans and			
the type approval may be reutilized.	documents submitted for the approval of use may			
	be reutilized.			
(c) Other plans and documents considered necessary	(c) Other plans and documents considered necessary			
by the Society	by the Society			
	nd Documents to be Submitted			
(Related to Chapter 4 CYBER RESILIENCE O	F ON-BOARD SYSTEMS AND EQUIPMENT)			
# Document	Requirements Reference Approval			
(Referenced requirements)	ferenced requirements) Reference Approval			
		Changes d	lue to	the
(Om	nitted)	renaming	of	the
		"Guidance	for	the
(Notes)		Approval"	1:	4
Approval: Plans and documents to be submitt	ed for approval	Terminology	angnme	ent
Reference: Plans and documents to be submit				
O: Submission required				
(1): Submitted when approval of use has not	t been obtained in accordance with Chapter 10, Part 7 of the			
	<del>oval</del> of Materials and Equipment for Marine Use			
	obtained in accordance with Chapter 10, Part 7 of the Guidance			
for the Approval <del>and Type Approval</del> of Ma	terials and Equipment for Marine Use			

Amended	Original	Remarks
,	2.2.1 Tests (Related to Chapter 3 COMPUTER BASED SYSTEMS)  2 Verification Items for System Suppliers ((1) to (3) are omitted.) (4) Environmental compliance of hardware components (see 3.4.2-4) (a) Category I: Environmental tests may be omitted. However, certificates issued in accordance with Chapter 1, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use or documents	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment
proving the passing of the environmental tests specified in 18.7.1(1), Part D are to be submitted for reference when deemed necessary by Society (see 3.3.2).  (b) Categories II and III: Type approval certificates issued in accordance with Chapter 1, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use or documents proving the passing of the environmental tests specified in 18.7.1(1), Part D are to be submitted for reference.  ((5) to (8) are omitted.)	proving the passing of the environmental tests specified in 18.7.1(1), Part D are to be submitted for reference when deemed necessary by Society (see 3.3.2).  (b) Categories II and III: Certificates issued in accordance with Chapter 1, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use or documents proving the passing of the environmental tests specified in 18.7.1(1), Part D are to be submitted for reference.  ((5) to (8) are omitted.)	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment

	proval of Materials and Equipment for Marine Use)	D1
Amended	Original	Remarks
Chapter 3 COMPUTER-BASED SYSTEMS  3.1 General  3.1.3 Structure	Chapter 3 COMPUTER-BASED SYSTEMS  3.1 General  3.1.3 Structure	
1 General certification requirements for computer-based systems and their relationship to are described in 3.2.	1 General certification requirements for computer-based systems and their relationship to <u>approval of use</u> are described in 3.2.	Terminology alignment
3.2 Approval of Systems and Components	3.2 Approval of Systems and Components	
3.2.2 Type approval for Computer-based Systems  1 Computer-based systems that are routinely manufactured and include standardised software functions may be type approved in accordance with Chapter 8, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use. Hardware is to be documented according to 2.2.1-2(4). The type approval consists of two main verification activities:  (1) assessment of type-specific documentation, and (2) survey and testing of the standardised functions.  2 In principle, vessel-specific system certification is required as specified in 3.2.1 even if the type approval is acquired for computer-based systems. However, for such computer systems, submitted drawings may be omitted subject to 2.1.1(1)(a) and (2)(a), and tests may be subject to 3.2.1-2.	3.2.2 Approval of Use for Computer-based Systems  1 Computer-based systems that are routinely manufactured and include standardised software functions may be approved in accordance with Chapter 8, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use. Hardware is to be documented according to 2.2.1-2(4). The approval of use consists of two main verification activities:  (1) assessment of type-specific documentation, and (2) survey and testing of the standardised functions.  2 In principle, vessel-specific system certification is required as specified in 3.2.1 even if the approval of use is acquired for computer-based systems. However, for such computer systems, submitted drawings may be omitted subject to 2.1.1(1)(a) and (2)(a), and tests may be subject to 3.2.1-2.	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment  Terminology alignment

` '	proval of Materials and Equipment for Marine Ose)	D 1
Amended	Original	Remarks
3.4 Requirements for Development and Certification	3.4 Requirements for Development and Certification	
of Computer-based Systems	of Computer-based Systems	
<ul> <li>3.4.2 Requirements for System Suppliers*</li> <li>7 Factory acceptance test (FAT) before installation on board</li> <li>(1) FAT is to be carried out for each product or when the</li> </ul>	<ul> <li>3.4.2 Requirements for System Suppliers*</li> <li>7 Factory acceptance test (FAT) before installation on board</li> <li>(1) FAT is to be carried out for each product or when the</li> </ul>	Changes due to the renaming of the "Guidance for the Approval"
computer-based system acquires type approval in accordance with Chapter 8, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use. The main purpose of FAT is to demonstrate to the Society that the system is complete and compliant with applicable requirements, thus enabling issuance of a vessel-specific certificate for the system.	computer-based system acquires approval of use in accordance with Chapter 8, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use. The main purpose of FAT is to demonstrate to the Society that the system is complete and compliant with applicable requirements, thus enabling issuance of a vessel-specific certificate for the system.	Terminology alignment
((2) to (5) are omitted.)	((2) to (5) are omitted.)	
Chapter 4 CYBER RESILIENCE OF ON- BOARD SYSTEMS AND EQUIPMENT	Chapter 4 CYBER RESILIENCE OF ON- BOARD SYSTEMS AND EQUIPMENT	
4.4 Requirements for Cyber resilience of on-board systems and equipment	4.4 Requirements for Cyber resilience of on-board systems and equipment	
4.4.1 Documentation for Cyber resilience of on-board systems and equipment	4.4.1 Documentation for Cyber resilience of on-board systems and equipment	
The following documents are to be submitted to the Society for review and approval in accordance with the requirements in this Chapter (see also 4.6.2).	The following documents are to be submitted to the Society for review and approval in accordance with the requirements in this Chapter (see also 4.6.2).	Terminology alignment

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)			
Amended	Original	Remarks	
((1) to (9) are omitted) (10) Test reports  Computer-based systems with <u>type</u> approval certificate covering the security capabilities of this Chapter may be exempted from survey by the Society. However, test reports signed by the supplier are to be submitted to the Society, demonstrating that the supplier has completed design, construction, testing, configuration, and hardening as would otherwise be verified by the Society in survey (4.6.3 and 2.2.3).	((1) to (9) are omitted) (10) Test reports  Computer-based systems with approval certificate covering the security capabilities of this Chapter may be exempted from survey by the Society. However, test reports signed by the supplier are to be submitted to the Society, demonstrating that the supplier has completed design, construction, testing, configuration, and hardening as would otherwise be verified by the Society in survey (4.6.3 and 2.2.3).		
4.6 Demonstration of Compliance	4.6 Demonstration of Compliance		
<ul> <li>4.6.1 Introduction</li> <li>3 Approval of use based on Chapter 10, Part 7 of Guidance for the Approval of Materials and Equipment for Marine Use is voluntary and applies for computer-based systems that are standard and routinely manufactured. See 3.2.1 and 3.2.2 for definition of System certification and type approval.</li> <li>4.6.2 Plan Approval</li> <li>2 If the computer-based system holds a valid type approval certificate covering the requirements of this Chapter, subject to approval by the Society, the supplier may submit a reduced set of vessel-specific documents to the Society (see Table X2.3).</li> </ul>	4.6.1 Introduction 3 Approval of use based on Chapter 10, Part 7 of Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use is voluntary and applies for computer-based systems that are standard and routinely manufactured. See 3.2.1 and 3.2.2 for definition of System certification and approval of use.  4.6.2 Plan Approval 2 If the computer-based system holds a valid approval certificate covering the requirements of this Chapter, subject to approval by the Society, the supplier may submit a reduced set of vessel-specific documents to the Society (see Table X2.3).	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment  Terminology alignment	
4.6.3 Survey and Factory Acceptance Test  1 Survey and factory acceptance test is a vessel-specific	4.6.3 Survey and Factory Acceptance Test  1 Survey and factory acceptance test is a vessel-specific	Terminology alignment	

Amended	Original	Remarks
verification activity required for computer-based systems that	verification activity required for computer-based systems that	
do not hold a valid type approval certificate covering the	do not hold a valid approval certificate covering the	
requirements of this Chapter.	requirements of this Chapter.	



Amended	Original Original	Remarks
RULES FOR CARGO REFRIGERATING INSTALLATIONS	RULES FOR CARGO REFRIGERATING INSTALLATIONS	
Chapter 2 SURVEYS	Chapter 2 SURVEYS	
2.1 General	2.1 General	
<ul> <li>2.1.2 Registration Surveys and Intervals of Registration Maintenance Surveys*</li> <li>(1) Registration Surveys during Construction Refrigerating installations intended to be constructed and registered with the Society under the survey by the Surveyors in accordance with the designs approved by the Society are to undergo the Registration Survey during Construction. The presence of the Surveyor is required at the following stages of the work.  However, except the case of thermal balance test specified in 6.2.6 of the Rules, the requirements may be modified having regard to the actual status of facilities, technical abilities and quality control at the works.</li> <li>(a) When the tests of materials in accordance with the requirements in Part K of the Rules for the Survey and Construction of Steel Ships and other tests necessary for the approval described in 3.1.3-4, 5.2.1-1 and 5.2.5 of the Rules are carried out.</li> </ul>	<ul> <li>2.1.2 Registration Surveys and Intervals of Registration Surveys</li> <li>1 Registration Surveys during Construction Refrigerating installations intended to be constructed and registered with the Society under the survey by the Surveyors in accordance with the designs approved by the Society are to undergo the Registration Survey during Construction. The presence of the Surveyor is required at the following stages of the work.  However, except the case of thermal balance test specified in 6.2.6 of the Rules, the requirements may be modified having regard to the actual status of facilities, technical abilities and quality control at the works.</li> <li>(a) When the tests of materials in accordance with the requirements in Part K of the Rules for the Survey and Construction of Steel Ships and other tests necessary for the approval or acceptance described in 3.1.3-4, 5.2.1-1 and 5.2.5</li> </ul>	Terminology alignment

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)				
Amended	Original	Remarks		
((b) to (d) are omitted.) (2) (Omitted)	of the Rules are carried out. ((b) to (d) are omitted.) (2) (Omitted)			
Chapter 2 DEEDICED ATING MACHINEDY	Chapter 2 DEEDICED ATING MACHINEDY			
3.1.3 Materials and Welding* 6 Special materials such as rubber hoses, plastic tubes (including vinyl pipes), aluminium alloys, etc. used for refrigerating machinery is to be approved by the Society in consideration of the refrigerant used or service conditions.	3.1.3 Materials and Welding* 6 Special materials such as rubber hoses, plastic tubes (including vinyl pipes), aluminium alloys, etc. used for refrigerating machinery is to be approved or accepted by the Society in consideration of_the refrigerant used or service conditions.	Terminology alignment		
Chapter 5 REFRIGERATED CHAMBERS	Chapter 5 REFRIGERATED CHAMBERS			
5.2 Insulation and Insulation Materials	5.2 Insulation and Insulation Materials			
<ul> <li>5.2.1 Insulation Materials</li> <li>1 Insulation materials approved by the Society are to be used.</li> </ul>	5.2.1 Insulation Materials  1 Insulation materials approved or accepted by the Society are to be used.	Terminology alignment		

Amended	Original	Remarks
RULES FOR AUTOMATIC AND REMOTE	RULES FOR AUTOMATIC AND REMOTE	
CONTROL SYSTEMS	CONTROL SYSTEMS	
Chapter 2 SURVEYS OF AUTOMATIC AND REMOTE CONTROL SYSTEMS	Chapter 2 SURVEYS OF AUTOMATIC AND REMOTE CONTROL SYSTEMS	
2.2 Registration Surveys	2.2 Registration Surveys	
2.2.3 Type Approval	2.2.3 Approval of Use	Terminology alignment
Type approval for those devices and equipment which have	Approval of use for those devices and equipment which	Terminology alignment
passed those environmental tests specified in 2.2.2 above is to	have passed those environmental tests specified in 2.2.2 above	
be in accordance with those requirements specified in 18.7.2,	is to be in accordance with those requirements specified in	
Part D of the Rules for the Survey and Construction of	18.7.2, Part D of the Rules for the Survey and Construction	
Steel Ships.	of Steel Ships.	

Amended	Original	Remarks
RULES FOR HIGH SPEED CRAFT	RULES FOR HIGH SPEED CRAFT	
Part 9 MACHINERY INSTALLATIONS	Part 9 MACHINERY INSTALLATIONS	
Chapter 2 RECIPROCATING INTERNAL COMBUSTION ENGINES	Chapter 2 RECIPROCATING INTERNAL COMBUSTION ENGINES	
2.1 General	2.1 General	
<ul> <li>2.1.1 General*</li> <li>2 For each type of reciprocating internal combustion engines, a type approval is to be obtained by the engine designer (hereinafter referred to "licensor" in this Chapter) as specified separately by the Society.</li> </ul>	<ul> <li>2.1.1 General*</li> <li>2 For each type of reciprocating internal combustion engines, an approval of use is to be obtained by the engine designer (hereinafter referred to "licensor" in this Chapter) as specified separately by the Society.</li> </ul>	Terminology alignment
2.1.3 Drawings and Data*  2 The drawings and data for the purpose of inspection and testing specified in -1 (the items represented by the mark  O in Table 9.2.1(a) and Table 9.2.1(b), hereinafter indicated in the same way throughout this Chapter) are to be submitted in accordance with 2.1.4-1 by the engine manufacturer producing engines with the drawings and data whose type approval has been obtained in accordance with 2.1.1-2 (hereinafter referred to as "licensee" in this Chapter). Such drawings and data, however, may be submitted by the licensor in accordance with 2.1.4-2.	2.1.3 Drawings and Data*  2 The drawings and data for the purpose of inspection and testing specified in -1 (the items represented by the mark  ○ in Table 9.2.1(a) and Table 9.2.1(b), hereinafter indicated in the same way throughout this Chapter) are to be submitted in accordance with 2.1.4-1 by the engine manufacturer producing engines with the drawings and data whose approval of use has been obtained in accordance with 2.1.1-2 (hereinafter referred to as "licensee" in this Chapter). Such drawings and data, however, may be submitted by the licensor in accordance with 2.1.4-2.	Terminology alignment

	Amended	Original	Remarks
	Table 9.2.1(a) Drawings an	nd Data for Approval	Terminology alignment
	Items (Omitted)	For inspection and testing	
	(b) Category <i>B</i> turbochargers i) Sectional assembly (including principal dimensions a for containment evaluation.) ii) Documentation of containment in the event of the diii) Documentation of following operational data and lim • Maximum permissible operating speed ( <i>rpm</i> ) • Maximum permissible exhaust gas temperature at the • Minimum lubrication oil inlet pressure • Maximum permissible vibration levels (self- and ext) • Alarm level for exhaust gas temperature at the turbin on engine control system diagrams) • Lubrication oil inlet pressure low alarm set point (lever control system diagrams) • Lubrication oil outlet temperature high alarm set point engine control system diagrams) iv) Diagram of lubrication oil systems (diagrams include engines may be accepted instead) v) Test report of type approval test (only for type approval tests)  (Omitted)	isc fracture intations  the turbine inlet  ternally generated vibrations) the inlet (levels are also to be indicated  vels are also to be indicated on engine  int (levels are also to be indicated on  ded in piping arrangements fitted to	
Note: (Omitted)	Table 9.2.1(b) Drawings and		Terminology alignment
	Items	For inspection and testing	
	(Omitted)		
(31)	Certification of an approval of use a type approval for environ (Omitted)	mental tests, control components <sup>(2)</sup>	

	pproval of Materials and Equipment for Marine Use)	
Amended	Original	Remarks
2.1.4 Approval of Reciprocating Interna Combustion Engines*	2.1.4 Approval of Reciprocating Internal Combustion Engines*	
1 Reciprocating internal combustion engines are to b	Reciprocating internal combustion engines are to be	
approved in accordance with the following (1) to (6):	approved in accordance with the following (1) to (6):	
(1) Development of documents and data for engin	(1) Development of documents and data for engine	
production	production	
(a) (Omitted)	(a) (Omitted)	
(b) Each type of reciprocating internal combustion	(b) Each type of reciprocating internal combustion	
engine is to be provided with a certificate of typ approval obtained by the licensor in accordanc with 2.1.1-2. For the first engine of a type or for	approval of use obtained by the licensor in	Terminology alignment
those with no service records, the process of a	type or for those with no service records, the	
approval of use and the approval process fo	process of an approval of use and the approval	
production by the licensee may be performed simultaneously.	process for production by the licensee may be performed simultaneously.	
(c) The licensor is to review the drawings and dat		
of the reciprocating internal combustion engin	1 5	Terminology alignment
whose type approval has been obtained for the		
application and develop, if necessary, application		
specific drawings and data for production o		
reciprocating internal combustion engines for th		
use of the licensee in developing th	1 0	
reciprocating internal combustion engin		
specific production drawings and data for th		
purpose of inspection and testing specified in	± ± ±	Terminology alignment
2.1.3-1.	2.1.3-1.	
(d) If substantive modifications to the drawings and	` '	
data of the reciprocating internal combustion		
engine whose type approval has been obtained		
have been made in the drawings and data o	have been made in the drawings and data of	

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)					
Amended	Original	Remarks			
reciprocating internal combustion engines to be produced, the affected drawings and data are to be resubmitted to the Society as specified separately by the Society.  (2) Drawings and data for the inspection and testing of reciprocating internal combustion engines  (a) The licensee is to develop the drawings and data for the inspection and testing specified in 2.1.3-1 and a comparison list of these drawings and data to the drawings and data of the reciprocating internal combustion engine whose type approval has been obtained by the licensor and submit these drawings and the comparison list to the Society.	reciprocating internal combustion engines to be produced, the affected drawings and data are to be resubmitted to the Society as specified separately by the Society.  (2) Drawings and data for the inspection and testing of reciprocating internal combustion engines  (a) The licensee is to develop the drawings and data for the inspection and testing specified in 2.1.3-1 and a comparison list of these drawings and data to the drawings and data of the reciprocating internal combustion engine whose approval of use has been obtained by the licensor and submit these drawings and the comparison list to the Society.	Remarks  Terminology alignment			
has been obtained by the licensor and submit these drawings and the comparison list to the	use has been obtained by the licensor and submit these drawings and the comparison list to the	Terminology alignment			
internal combustion engine manufactured by the licensee is to be regarded as a different engine type and is 2.1.1-2 is to apply to the reciprocating internal combustion engine.	internal combustion engine manufactured by the licensee is to be regarded as a different engine type and is 2.1.1-2 is to apply to the reciprocating internal combustion engine.				

Amended	Original	Remarks
((c) to (e) are omitted.)	((c) to (e) are omitted.)	
((3) to (6) are omitted.)	((3) to (6) are omitted.)	



Amended	Original	Remarks	
RULES FOR THE SURVEY AND	RULES FOR THE SURVEY AND		
<b>CONSTRUCTION OF</b>	CONSTRUCTION OF		
INLAND WATERWAY SHIPS	INLAND WATERWAY SHIPS		
Part 7 MACHINERY INSTALLATIONS	Part 7 MACHINERY INSTALLATIONS		
Chapter 2 RECIPROCATING INTERNAL COMBUSTION ENGINES	Chapter 2 RECIPROCATING INTERNAL COMBUSTION ENGINES		
2.6 Tests	2.6 Tests		
2.6.1 Shop Tests*  Table 7.2.9 Programme for Shop Trials of Engines		Changes due to renaming of "Guidance for	the the
(Table omitted)			uic
Notes:  ((1) to (10) are omitted )		Approval"	
<ul> <li>((1) to (10) are omitted.)</li> <li>(11) The scope of the open-up inspection is to be as deemed appropriate by the surveyor. The omission of the open-up inspection may be considered by the Society provided that all of the following(a)through(g)re met:</li> <li>(a) It is not the open-up inspection to be carried out during the approval test specified in Chapter 8, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.</li> <li>(b) to (g) are omitted.)</li> </ul>			

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND	GUIDANCE FOR THE SURVEY AND	
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS	
Part B CLASS SURVEYS	Part B CLASS SURVEYS	
B1 GENERAL	B1 GENERAL	
DI GENERALE	DI GERGE	
B1.1 Surveys	B1.1 Surveys	
B1.1.3 Intervals of Class Maintenance Surveys	B1.1.3 Intervals of Class Maintenance Surveys	
3 The Occasional Surveys specified in 1.1.3-3(5), Part	3 The Occasional Surveys specified in 1.1.3-3(5), Part	Changes due to the
B of the Rules are as specified below:	B of the Rules are as specified below:	renaming of the
((1) to (12) are omitted.)	((1) to (12) are omitted.)	"Guidance for the Approval"
(13) Devices to prevent the passage of flame (flame	(13) Devices to prevent the passage of flame (flame	Approvai
screen, flame arrester, detonation flame arrester and	screen, flame arrester, detonation flame arrester and	
high velocity device)	high velocity device)	
For devices to prevent the passage of flame required	For devices to prevent the passage of flame required	
to ships which had been at the beginning stage of	to ships which had been at the beginning stage of	
construction before 1 January 2013 and for ships	construction before 1 January 2013 and for ships which carry cargos shown as apparatus groups IIB,	
which carry cargos shown as apparatus groups II $B$ , II $C$ or no apparatus group assigned in the column $i$ "	IIC or no apparatus group assigned in the column $i$ "	
of Table S17.1, Part S of the Rules, a survey is to be	of Table S17.1, Part S of the Rules, a survey is to be	
carried out to verify that the devices are in compliance	carried out to verify that the devices are in compliance	
with 7.4.2-2, Chapter 7, Part 6 of the Guidance for	with 7.4.2-2, Chapter 7, Part 6 of the Guidance for	
the Approval of Materials and Equipment for	the Approval and Type Approval of Materials and	
Marine Use by the first scheduled dry-docking after	Equipment for Marine Use by the first scheduled	
1 January 2013.	dry-docking after 1 January 2013.	

### Amended-Original Requirements Comparison Table

(	Review or	f Guidance	for the Appro	oval of Mate	erials and l	Equipme	nt for Marine	Use)
١,						1 1		,

Amended	Original	Remarks
((14) to (27) are omitted.)	((14) to (27) are omitted.)	
B8 PROPELLER SHAFT AND STERN TUBE SHAFT SURVEYS	B8 PROPELLER SHAFT AND STERN TUBE SHAFT SURVEYS	
B8.1 General	B8.1 General	
B8.1.2 Preventive Maintenance System of Shafts  2 The wording "Remote monitoring devices for weardown of shaft deemed appropriate by the Society" in 8.1.2-2(7), Part B of the Rules means devices approved by the Society in accordance with Chapter 1, Part 7 of Guidance for the Approval of Materials and Equipment for Marine Use.	B8.1.2 Preventive Maintenance System of Shafts  2 The wording "Remote monitoring devices for weardown of shaft deemed appropriate by the Society" in 8.1.2-2(7), Part B of the Rules means devices approved by the Society in accordance with Chapter 1, Part 7 of Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval"

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Amended	Original	Rema	ırks	
GUIDANCE FOR THE SURVEY AND	GUIDANCE FOR THE SURVEY AND			
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS			
Part U INTACT STABILITY	Part U INTACT STABILITY			
Annex U1.2.2 GUIDANCE FOR STABILITY COMPUTER	Annex U1.2.2 GUIDANCE FOR STABILITY COMPUTER			
1.3 Hardware for Stability Computer	1.3 Hardware for Stability Computer			
1.3.1 Hardware Requirements	1.3.1 Hardware Requirements			
1 Hardware for stability computers is recommended to	1 Hardware for stability computers is recommended to	Changes du	e to	the
be of approved type in accordance with the requirements of	be of approved type in accordance with the requirements of	renaming	of	the
Chapter 2, Part 7 of the Guidance for the Approval of	Chapter 2, Part 7 of the Guidance for the Approval and	"Guidance	for	the
Materials and Equipment for Marine Use "APPROVAL	<b>Type Approval</b> of Materials and Equipment for Marine	Approval"		
OF USE OF LOADING COMPUTER".	Use "APPROVAL OF USE OF LOADING COMPUTER".			

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND	GUIDANCE FOR THE SURVEY AND	
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS	
Part W NAVIGATION BRIDGE	Part W NAVIGATION BRIDGE	
VISIBILITY	VISIBILITY	
W1 GENERAL	W1 GENERAL	
W1.1 General	W1.1 General	
W1.1 General	W1.1 General	
W1.1.2 Ships of Unconventional Design	W1.1.2 Ships of Unconventional Design	
The use of remote camera systems for ships of	The use of remote camera systems for ships of	
unconventional design specified in 1.1.2 of the Rules	unconventional design specified in 1.1.2 of the Rules	
(excluding the ships mentioned in the provisory requirement	(excluding the ships mentioned in the provisory requirement	
specified in 2.1.4(2) of the Rules) may be accepted as an alternative to 2.1.4 of the Rules provided that they are deemed	specified in 2.1.4(2) of the Rules) may be accepted as an alternative to 2.1.4 of the Rules provided that they are deemed	
by the Society to comply with the following requirements (1)	by the Society to comply with the following requirements (1)	
to (5), subject to acceptance by the flag state authority.	to (5), subject to acceptance by the flag state authority.	
(1) (Omitted)	(1) (Omitted)	Changes due to the
(2) (Omitted)	(2) (Omitted)	renaming of the
(3) The remote camera systems are to be capable of	(3) The remote camera systems are to be capable of	"Guidance for the
continuous operation under environmental	continuous operation under environmental	Approval"
conditions in Table 7.1-1, Chapter 1, Part 7 of the	conditions in Table 7.1-1, Chapter 1, Part 7 of the	
Guidance for the Approval of Materials and	Guidance for the Approval and Type Approval of	
Equipment for Marine Use.	Materials and Equipment for Marine Use.	
(4) (Omitted)	(4) (Omitted)	
(5) ((Omitted)	(5) (Omitted)	

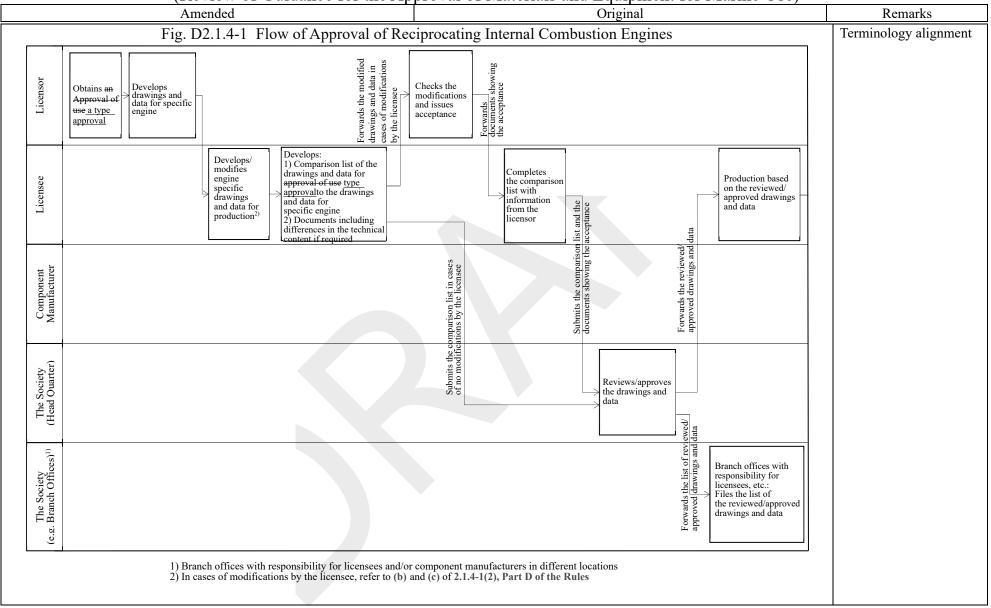
Amended	Original	Remarks	
GUIDANCE FOR THE SURVEY AND	GUIDANCE FOR THE SURVEY AND		
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS		
Part CS HULL CONSTRUCTION AND EQUIPMENT OF SMALL SHIPS	Part CS HULL CONSTRUCTION AND EQUIPMENT OF SMALL SHIPS		
CS3 RUDDERS	CS3 RUDDERS		
CS3.11 Bearings of Rudder Stocks and Pintles	CS3.11 Bearings of Rudder Stocks and Pintles		
CS3.11.1 Minimum Bearing Surface	CS3.11.1 Minimum Bearing Surface		
2 "The type as deemed appropriate by the Society"	2 "The type as deemed appropriate by the Society"	Changes due to th	ıe
stipulated in Table CS3.3, Part CS of the Rules means that	stipulated in Table CS3.3, Part CS of the Rules means that	renaming of th	
approval is to be made in accordance with the requirements of	approval is to be made in accordance with the requirements of	"Guidance for th	ıe
Chapter 5, Part 5 of Guidance for the Approval of	Chapter 5, Part 4 of Guidance for the Approval and Type	Approval"	
Materials and Equipment for Marine Use.	Approval of Materials and Equipment for Marine Use.	Changes due to the reorganization of the	
		"Guidance for th	
		Approval"	

Amended	Original Original	Remarks	
GUIDANCE FOR THE SURVEY AND	GUIDANCE FOR THE SURVEY AND		
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS		
Part D MACHINERY INSTALLATIONS	Part D MACHINERY INSTALLATIONS		
D2 RECIPROCATING INTERNAL CONBUSTION ENGINES	D2 RECIPROCATING INTERNAL CONBUSTION ENGINES		
D2.1 General	D2.1 General		
D2.1.1 General  The wording "as specified separately by the Society" specified in 2.1.1-3, Part D of the Rules means "in accordance with Chapter 8, Part 6 of Guidance for the Approval of Materials and Equipment for Marine Use".	D2.1.1 General  The wording "as specified separately by the Society" specified in 2.1.1-3, Part D of the Rules means "in accordance with Chapter 8, Part 6 of Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use".	renaming of	the the the
D2.1.4 Approval of Reciprocating Internal Combustion Engines  2 The phrase "design approval is to be obtained as specified separately by the Society" specified in 2.1.4-1(1)(a), Part D of the Rules means that the design approval and design appraisal are to be obtained in accordance with Chapter 8, Part 6 of Guidance for the Approval of Materials and Equipment for Marine Use.  3 The wording "the drawings and data of the	D2.1.4 Approval of Reciprocating Internal Combustion Engines  2 The phrase "design approval is to be obtained as specified separately by the Society" specified in 2.1.4-1(1)(a), Part D of the Rules means that the design approval and design appraisal are to be obtained in accordance with Chapter 8, Part 6 of Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  3 The wording "the drawings and data of the	renaming of "Guidance for Approval"	the the the
reciprocating internal combustion engine whose type approval	reciprocating internal combustion engine whose approval of		the

Amended	Original	Remarks
has been obtained" specified in (1)(c), (1)(d), (2)(a) and (2)(b)	use has been obtained" specified in (1)(c), (1)(d), (2)(a) and	"Guidance for the
of 2.1.4-1, Part D of the Rules means those listed in 8.2.2,	(2)(b) of 2.1.4-1, Part D of the Rules means those listed in	Approval"
Part 6 of Guidance for the Approval of Materials and	8.2.2, Part 6 of Guidance for the Approval and Type	Terminology alignment
<b>Equipment for Marine Use.</b>	Approval of Materials and Equipment for Marine Use.	
4 The wording "as specified separately by the Society"	4 The wording "as specified separately by the Society"	Changes due to the
specified in 2.1.4-1(1)(d), Part D of the Rules means "in	specified in 2.1.4-1(1)(d), Part D of the Rules means "in	renaming of the
accordance with 8.2.2-2, Part 6 of Guidance for the	accordance with 8.2.2-2, Part 6 of Guidance for the	"Guidance for the
Approval of Materials and Equipment for Marine Use".	Approval and Type Approval of Materials and Equipment	Approval"
	for Marine Use".	
6 The wording "as specified separately by the Society"	6 The wording "as specified separately by the Society"	Changes due to the
specified in 2.1.4-1(4)(a), Part D of the Rules means "in	specified in 2.1.4-1(4)(a), Part D of the Rules means "in	renaming of the
accordance with 8.2.2-4, Part 6 of Guidance for the	accordance with 8.2.2-4, Part 6 of Guidance for the	"Guidance for the
Approval of Materials and Equipment for Marine Use".	Approval and Type Approval of Materials and Equipment	Approval"
	for Marine Use".	

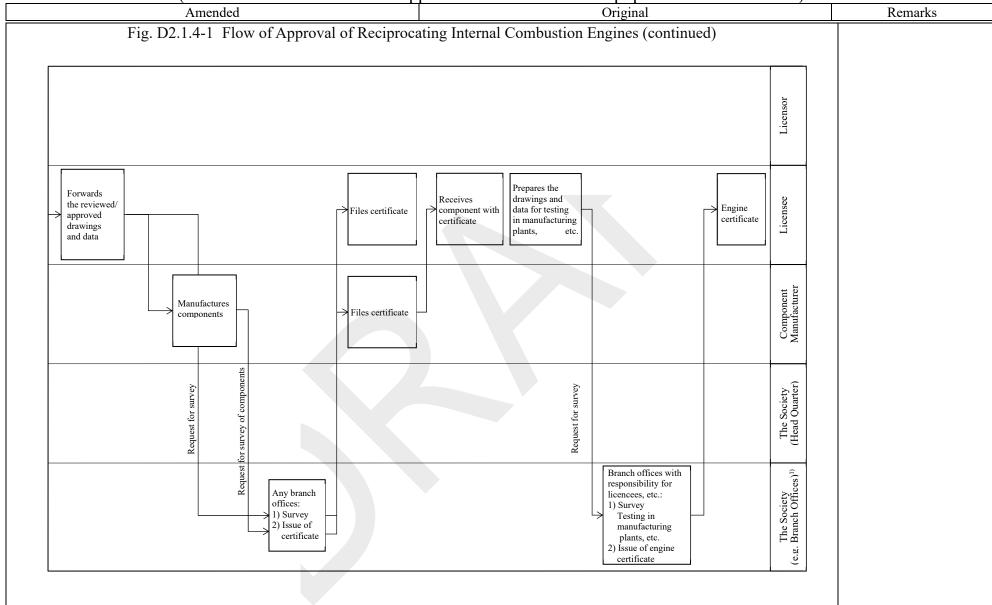
### Amended-Original Requirements Comparison Table

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)



### Amended-Original Requirements Comparison Table

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)



Amended	Original	Remarks
D2.4 Safety Devices	D2.4 Safety Devices	
D2.4.3 Protection against Crankcase Explosion	D2.4.3 Protection against Crankcase Explosion	
1 The wording "explosion relief valves of approved	1 The wording "explosion relief valves of approved	Changes due to the
type" in 2.4.3-1, Part D of the Rules means those valves	type" in 2.4.3-1, Part D of the Rules means those valves	renaming of the "Guidance for the
approved by the Society in accordance with Chapter 10, Part	approved by the Society in accordance with Chapter 10, Part	Approval"
6 of the Guidance for the Approval of Materials and	6 of the Guidance for the Approval and Type Approval of	Approvar
<b>Equipment for Marine Use.</b>	Materials and Equipment for Marine Use.	
3 The installation and maintenance manual specified in	3 The installation and maintenance manual specified in	
2.4.3-1(5), Part D of the Rules is to contain the following	2.4.3-1(5), Part D of the Rules is to contain the following	
information:	information:	
(1) Description of valve with details of function and	(1) Description of valve with details of function and	Terminology alignment
design limits	design limits	Terminology ungilinent
(2) Copy of type <u>approval</u> test certification	(2) Copy of type test certification	
(3) Installation instructions	(3) Installation instructions	
(4) Maintenance in service instructions to include testing	(4) Maintenance in service instructions to include testing	
and renewal of any sealing arrangements	and renewal of any sealing arrangements	
(5) Actions required after a crankcase explosion	(5) Actions required after a crankcase explosion	
D2 45 Chankage Oil Mist Detection Amongoments	D2 4.5 Cyankaasa Oil Mist Detection Aurongoments	
D2.4.5 Crankcase Oil Mist Detection Arrangements	D2.4.5 Crankcase Oil Mist Detection Arrangements	Changes due to the
2 The wording "crankcase oil mist detection	2 The wording "crankcase oil mist detection	renaming of the
arrangements required to be fitted to engines are to be	arrangements required to be fitted to engines are to be	"Guidance for the
approved type" stipulated in 2.4.5-2, Part D of the Rules	approved type" stipulated in 2.4.5-2, Part D of the Rules	Approval"
refers to crankcase oil mist detection arrangement approved in	refers to crankcase oil mist detection arrangement approved in	
accordance with Chapter 6, Part 7 of the Guidance for the	accordance with Chapter 6, Part 7 of the Guidance for the	
Approval of Materials and Equipment for Marine Use.	Approval <u>and Type Approval</u> of Materials and Equipment for Marine Use.	
	for Marine Use.	

Society" in 2.6.1-2(6)(c), Part D of the Rules means the tests specified in 8.5.2-2(10), Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.  Society" in 2.6.1-2(6)(c), Part D of the Rules means the tests specified in 8.5.2-2(10), Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  The wording "a procedure deemed appropriate by the Characteristics of the Rules means the tests specified in 8.5.2-2(10), Part D of the Rules means the tests specified in 8.5.2-2(10), Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  The wording "a procedure deemed appropriate by the Characteristics and Equipment for Marine Use.  The wording "a procedure deemed appropriate by the Characteristics and Equipment for Marine Use."  Characteristics are a procedure deemed appropriate by the Characteristics and Equipment for Marine Use.	Remarks  Changes due to renaming of 'Guidance for Approval''  Changes due to	the the the
D2.6.1 Shop Tests  1 The wording "a procedure deemed appropriate by the Society" in 2.6.1-2(6)(c), Part D of the Rules means the tests specified in 8.5.2-2(10), Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.  2 The wording "a procedure deemed appropriate by the Society" in 2.6.1-2(6)(c), Part D of the Rules means the tests specified in 8.5.2-2(10), Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  2 The wording "a procedure deemed appropriate by the Charton Marine Use.  Charton Marine Use.  2 The wording "a procedure deemed appropriate by the Charton Marine Use.  Charton Marine Use.  2 The wording "a procedure deemed appropriate by the Charton Marine Use.  Charton Marine Use.  Charton Marine Use.  Charton Marine Use.  The wording "a procedure deemed appropriate by the Marine Use.  Charton Marine Use.  Charton Marine Use.  Charton Marine Use.  The wording "a procedure deemed appropriate by the Marine Use."  Charton Marine Use.  Charton Marine Use.  Charton Marine Use.  Charton Marine Use.  The wording "a procedure deemed appropriate by the Marine Use."  Charton Marine Use.  Charton Marine Use.  The wording "a procedure deemed appropriate by the Use."	renaming of 'Guidance for 'Approval''	the
1 The wording "a procedure deemed appropriate by the Society" in 2.6.1-2(6)(c), Part D of the Rules means the tests specified in 8.5.2-2(10), Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.  1 The wording "a procedure deemed appropriate by the Society" in 2.6.1-2(6)(c), Part D of the Rules means the tests specified in 8.5.2-2(10), Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  2 The wording "a procedure deemed appropriate by the Society" in 2.6.1-2(6)(c), Part D of the Rules means the tests specified in 8.5.2-2(10), Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  2 The wording "a procedure deemed appropriate by the Characteristics of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  Characteristics of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  Characteristics of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  Characteristics of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  Characteristics of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	renaming of 'Guidance for 'Approval''	the
1 The wording "a procedure deemed appropriate by the Society" in 2.6.1-2(6)(c), Part D of the Rules means the tests specified in 8.5.2-2(10), Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.  1 The wording "a procedure deemed appropriate by the Society" in 2.6.1-2(6)(c), Part D of the Rules means the tests specified in 8.5.2-2(10), Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  2 The wording "a procedure deemed appropriate by the Society" in 2.6.1-2(6)(c), Part D of the Rules means the tests specified in 8.5.2-2(10), Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  2 The wording "a procedure deemed appropriate by the Characteristics of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  Characteristics of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  Characteristics of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  Characteristics of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  Characteristics of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	renaming of 'Guidance for 'Approval''	the
Society" in 2.6.1-2(6)(c), Part D of the Rules means the tests specified in 8.5.2-2(10), Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.  Society" in 2.6.1-2(6)(c), Part D of the Rules means the tests specified in 8.5.2-2(10), Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  The wording "a procedure deemed appropriate by the Characteristics of the Guidance for the Approval of Materials and Equipment for Marine Use.  The wording "a procedure deemed appropriate by the Characteristics of the Rules means the tests specified in 8.5.2-2(10), Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  The wording "a procedure deemed appropriate by the Characteristics of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  Characteristics of the Rules means the tests specified in 8.5.2-2(10), Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  Characteristics of the Rules means the tests specified in 8.5.2-2(10), Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  Characteristics of the Rules means the tests specified in 8.5.2-2(10), Part 6 of the Guidance for the Approval and Type Approval and Type Approval of Materials and Equipment for Marine Use.	renaming of 'Guidance for 'Approval''	the
specified in 8.5.2-2(10), Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.  2 The wording "a procedure deemed appropriate by the Characteristic Control of Characteristics Characteristic Control of Characteristic Control of Characteristic Characteristic Control of Characteristic Control of Characteristic Control of Characteristic Ch	'Guidance for Approval''	
Approval of Materials and Equipment for Marine Use.  2 The wording "a procedure deemed appropriate by the Approval of Materials and Equipment for Marine Use.  2 The wording "a procedure deemed appropriate by the Characteristics of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  2 The wording "a procedure deemed appropriate by the Characteristics of the Guidance for the Approval of Materials and Equipment for Marine Use.  2 The wording "a procedure deemed appropriate by the Characteristics of the Guidance for the Approval of Materials and Equipment for Marine Use.  3 The wording "a procedure deemed appropriate by the Characteristics of the Guidance for the Approval of Materials and Equipment for Marine Use.  4 The wording "a procedure deemed appropriate by the Characteristics of the Guidance for the Approval of Materials and Equipment for Marine Use.  4 The wording "a procedure deemed appropriate by the Characteristics of the Guidance for the Approval of Materials and Equipment for Marine Use.  5 The wording "a procedure deemed appropriate by the Characteristics of the Guidance for the Approval of Materials and Equipment for Marine Use.  6 The wording "a procedure deemed appropriate by the Characteristics of the Guidance for the Approval of Materials and Equipment for Marine Use.  7 The wording "a procedure deemed appropriate by the Characteristics of the Guidance for the Approval of Materials and Equipment for Marine Use.  8 The wording "a procedure deemed appropriate by the Use."	Approval"	tile
Approval of Waterials and Equipment for Warine Use.  2 The wording "a procedure deemed appropriate by the Chartonic		
	Thanges due to	
	•	the
Society in 2.0.1-5(5), I art D of the rates means the tests   Society in 2.0.1-5(5), I art D of the rates means the tests	renaming of	the
	'Guidance for	the
Wraterials and Equipment for Warme Use.	Approval"	
Use.	~1	
The second of th	Changes due to renaming of	the the
boolety in 2.0.17, Tart b of the Rules means the tests   Society in 2.0.17, Tart b of the Rules means the tests	'Guidance for	the
specified in Chapter 11, Part 6 of the Guidance for the specified in Chapter 11, Part 6 of the Guidance for the	Approval"	
Approval of Materials and Equipment for Marine Use.  Approval and Type Approval of Materials and Equipment for Marine Use.		
for wratine use.		
D6 SHAFTINGS D6 SHAFTINGS		
D6.2 Materials, Construction and Strength  D6.2 Materials, Construction and Strength		
D(27 Compaign Dustration of Duspellon Shafts and D(27 Compaign Dustration of Duspellon Shafts and		
D6.2.7 Corrosion Protection of Propeller Shafts and Stern Tube Shafts  D6.2.7 Corrosion Protection of Propeller Shafts and Stern Tube Shafts		
	Changes due to	the
by the society in 6.2.7 1(6), 1 are b of the realist hose by the society in 6.2.7 1(6), 1 are b of the realist hose	renaming of 'Guidance for	the the
- maieriais which have been subjected to abbroval tests specified 1. maieriais which have been subjected to abbroval tests specified 1	Approval"	ше

Amended	Original	Remarks
in 2.4.2-5, Part 6 of the Guidance for the Approval of	in 2.4.2-5, Part 6 of the Guidance for the Approval and	Terminology alignment
Materials and Equipment for Marine Use and then which	Type Approval of Materials and Equipment for Marine	
obtain type approval of machinery and equipment as a	Use and then which obtain type approval of use of machinery	
corrosion resistant material for propeller shafts or stern tube	and equipment as a corrosion resistant material for propeller	
shafts. In addition, KSUSF316, KSUSF316L, KSUS316-SU or	shafts or stern tube shafts. In addition, KSUSF316,	
KSUS316L-SU used for the propeller shafts exceeding 200 mm	KSUSF316L, KSUS316-SU or KSUS316L-SU used for the	
in diameter are also to be in accordance with this requirement	propeller shafts exceeding 200 mm in diameter are also to be	
to obtain type approval of use of machinery and equipment as	in accordance with this requirement to obtain type approval of	
a corrosion resistant material for propeller shafts or stern tube	use of machinery and equipment as a corrosion resistant	
shafts.	material for propeller shafts or stern tube shafts.	
D12 PIPES, VALVES, PIPE FITTINGS AND	D12 PIPES, VALVES, PIPE FITTINGS AND	
AUXILIARIES	AUXILIARIES	
D12.1 General	D12.1 General	
D12.1 ( Use of Special Metapiels	D12.1 ( Use of Special Metaviels	
D12.1.6 Use of Special Materials	D12.1.6 Use of Special Materials	
1 The wording "requirements specified otherwise" in	1 The wording "requirements specified otherwise" in	
12.1.6, Part D of the Rules means as follows.	12.1.6, Part D of the Rules means as follows.	
(1) In cases where rubber hoses, Teflon hoses or nylon	(1) In cases where rubber hoses, Teflon hoses or nylon	
hoses are used for the following pipes, materials	hoses are used for the following pipes, materials	Changes due to the
approved in accordance with Guidance for the	approved in accordance with Guidance for the	renaming of the
Approval of Materials and Equipment for Marine	Approval and Type Approval of Materials and	"Guidance for the
Use are to be used.	Equipment for Marine Use are to be used.	Approval"
(a) Pipes of Group I or Group II	(a) Pipes of Group I or Group II	
(b) Pipes likely to cause fire or flooding in cases	(b) Pipes likely to cause fire or flooding in cases	
where they rupture	where they rupture	
(2) Only plastic pipes (including vinyl pipes) approved by	(2) Only plastic pipes (including vinyl pipes) approved by	
the Society in accordance with Chapter 6, Part 6 of	the Society in accordance with Chapter 6, Part 6 of	

### Amended-Original Requirements Comparison Table

(Review of Guidance for the App	proval of Materials and Equipment for Marine Use)						
Amended	Amended Original			Amended Original Rem			
the Guidance for the Approval of Materials and Equipment for Marine Use are to be used.  (3) (Omitted)	the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use are to be used.  (3) (Omitted)	Changes due to renaming of "Guidance for Approval"	the the the				
D12.3 Construction of Valves and Pipe Fittings	D12.3 Construction of Valves and Pipe Fittings						
D12.3.3 Mechanical Joints  1 The wording "type approved by the Society" referred	<ul> <li>D12.3.3 Mechanical Joints</li> <li>1 The wording "type approved by the Society" referred</li> </ul>	Changes due to	the				
to in 12.3.3-2, Part D of the Rules means one whose approval	to in 12.3.3-2, Part D of the Rules means one whose approval	renaming of	the				
of use is obtained in accordance with Chapter 9, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	of use is obtained in accordance with Chapter 9, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	"Guidance for Approval" Terminology alignme	the ent				
2 Details of the pressure referred to in 12.3.3-5, Part D of the Rules are specified in 9.3.2(4) of Chapter 9, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	2 Details of the pressure referred to in 12.3.3-5, Part D of the Rules are specified in 9.3.2(4) of Chapter 9, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to renaming of "Guidance for Approval"	the the the				
3 The wording "standards separately specified by the Society" referred to in 12.3.3-7, Part D of the Rules refers to Chapter 9, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	3 The wording "standards separately specified by the Society" referred to in 12.3.3-7, Part D of the Rules refers to Chapter 9, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to renaming of "Guidance for Approval"	the the the				
4 The wording "where deemed necessary by the Society" referred to in(2) and (4) as well as (6) to (8) of 12.3.3-7, Part D of the Rules is in accordance with Table 6.9-1 of Chapter 9, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	4 The wording "where deemed necessary by the Society" referred to in(2) and (4) as well as (6) to (8) of 12.3.3-7, Part D of the Rules is in accordance with Table 6.9-1 of Chapter 9, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to renaming of "Guidance for Approval"	the the the				
D12.3.4 Flexible Hose Assemblies  1 The wording "approved by the Society" referred to in	<ul> <li>D12.3.4 Flexible Hose Assemblies</li> <li>1 The wording "approved by the Society" referred to in</li> </ul>	Changes due to renaming of	the the				

	Original	D1
Amended	Original	Remarks
12.3.4-2, Part D of the Rules means one whose approval is	12.3.4-2, Part D of the Rules means one whose approval is	"Guidance for the
obtained in accordance with 2.4.2-11, Chapter 2, Part 6 of the	obtained in accordance with 2.4.2-11, Chapter 2, Part 6 of the	Approval"
Guidance for the Approval of Materials and Equipment for	Guidance for the Approval and Type Approval of Materials	
Marine Use.	and Equipment for Marine Use.	
D12.6 Tests	D12.6 Tests	
D44 (4 (1)   T	D44 (4 (1) T	
D12.6.1 Shop Tests	D12.6.1 Shop Tests	
1 Testing of pipe joints of a butt welded type and pipe	1 Testing of pipe joints of a butt welded type and pipe	
joints of a slip-on sleeve welded type (such as elbows,	joints of a slip-on sleeve welded type (such as elbows,	
reducers, tees, bends and sockets, etc.)	reducers, tees, bends and sockets, etc.)	
(1) Materials and tests of pipe joints of a butt welded type	(1) Materials and tests of pipe joints of a butt welded type	
and pipe joints of a slip-on sleeve welded type used	and pipe joints of a slip-on sleeve welded type used	
for Group I or II pipes are to be in accordance with the	for Group I or II pipes are to be in accordance with the	
following:	following:	
(a) Materials	(a) Materials	
i) Materials for pipe joints are to comply with	i) Materials for pipe joints are to comply with	
the requirements in Part K (see D1.1.4(7)).	the requirements in Part K (see D1.1.4(7)).	
ii) Notwithstanding the requirement given in i),	ii) Notwithstanding the requirement given in i),	
materials complying with international or	materials complying with international or	
national standards such as ISO, JIS, etc. may	national standards such as ISO, JIS, etc. may	
be used for pipe joints for which hot forming	be used for pipe joints for which hot forming	
or heat treatment is carried out during the	or heat treatment is carried out during the	
manufacturing process, provided that they	manufacturing process, provided that they	
receive approval of use from the Society in	receive approval of use from the Society in	Changes due to the
accordance with Chapter 12, Part 6 of the	accordance with Chapter 12, Part 6 of the	renaming of the "Guidance for the
Guidance for the Approval and Type	Guidance for the Approval and Type	"Guidance for the Approval"
Approval of Materials and Equipment for	Approval of Materials and Equipment for	Terminology alignment
Marine Use.	Marine Use.	
((b) to (d) are omitted.)	((b) to (d) are omitted.)	
(e) Omission of surveyor attendance	(e) Omission of surveyor attendance	

### Amended-Original Requirements Comparison Table

	-	<u>*</u>	
(Review of Guidance for the Ap	proval of Ma	aterials and Equipme	ent for Marine Use)
Amended		Original	

Amended	Original Original	Remarks
i) (Omitted) ii) With respect to pipe joints other than those specified in i) and (1)(a)ii), a Society surveyor need not be present during the tests specified in (b) to (d) when the requirements in Chapter 4, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use are satisfied.  iii) (Omitted)  (2) (Omitted)  (3) (Omitted)	i) (Omitted) ii) With respect to pipe joints other than those specified in i) and (1)(a)ii), a Society surveyor need not be present during the tests specified in (b) to (d) when the requirements in Chapter 4, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use are satisfied. iii) (Omitted) (2) (Omitted) (3) (Omitted)	
D13.6.2 Open Ends of Air Pipes  The wording "automatic closing devices" specified in 13.6.2-2, Part D of the Rules means those approved by the Society in accordance with 2.4.2-10, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use. For tankers, pressure-vacuum valves (PV valves) may be used in lieu of automatic closing devices. These valves are to be of a type approved by the Society in accordance with procedures deemed appropriate by the Society.	D13.6.2 Open Ends of Air Pipes  The wording "automatic closing devices" specified in 13.6.2-2, Part D of the Rules means those approved by the Society in accordance with 2.4.2-10, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use. For tankers, pressure-vacuum valves (PV valves) may be used in lieu of automatic closing devices. These valves are to be of a type approved by the Society in accordance with procedures deemed appropriate by the Society.	Changes due to the renaming of the "Guidance for the Approval"

	proval of Materials and Equipment for Marine Use)	
Amended	Original	Remarks
D13.8 Sounding Devices	D13.8 Sounding Devices	
D13.8.4 Construction of Liquid Level Indicators  The wording "a type that has been approved by the Society" in 13.8.4, Part D of the Rules means those liquid level indicators approved in accordance with the requirements of Chapter 4, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use and the wording "other standards approved by the Society" means JIS F 7211 "5 K level gauges with valves", JIS F 7215 "Flat glass oil level gauges" or any equivalent standards.	D13.8.4 Construction of Liquid Level Indicators  The wording "a type that has been approved by the Society" in 13.8.4, Part D of the Rules means those liquid level indicators approved in accordance with the requirements of Chapter 4, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use and the wording "other standards approved by the Society" means JIS F 7211 "5 K level gauges with valves", JIS F 7215 "Flat glass oil level gauges" or any equivalent standards.	Changes due to the renaming of the "Guidance for the Approval"
D13.8.5 Water Level Detection and Alarm Systems for Bulk Carriers, etc.  3 The wording "the systems to have constructions and functions deemed appropriate by the Society" in 13.8.5-1(4), Part D of the Rules means those systems complying with the following requirements and being of a type approved by the Society in accordance with Chapter 5, Part 7 of Guidance for the Approval of Materials and Equipment for Marine Use or those systems approved by an organisation deemed appropriate by the Society in accordance with the Resolution MSC.188(79), as amended.  ((1) to (8) are omitted)  7 Manuals specified in 13.8.5-4, Part D of the Rules are to contain the following information and operational instructions:  (1) (Omitted)	D13.8.5 Water Level Detection and Alarm Systems for Bulk Carriers, etc.  3 The wording "the systems to have constructions and functions deemed appropriate by the Society" in 13.8.5-1(4), Part D of the Rules means those systems complying with the following requirements and being of a type approved by the Society in accordance with Chapter 5, Part 7 of Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use or those systems approved by an organisation deemed appropriate by the Society in accordance with the Resolution MSC.188(79), as amended.  ((1) to (8) are omitted)  7 Manuals specified in 13.8.5-4, Part D of the Rules are to contain the following information and operational instructions:  (1) (Omitted)	Changes due to the renaming of the "Guidance for the Approval"
(2) Evidence that the system has been approved in accordance with Chapter 5, Part 7 of Guidance for	(2) Evidence that the system has been approved in accordance with Chapter 5, Part 7 of Guidance for	Changes due to the

Amended	Original Original	Remar	rks	
the Approval of Materials and Equipment for	**	renaming	of	the
Marine Use or the Resolution MSC.188(79), as	Equipment for Marine Use or the Resolution	"Guidance Approval"	for	the
amended.	MSC.188(79), as amended.	Approvai		
((3) to (8) are omitted)	((3) to (8) are omitted)			
D14 PIPING SYSTEMS FOR TANKERS	D14 PIPING SYSTEMS FOR TANKERS			
D14.2 Cargo Oil Pumps, Cargo Oil Piping Systems, Piping in Cargo Oil Tanks, etc.	D14.2 Cargo Oil Pumps, Cargo Oil Piping Systems, Piping in Cargo Oil Tanks, etc.			
D14.2.8 Sounding Devices of Cargo Oil Tanks	D14.2.8 Sounding Devices of Cargo Oil Tanks			
3 In cases where level indicating devices are provided for those sounding devices specified in 14.2.8, Part D of the Rules, such devices are to be of a type approved by the Society in accordance with Chapter 4, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use, which is separately specified. And, all approved devices are to be made public on the "List of approved materials and equipment".	3 In cases where level indicating devices are provided for those sounding devices specified in 14.2.8, Part D of the Rules, such devices are to be of a type approved by the Society in accordance with Chapter 4, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use, which is separately specified. And, all approved devices are to be made public on the "List of approved materials and equipment".	Changes durenaming "Guidance Approval"	e to of for	the the the
D17 REFRIGERATING MACHINERY AND	D17 REFRIGERATING MACHINERY AND			
CONTROLLED ATMOSPHERE SYSTEMS	CONTROLLED ATMOSPHERE SYSTEMS			
D17.1 General	D17.1 General			
D17.1.1 Scope 6 Ammonia refrigerating machinery materials	D17.1.1 Scope 6 Ammonia refrigerating machinery materials			

### Amended-Original Requirements Comparison Table

(Review of Guidance for the Approval of Materials and Equip
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Amended	Original	Remarks
<ul> <li>((1) to (4) are omitted)</li> <li>(5) In cases where flat tanks of quick freezers (contact freezers) are manufactured by extrusion molding of aluminum alloys, materials are to be approved in accordance with Chapter 5, Part 2 of the Guidance for the Approval of Materials and Equipment for Marine Use.</li> </ul>	<ul> <li>((1) to (4) are omitted)</li> <li>(5) In cases where flat tanks of quick freezers (contact freezers) are manufactured by extrusion molding of aluminum alloys, materials are to be approved in accordance with Chapter 5, Part 1 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.</li> </ul>	Changes due to the renaming of the "Guidance for the Approval" Changes due to the reorganization of the "Guidance for the Approval"
D18 AUTOMATIC AND REMOTE CONTROL D18.7 Tests	D18 AUTOMATIC AND REMOTE CONTROL D18.7 Tests	
D18.7.1 Shop Tests  2 The wording "The procedures for these tests are to be deemed appropriate by the Society" specified in 18.7.1(1), Part D of the Rules means those procedures in accordance with Chapter 1, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use.	D18.7.1 Shop Tests  2 The wording "The procedures for these tests are to be deemed appropriate by the Society" specified in 18.7.1(1), Part D of the Rules means those procedures in accordance with Chapter 1, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval"

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND	GUIDANCE FOR THE SURVEY AND	Remarks
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS	
Part GF SHIPS USING LOW- FLASHPOINT FUELS	Part GF SHIPS USING LOW- FLASHPOINT FUELS	
CE1 CENEDAL	CE1 CENEDAL	
GF1 GENERAL	GF1 GENERAL	
GF1.1 General	GF1.1 General	
GF1.1.3 Approval of Systems and Equipment, etc.	GF1.1.3 Approval of Systems and Equipment, etc.	
1 The wording "to be approved as specified separately	1 The wording "to be approved as specified separately	In order to add "TYPE
by the Society" specified in 1.1.3-1, Part GF of the Rules	by the Society" specified in 1.1.3-1, Part GF of the Rules	APPROVAL OF
means that an approval is to be obtained in accordance with	means that an approval is to be obtained in accordance with	INSULATION
Annex 1.1.3-3, Part GF of the Rules, Annexes 1 to 2A and	Annex 1.1.3-3, Part GF of the Rules, and Annexes 1 to 2A.	MATERIALS USED IN
Chapter 7, Part 5 of the Guidance for the Approval and	Annex 1.1.3-3, 1 art of of the Rules, and Annexes 1 to 2A.	CARGO
Type Approval of Materials and Equipment for Marine		CONTAINMENT
Use.		SYSTEMS FOR LIQUEFIED GASES" to
USC.		Chapter 7, Part 5 of the
		Guidance for the
		Approval and Type
		Approval of Materials and
		Equipment for Marine
		Use, the current
		requirement have been
		changed. (Transfer from Annex 1 of Part N and
		GF.)
	l	51.)

Amended	Original	Remarks
		Remarks
GF6.4 Liquefied Gas Fuel Containment	GF6 FUEL CONTAINMENT SYSTEM  GF6.4 Liquefied Gas Fuel Containment	
<ul> <li>GF6.4.13 Materials and Construction</li> <li>5 For the purpose of the requirements in 6.4.13-3(2),</li> <li>Part GF of the Rules, tests and inspection specified in the following (1) and (2) are to be carried out.</li> <li>(1) The insulation materials are to be approved in accordance with the Chapter 7, Part 5 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use. In the above, tests and inspection are to be conducted according to the procedures on the manufacture, storage, handling and product quality control established by the manufacturer.</li> <li>(2) (Omitted)</li> </ul>	<ul> <li>GF6.4.13 Materials and Construction</li> <li>5 For the purpose of the requirements in 6.4.13-3(2),</li> <li>Part GF of the Rules, tests and inspection specified in the following (1) and (2) are to be carried out.</li> <li>(1) The insulation materials are to be approved in accordance with the Annex 1 "Guidance for Equipment and Fittings of Ships Using Low-flashpoint Fuels". In the above, tests and inspection are to be conducted according to the procedures on the manufacture, storage, handling and product quality control established by the manufacturer.</li> <li>(2) (omitted)</li> </ul>	In order to add "TYPE APPROVAL OF INSULATION MATERIALS USED IN CARGO CONTAINMENT SYSTEMS FOR LIQUEFIED GASES" to Chapter 7, Part 5 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use, the current requirement have been changed.(Transfer from Annex 1 of Part N and GF.)
8 If the material, which has been approved according to the Chapter 7, Part 5 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use, satisfies the performance requirements and such performance is considered to serve the purpose, the tests referred to in the preceding -6 may be omitted.	8 If the material, which has been approved according to the Annex 1 "Guidance for Equipment and Fittings of Ships Using Low-flashpoint Fuels", satisfies the performance requirements and such performance is considered to serve the purpose, the tests referred to in the preceding -6 may be omitted.	In order to add "TYPE APPROVAL OF INSULATION MATERIALS USED IN CARGO CONTAINMENT SYSTEMS FOR LIQUEFIED GASES" to Chapter 7, Part 5 of the Guidance for the

	provar of Materials and Equipment for Matric Osc)	D 1
Amended	Original	Remarks
		Approval and Type Approval of Materials and Equipment for Marine Use, the current requirement have been changed.(Transfer from Annex 1 of Part N and GF.)
GF10 POWER GENERATION INCLUDING PROPULSION AND OTHER GAS CONSUMERS	GF10 POWER GENERATION INCLUDING PROPULSION AND OTHER GAS CONSUMERS	
GF10.3 Internal Combustion Engines of Piston Type	GF10.3 Internal Combustion Engines of Piston Type	
GF10.3.1 General 1 In applying 10.3.1-1, Part GF of the Rules, explosion relief ventilation provided for exhaust gas manifolds composing exhaust systems are to be approved by the Society in accordance with Chapter 6, Part 13 of the Guidance for the Approval of Materials and Equipment for Marine Use.	GF10.3.1 General  1 In applying 10.3.1-1, Part GF of the Rules, explosion relief ventilation provided for exhaust gas manifolds composing exhaust systems are to be approved by the Society in accordance with Chapter 6, Part 13 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval"

Amended	Original Original	Remarks
Annex 1 GUIDANCE FOR EQUIPMENT AND FITTINGS OF SHIPS USING LOW-FLASHPOINT FUELS  Chapter 2 FUEL VAPOUR COMPRESSORS	Annex 1 GUIDANCE FOR EQUIPMENT AND FITTINGS OF SHIPS USING LOW-FLASHPOINT FUELS  Chapter 2 FUEL VAPOUR COMPRESSORS	
2.6 Tests and Inspections	2.6 Tests and Inspections	
2.6.1 Type Tests  1 Each size and type of gas compressor is to be subjected type tests in the presence of a Society surveyor and type approved in accordance with Chapter 2, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	2.6.1 Type Tests  1 Each size and type of gas compressor is to be subjected type tests in the presence of a Society surveyor and approved for use in accordance with Chapter 2, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment
Chapter 3 FUEL PUMPS	Chapter 3 FUEL PUMPS	
3.6 Tests and Inspections	3.6 Tests and Inspections	
3.6.1 Type Tests  1 Each size and type of pump is to be subjected to type tests in the presence of a Society surveyor and type approved in accordance with Chapter 2, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	3.6.1 Type Tests  1 Each size and type of pump is to be subjected to type tests in the presence of a Society surveyor and approved for use in accordance with Chapter 2, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment

Amended	Original	Remarks
Chapter 5 VALVES	Chapter 5 VALVES	
5.3 Tests and Inspections	5.3 Tests and Inspections	
5.3.1 Type Tests  1 Valves whose design temperatures are below -55°C are to be subjected to the tests and inspections specified in (1) to (9) below, taking into consideration 16.7.1, Part GF of the Rules and type approved in accordance with Chapter 2, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.  ((1) to (9) are omitted)  2 For valves not conforming to 5.2-2, detailed data on construction and strength are to be submitted to the Society,	5.3.1 Type Tests  1 Valves whose design temperatures are below -55°C are to be subjected to the tests and inspections specified in (1) to (9) below, taking into consideration 16.7.1, Part GF of the Rules and approved for use in accordance with Chapter 2, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  ((1) to (9) are omitted)  2 For valves not conforming to 5.2-2, detailed data on construction and strength are to be submitted to the Society,	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment  Changes due to the renaming of the
and such valves are to be type approved in accordance with Chapter 2, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	and such valves are to be type approved in accordance with Chapter 2, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	"Guidance for the Approval"
Chapter 6 RELIEF VALVES	Chapter 6 RELIEF VALVES	
6.4 Tests and Inspections	6.4 Tests and Inspections	
6.4.1 Prototype Tests  1 Relief valves, not including those whose design temperatures are -55°C or higher, fitted to fuel piping and process piping, are to be subjected to prototype tests, and are	6.4.1 Prototype Tests  1 Relief valves, not including those whose design temperatures are -55°C or higher, fitted to fuel piping and process piping, are to be subjected to prototype tests, and are	Changes due to the renaming of the "Guidance for the Approval"

Amended	Original Original	Remarks
to be type approved in accordance with Chapter 2, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use. The tests are to verify that the relief valves possess necessary performance.	to be approved <u>for use</u> in accordance with Chapter 2, Part 6 of the Guidance for the Approval <u>and Type Approval</u> of Materials and Equipment for Marine Use. The tests are to verify that the relief valves possess necessary performance.	Terminology alignment
Chapter 7 BELLOWS AND EXPANSION JOINTS (For Fuel Piping and Process Piping Systems)	Chapter 7 BELLOWS AND EXPANSION JOINTS (For Fuel Piping and Process Piping Systems)	
7.3 Tests and Inspections	7.3 Tests and Inspections	
7.3.1 Type Tests  Bellows and expansion joints, not including those used for piping with open pipe ends and installed in fuel tanks, are to be subjected to the type tests specified in 16.7.2, Part GF of the Rules for each type and are to be type approved in accordance with Chapter 2, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	7.3.1 Type Tests  Bellows and expansion joints, not including those used for piping with open pipe ends and installed in fuel tanks, are to be subjected to the type tests specified in 16.7.2, Part GF of the Rules for each type and are to be approved for use in accordance with Chapter 2, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment

Amended	Original Original	Remarks
Chapter 9 LEVEL INDICATORS AND LEVEL ALARMS	Chapter 9 LEVEL INDICATORS AND LEVEL ALARMS	
9.1 General	9.1 General	
9.1.1 Application  1 Level gauges for measuring fuel liquid levels in fuel containment systems and process pressure vessels, and liquid levels in nitrogen tanks are to be in accordance with the requirements in Chapter 4, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use.  2 Level alarm systems for detecting one or more of specific fuel liquid levels in fuel containment systems and process pressure vessels are to be in accordance with requirements in Chapter 4, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use: relevant requirements are to be applied mutatis mutandis.	9.1.1 Application  1 Level gauges for measuring fuel liquid levels in fuel containment systems and process pressure vessels, and liquid levels in nitrogen tanks are to be in accordance with the requirements in Chapter 4, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  2 Level alarm systems for detecting one or more of specific fuel liquid levels in fuel containment systems and process pressure vessels are to be in accordance with requirements in Chapter 4, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use: relevant requirements are to be applied mutatis mutandis.	Changes due to the renaming of the "Guidance for the Approval"  Changes due to the renaming of the "Guidance for the Approval"
Chapter 10 PRESSURE GAUGES	Chapter 10 PRESSURE GAUGES	
10.5 Electrical Installations	10.5 Electrical Installations	
<ul> <li>10.5.1 General</li> <li>2 Tests specified in Chapter 1, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine</li> </ul>	10.5.1 General 2 Tests specified in Chapter 1, Part 7 of the Guidance for the Approval and Type Approval of Materials and	Changes due to the renaming of the "Guidance for the

Amended	Original	Remarks
		Approval"
Use are to be carried out mutatis mutandis and passed.	Equipment for Marine Use are to be carried out mutatis	Approvai
	mutandis and passed.	
Chapter 11 TEMPERATURE INDICATING	Chapter 11 TEMPERATURE INDICATING	
DEVICES	DEVICES	
	22,102	
11.4 Electrical Installations	11.4 Electrical Installations	
11.4 Electrical instanations	11.4 Electrical instanations	
11.4.1 General	11.4.1 General	
	2 Tests specified in Chapter 1, Part 7 of the Guidance	Changes due to the
1 I I I I I I I I I I I I I I I I I I I		renaming of the
for the Approval of Materials and Equipment for Marine	for the Approval and Type Approval of Materials and	"Guidance for the
Use are to be carried out mutatis mutandis and passed.	Equipment for Marine Use are to be carried out mutatis	Approval"
	mutandis and passed.	Approvar
(Delete)	Chapter 12 INSULATION MATERIALS	In order to add "TYPE
		APPROVAL OF
		INSULATION
	(Chapter 12 text is omitted)	MATERIALS USED IN
	Chapter 12 text is omitted/	CARGO
		CONTAINMENT
		SYSTEMS FOR
		LIQUEFIED GASES" to
		Chapter 7, Part 5 of the
		Guidance for the
		Approval and Type
		Approval of Materials and
		Equipment for Marine
		Use, the current
		requirement have been
		deleted.(Transfer from

	proval of Materials and Equipment for Marine Use)	D 1
Amended	Original	Remarks
CL 4 12 INCLIA ATRON CVCTEM FOR		Annex 1 of Part N and GF.)
Chapter 13 INSULATION SYSTEM FOR	Chapter 13 INSULATION SYSTEM FOR	
VACUUM INSULATED TANKS	VACUUM INSULATED TANKS	
13.3 Materials, Construction and Strength	13.3 Materials, Construction and Strength	
13.3.1 Materials and Welding	13.3.1 Materials and Welding	
3 Elements of insulation systems which do not contribute to vacuums (such as supporting structures installed between inner vessels and outer shells, and layered insulation installed on inner vessels as countermeasure for heat radiation) are to be type approved in accordance with Guidance for the Approval of Materials and Equipment for Marine Use. Type approval for filler material such as pearlite, glass wool, etc. used between inner vessels and outer shells is not required except for cases where the Society deems it especially necessary.	3 Elements of insulation systems which do not contribute to vacuums (such as supporting structures installed between inner vessels and outer shells, and layered insulation installed on inner vessels as countermeasure for heat radiation) are to be type approved in accordance with Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use. Type approval for filler material such as pearlite, glass wool, etc. used between inner vessels and outer shells is not required except for cases where the Society deems it especially necessary.	Changes due to the renaming of the "Guidance for the Approval"
Chapter 14 OXYGEN CONTENT MEASURING EQUIPMENT	Chapter 14 OXYGEN CONTENT MEASURING EQUIPMENT	
14.4 Tests and Inspections	14.4 Tests and Inspections	
14.4.2 Two approprial Tooks	14.4.2 Ammuoval of Use Tasts	Terminology alignment
14.4.2 <u>Type approval Tests</u>	14.4.2 Approval of Use Tests	T
Fixed-type oxygen content measuring equipment is to pass	Fixed-type oxygen content measuring equipment is to pass	Terminology alignment
the tests specified in 14.4.4 for each type. Such tests, however,	the tests specified in 14.4.4 for each type. Such tests, however,	

Amended	Original Original	Remarks
are not required in cases where the tests are carried out for individual equipment.	are not required in cases where the tests are carried out for individual equipment.	
Chapter 20 FUEL HOSES	Chapter 20 FUEL HOSES	
20.5 Tests and Inspections	20.5 Tests and Inspections	
20.5.1 <u>Type approval Tests</u> 1 In principle, fuel hoses are to be subjected to the prototype tests in -2 for each type and hose bore. In addition, fuel hose are to be <u>type approved</u> in accordance with Chapter 2, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	20.5.1 Approval of Use Tests  1 In principle, fuel hoses are to be subjected to the prototype tests in -2 for each type and hose bore. In addition, fuel hose are to be approved for use in accordance with Chapter 2, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Terminology alignment  Changes due to the renaming of the "Guidance for the Approval"  Terminology alignment
20.5.2 Product Inspections  Hoses which have received type approval are to be subjected to the tests specified in the following (1) to (3), and inspections are to be carried out in the presence of a Society surveyor before being shipped.  ((1) to (3) are omitted)	20.5.2 Product Inspections  Hoses which have received Approval of Use are to be subjected to the tests specified in the following (1) to (3), and inspections are to be carried out in the presence of a Society surveyor before being shipped.  ((1) to (3) are omitted)	Terminology alignment

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND	GUIDANCE FOR THE SURVEY AND	
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS	
Part HELECTRICAL INSTALLATIONS	Part H ELECTRICAL INSTALLATIONS	
H1 GENERAL	H1 GENERAL	
H1.2 Testing	H1.2 Testing	
H1.2.1 Shop Tests 5 The wording "to be subjected to type tests" in 1.2.1-4, Part H of the Rules means Part 8 of the Guidance for the Approval of Materials and Equipment for Marine Use. Equipment and cables approved are made public in the List of Approved Materials and Equipment.	H1.2.1 Shop Test 5 The wording "to be subjected to type tests" in 1.2.1-4, Part H of the Rules means Part 8 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use. Equipment and cables approved are made public in the List of Approved Materials and Equipment.	Changes due to the renaming of the "Guidance for the Approval"
H2 ELECTRICAL INSTALLATIONS AND SYSTEM DESIGN	H2 ELECTRICAL INSTALLATIONS AND SYSTEM DESIGN	
H2.9 Cables	H2.9 Cables	
H2.9.11 Precaution against Fire  1 In cases where the installation work of cables in enclosed spaces or semi-enclosed spaces of ships meet either	H2.9.11 Precaution against Fire  1 In cases where the installation work of cables in enclosed spaces or semi-enclosed spaces of ships meet either	

### Amended-Original Requirements Comparison Table

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)

Amended
of the following requirements, such work may be regarded as
complying with the requirements given in 2.9.11-1, Part H of
the Rules. However, item (2)(c) below is to be approved by
the Society in accordance with the requirements given in Part
7 of the Guidance for the Approval of Materials and
Equipment for Marine Use. Furthermore, in cases where the
use of cables is limited to specific applications, approval by
the Society may be given on a case by case basis.

((1) and (2) are omitted)

### **H2.9.14 Supports and Fixing of Cables**

- 4 The wording "any tests otherwise specified by the Society" referred to in 2.9.14-3(4)(a), Part H of the Rules are those tests specified in 3.4.2, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use.
- 5 The wording "those tests" referred to in 2.9.14-3(4)(f), Part H of the Rules are those safe working load tests specified in 3.4.2(3), Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use.

### H2.9.15 Penetration of Bulkheads and Decks

- 5 Cable penetrations which are required to be watertight may be verified, for example, in accordance any of the following (1) to (3).
  - (1) Confirmation as to whether watertightness is assured by a construction method in accordance with standards such as *JIS*.
  - (2) The watertightness tests specified in item 10(1), Table B2.7, Part B of the Rules.

of the following requirements, such work may be regarded as complying with the requirements given in 2.9.11-1, Part H of the Rules. However, item (2)(c) below is to be approved by the Society in accordance with the requirements given in Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use. Furthermore, in cases where the use of cables is limited to specific applications, approval by the Society may be given on a case by case basis.

Original

((1) and (2) are omitted)

### **H2.9.14** Supports and Fixing of Cables

- 4 The wording "any tests otherwise specified by the Society" referred to in 2.9.14-3(4)(a), Part H of the Rules are those tests specified in 3.4.2, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.
- 5 The wording "those tests" referred to in 2.9.14-3(4)(f), Part H of the Rules are those safe working load tests specified in 3.4.2(3), Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.

### H2.9.15 Penetration of Bulkheads and Decks

- 5 Cable penetrations which are required to be watertight may be verified, for example, in accordance any of the following (1) to (3).
  - (1) Confirmation as to whether watertightness is assured by a construction method in accordance with standards such as *JIS*.
  - (2) The watertightness tests specified in item 10(1), Table B2.7, Part B of the Rules.

Changes due to the renaming of the "Guidance for the Approval"

Remarks

Changes due to the renaming of the "Guidance for the Approval"

Changes due to the renaming of the "Guidance for the Approval"

Changes due to the renaming of the "Guidance for the Approval" Changes due to the reorganization of the "Guidance for the

Approval"

Amended	Original	Remarks
(3) Approval in accordance with Chapter 1, Part <u>5</u> of the Guidance for the Approval of Materials and Equipment for Marine Use.	· / 11	



L	Amended	Original	Remarks	
	GUIDANCE FOR THE SURVEY AND	GUIDANCE FOR THE SURVEY AND		
	CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS		
	Part KMATERIALS	Part KMATERIALS		
	K1 GENERAL	K1 GENERAL		
	K1.1 General	K1.1 General		
	K1.1.1 Application	K1.1.1 Application		
	4 In the application of 1.1.1-3, Part K of the Rules for	4 In the application of 1.1.1-3, Part K of the Rules for	Changes due to	the
	the Survey and Construction of Steel Ships, those pipes	the Survey and Construction of Steel Ships, those pipes		the
	made from metallic materials other than steels (for example	made from metallic materials other than steels (for example		the
				the
	* · · · · =	_	reorganization of	the
	Approval of Materials and Equipment for Marine Use.		"Guidance for	the
		for Marine Use.	Approval"	
	K1. GENERAL  K1.1 General  K1.1.1 Application 4 In the application of 1.1.1-3, Part K of the Rules for the Survey and Construction of Steel Ships, those pipes	K1 GENERAL  K1.1 General  K1.1.1 Application 4 In the application of 1.1.1-3, Part K of the Rules for the Survey and Construction of Steel Ships, those pipes	renaming of "Guidance for Approval" Changes due to reorganization of	

Amended	Original	Remarks
K2 TEST SPECIMENS AND MECHANICAL TESTING PROCEDURES	K2 TEST SPECIMENS AND MECHANICAL TESTING PROCEDURES	
K2.2 Test Specimens	K2.2 Test Specimens	
K2.2.1 Preparation of Test Specimens  1 "Where otherwise specified or agreed with the Surveyor" referred in 2.2.1-1, Part K of the Rules means only where manufacturing process of the material has been already approved according to the requirements of Part 2 of Guidance for the Approval of Materials and Equipment for Marine Use by the Society.  K3 ROLLED STEELS	K2.2.1 Preparation of Test Specimens  1 "Where otherwise specified or agreed with the Surveyor" referred in 2.2.1-1, Part K of the Rules means only where manufacturing process of the material has been already approved according to the requirements of Part 1 of Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use by the Society.  K3 ROLLED STEELS	Changes due to the renaming of the "Guidance for the Approval" Changes due to the reorganization of the "Guidance for the Approval"
K3.12Additional Requirements for Brittle Crack Arrest Properties  K3.12.3Brittle Crack Arrest Properties etc.	K3.12 Additional Requirements for Brittle Crack Arrest Properties  K3.12.3 Brittle Crack Arrest Properties etc.	
4 In 3.12.3-3, Part K of the Rules, "A brittle fracture test deemed appropriate by the Society" means a test with an evaluation procedure approved by the Society in accordance with Annex 1.1 "Approval Scheme of Small-scale Test Methods for Brittle Crack Arrest Steels", Guidance for the Approval of Materials and Equipment for Marine Use.	4 In 3.12.3-3, Part K of the Rules, "A brittle fracture test deemed appropriate by the Society" means a test with an evaluation procedure approved by the Society in accordance with Annex 1.1 "Approval Scheme of Small-scale Test Methods for Brittle Crack Arrest Steels", Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval"

Amended	Original	Remarks
K5 CASTINGS	K5 CASTINGS	Terraino
K5.1 Steel Castings	K5.1 Steel Castings	
K5.1.13 Additional Requirements for Crank Throws	K5.1.13 Additional Requirements for Crank Throws	
The wording "the preliminary tests instructed by the Society" in 5.1.13-2, Part K of the Rules means the tests in accordance with Chapter 4, Part 2 of the Guidance for the Approval of Materials and Equipment for Marine Use.	The wording "the preliminary tests instructed by the Society" in 5.1.13-2, Part K of the Rules means the tests in accordance with Chapter 4, Part 1 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval" Changes due to the reorganization of the "Guidance for the Approval"
K6 STEEL FORGINGS	K6 STEEL FORGINGS	11
K6.1 Steel Forgings	K6.1 Steel Forgings	
K6.1.13 Additional Requirements for Crankshafts  4 The wording "the preliminary tests instructed by the Society" in 6.1.13-2 and -3, Part K of the Rules means the tests in accordance with Chapter 3 and Chapter 4, Part 2 of the Guidance for the Approval of Materials and Equipment for Marine Use respectively.	K6.1.13 Additional Requirements for Crankshafts  4 The wording "the preliminary tests instructed by the Society" in 6.1.13-2 and -3, Part K of the Rules means the tests in accordance with Chapter 3 and Chapter 4, Part 1 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use respectively.	Changes due to the renaming of the "Guidance for the Approval" Changes due to the reorganization of the "Guidance for the Approval"

Amended	Original	Remarks
Annex K1.1.1-3 GUIDANCE RELATING TO	Annex K1.1.1-3 GUIDANCE RELATING TO	
HIGH MANGANESE AUSTENITIC STEELS	HIGH MANGANESE AUSTENITIC STEELS	
1.1 High Manganese Austenitic Steels	1.1 High Manganese Austenitic Steels	
1.1.3 Approval	1.1.3 Approval	
1 High manganese austenitic steel plates, unless otherwise specially provided or deemed appropriate by the Society, are to be manufactured at steel works which have been approved by the Society. The suitability of steel plates for forming and welding are to be demonstrated during the initial approval test at the steelworks. Approval of the steelworks is to follow a scheme given in Chapter 1, Part 2 of the Guidance for the Approval of Materials and Equipment for Marine Use.	1 1	Changes due to the renaming of the "Guidance for the Approval" Changes due to the reorganization of the "Guidance for the Approval"

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND	GUIDANCE FOR THE SURVEY AND	
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS	
Part L EQUIPMENT	Part L EQUIPMENT	
L2 ANCHORS	L2 ANCHORS	
L2.2 Anchors Used for Positioning Systems	L2.2 Anchors Used for Positioning Systems	
L2.2.11 Holding Power Tests	L2.2.11 Holding Power Tests	
1 "Holding power tests designated by the Society" refers	1 "Holding power tests designated by the Society" refers	Changes due to the
to the tests specified in 1.6.1(3), Part 3 of the "Guidance for	to the tests specified in 1.6.1(3), Part 2 of the "Guidance for	renaming of the
the Approval of Materials and Equipment for Marine	the Approval and Type Approval of Materials and	"Guidance for the Approval"
Use". For anchors intended to be used for vessels and floating	Equipment for Marine Use". For anchors intended to be	Changes due to the
offshore facilities fixed or positioned at specific sea areas for	used for vessels and floating offshore facilities fixed or	reorganization of the
long periods of time, it means the tests specified in 1A.2.2(3)(b), Part 3 of the "Guidance for the Approval of	positioned at specific sea areas for long periods of time, it means the tests specified in 1A.2.2(3)(b), Part 2 of the	"Guidance for the
Materials and Equipment for Marine Use".	"Guidance for the Approval and Type Approval of	Approval"
Materials and Equipment for Marine osc.	Materials and Equipment for Marine Use".	

Amended	Original	Remarks	
L5 FIBRE ROPES	L5 FIBRE ROPES		
L5.1 Fibre Ropes	L5.1 Fibre Ropes		
L5.1.3 Processes of Manufacture  Where the tests for the filaments specified in Chapter 4,  Part 3 of Guidance for the Approval of Materials and  Equipment for Marine Use as a part of the approval test of synthetic fibre rope are carried out by synthetic fibre rope manufacture and passed them, the filaments may be used for synthetic fibre rope.	L5.1.3 Processes of Manufacture  Where the tests for the filaments specified in Chapter 4,  Part 2 of Guidance for the Approval and Type Approval of  Materials and Equipment for Marine Use as a part of the approval test of synthetic fibre rope are carried out by synthetic fibre rope manufacture and passed them, the filaments may be used for synthetic fibre rope.	renaming of "Guidance for Approval" Changes due to	the the the the the
L9 CONTAINER SECURING FITTINGS	L9 CONTAINER SECURING FITTINGS		
L9.1 Container Securing Fittings	L9.1 Container Securing Fittings		
L9.1.3 Materials  The wording "special consideration" in 9.1.3-3, Part L of the Rules means that impact tests are to be carried out in accordance with 12.4.4, Chapter 12, Part 3 of Guidance for the Approval of Materials and Equipment for Marine Use to confirm notch toughness at the design temperature of the ship provided with the fittings at the time of "Society's approval" referred to in 9.1.5, Part L of the Rules.	L9.1.3 Materials  The wording "special consideration" in 9.1.3-3, Part L of the Rules means that impact tests are to be carried out in accordance with 12.4.4, Chapter 12, Part 2 of Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use to confirm notch toughness at the design temperature of the ship provided with the fittings at the time of "Society's approval" referred to in 9.1.5, Part L of the Rules.	renaming of "Guidance for Approval" Changes due to reorganization of	the the the the the

### Amended-Original Requirements Comparison Table

Amended	Original	Remarks	
L9.1.5 Manufacturing Processes and Product Shapes The wording "Society's approval" in 9.1.5, Part L of the Rules means obtaining approval in accordance with Chapter 12, Part 3 of Guidance for the Approval of Materials and Equipment for Marine Use.	L9.1.5 Manufacturing Processes and Product Shapes The wording "Society's approval" in 9.1.5, Part L of the Rules means obtaining approval in accordance with Chapter 12, Part 2 of Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	renaming of "Guidance for Approval"	the the the the the

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS	GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS	
Part N SHIPS CARRYING LIQUEFIED GASES IN BULK	Part N SHIPS CARRYING LIQUEFIED GASES IN BULK	
N4 CARGO CONTAINMENT	N4 CARGO CONTAINMENT	
N4.19 Materials	N4.19 Materials	
N4.19.3 Thermal Insulation and Other Materials Used in Cargo Containment Systems  3 For the purpose of the requirements in 4.19.3-2, Part N of the Rules, tests and inspection specified in the following (1) and (2) are to be carried out.  (1) The insulation materials are to be approved in accordance with the Chapter 7, Part 5 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use. In the above, tests and inspection are to be conducted according to the procedures on the manufacture, storage, handling and product quality control established by the manufacturer.  (2) (Omitted)	in Cargo Containment Systems  3 For the purpose of the requirements in 4.19.3-2, Part N of the Rules, tests and inspection specified in the following (1) and (2) are to be carried out.  (1) The insulation materials are to be approved in accordance with the Annex 1 "GUIDANCE FOR EQUIPMENT AND FITTINGS OF SHIPS CARRYING LIQUEFIED GASES IN BULK". In the above, tests and inspection are to be conducted according to the procedures on the manufacture,	In order to add "TYPE APPROVAL OF INSULATION MATERIALS USED IN CARGO CONTAINMENT SYSTEMS FOR LIQUEFIED GASES" to Chapter 7, Part 5 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use, the current requirement have been changed.(Transfer from Annex 1 of Part N and

	proval of Materials and Equipment for Marine Use)	
Amended	Original	Remarks
6 If the material, which has been approved according to the Chapter 7, Part 5 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use", satisfies the performance requirements and such performance is considered to serve the purpose, the tests referred to in the preceding -4 may be omitted.	6 If the material, which has been approved according to the Annex 1 "GUIDANCE FOR EQUIPMENT AND FITTINGS OF SHIPS CARRYING LIQUEFIED GASES IN BULK", satisfies the performance requirements and such performance is considered to serve the purpose, the tests referred to in the preceding -4 may be omitted.	GF.) In order to add "TYPE APPROVAL OF INSULATION MATERIALS USED IN CARGO CONTAINMENT SYSTEMS FOR LIQUEFIED GASES" to Chapter 7, Part 5 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use, the current requirement have been changed.(Transfer from Annex 1 of Part N and GF.)
N5 PROCESS PRESSURE VESSELS AND	N5 PROCESS PRESSURE VESSELS AND	
LIQUID, VAPOUR, AND PRESSURE PIPING	LIQUID, VAPOUR, AND PRESSURE PIPING	
SYSTEMS	SYSTEMS	
N5.12 Materials	N5.12 Materials	
N5.12.1 Materials	N5.12.1 Materials	
1 For the purpose of 5.12.1, Part N of the Rules, the	1 For the purpose of 5.12.1, Part N of the Rules, the	
materials used for piping, valves and fittings are to comply	materials used for piping, valves and fittings are to comply	
with the relevant requirements in Chapter 6, Part N of the	with the relevant requirements in Chapter 6, Part N of the	
Rules, and at the same time, to conform to the relevant	Rules, and at the same time, to conform to the relevant	
requirements in <b>Part K of the Rules</b> . However, for materials	requirements in Part K of the Rules. However, for materials	
<u> </u>		

	proval of Materials and Equipment for Marine Ose)	T
Amended	Original	Remarks
used for the piping specified in the following (1) to (5), those conforming to JIS or other standards deemed appropriate by the Society may be used where they comply with the requirements in Chapter 6, Part N of the Rules.  ((1) to (4) are omitted)  (5) Pipe joints of a butt welded type and pipe joints of a slip-on sleeve welded type (such as elbows, reducers, tees, bends and sockets, etc.) for which hot forming or heat treatment is carried out during their manufacturing process in accordance with the requirements in D12.6.1(1)(a)ii), Part D of the Guidance on the condition that they receive type approval from Society in accordance with Chapter 12, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	used for the piping specified in the following (1) to (5), those conforming to JIS or other standards deemed appropriate by the Society may be used where they comply with the requirements in Chapter 6, Part N of the Rules.  ((1) to (4) are omitted)  (5) Pipe joints of a butt welded type and pipe joints of a slip-on sleeve welded type (such as elbows, reducers, tees, bends and sockets, etc.) for which hot forming or heat treatment is carried out during their manufacturing process in accordance with the requirements in D12.6.1(1)(a)ii), Part D of the Guidance on the condition that they receive approval of use from Society in accordance with Chapter 12, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment
N13 INSTRUMENTATION AND AUTOMATION SYSTEMS	N13 INSTRUMENTATION AND AUTOMATION SYSTEMS	
N13.1 General	N13.1 General	
N13.1.3 Calibration and Test of Measuring Instruments  For the purpose of the requirements in 13.1.3, Part N of the Rules, tests and inspections of measuring instruments are to be in accordance with the following requirements (1) to (3):  (1) Tests and inspections of measuring instruments during manufacture of each are to conform to the following requirements (a) to (c):	N13.1.3 Calibration and Test of Measuring Instruments  For the purpose of the requirements in 13.1.3, Part N of the Rules, tests and inspections of measuring instruments are to be in accordance with the following requirements (1) to (3):  (1) Tests and inspections of measuring instruments during manufacture of each are to conform to the following requirements (a) to (c):	Changes due to the

 (Ite view of Guidance for the rip	provar or materials and Equipment for marine ose)	
Amended	Original	
	(a) (Omittad)	٠

Amended	Original	Remarks	
(a) (Omitted) (b) Level gauges are to be in accordance with the requirements in the Chapter 4, Part 7 of Guidance for the Approval of Materials and Equipment for Marine Use. (c) (Omitted) ((2) and (3) are omitted)	(a) (Omitted) (b) Level gauges are to be in accordance with the requirements in the Chapter 4, Part 7 of Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use. (c) (Omitted) ((2) and (3) are omitted)	renaming of "Guidance for Approval"	the the
N13.2 Level Indicators for Cargo Tanks  N13.2.1 General  For the purpose of the requirements 13.2.1, Part N of the Rules, the following requirements (1) and (2) are to be complied with:  (1) The performance and construction of level gauges are	N13.2 Level Indicators for Cargo Tanks  N13.2.1 General  For the purpose of the requirements 13.2.1, Part N of the Rules, the following requirements (1) and (2) are to be complied with:  (1) The performance and construction of level gauges are	Changes due to renaming of "Guidance for	the the
to be approved by the Guidance for the Approval of Materials and Equipment for Marine Use.  (2) (Omitted)  N16 USE OF CARGO AS FUEL	to be approved by the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use. (2) (Omitted)  N16 USE OF CARGO AS FUEL	Approval"	
N16.1 General	N16.1 General		
N16.1.1 General 3 In applying 16.1.1, Part N of the Rules, Annex 16.1.1-3, Part N of the Rules is to be dealt with as follows: (1) The wording "specified separately by the Society"	N16.1.1 General 3 In applying 16.1.1, Part N of the Rules, Annex 16.1.1-3, Part N of the Rules is to be dealt with as follows: (1) The wording "specified separately by the Society"		

(Review of Guidance for the Ap	proval of Materials and Equipment for Marine Use)	
Amended	Original	Remarks
specified in 1.1-5, Annex 16.1.1-3, Part N of the Rules refers to 8.3(4)(i), Chapter 8, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.  (2) The wording "specified separately by the Society" specified in 3.1.1-2, Annex 16.1.1-3, Part N of the Rules refers to Chapter 2 to Chapter 4 of Annex 1.  (3) The wording "deemed appropriate by the Society" specified in 4.1-9, Annex 16.1.1-3, Part N of the Rules refers to 8.3, Chapter 8, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.  (4) The wording "specified separately by the Society" specified in 4.3(1), Annex 16.1.1-3, Part N of the Rules refers to 2.4.2 of Annex 1.  (5) The wording "specified separately by the Society" specified in 4.3(2), Annex 16.1.1-3, Part N of the Rules refers to 2.4.3 of Annex 1.  N16.3 Arrangement of Spaces Containing Gas	specified in 1.1-5, Annex 16.1.1-3, Part N of the Rules refers to 8.3(4)(i), Chapter 8, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  (2) The wording "specified separately by the Society" specified in 3.1.1-2, Annex 16.1.1-3, Part N of the Rules refers to Chapter 2 to Chapter 4 of Annex 1.  (3) The wording "deemed appropriate by the Society" specified in 4.1-9, Annex 16.1.1-3, Part N of the Rules refers to 8.3, Chapter 8, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  (4) The wording "specified separately by the Society" specified in 4.3(1), Annex 16.1.1-3, Part N of the Rules refers to 2.4.2 of Annex 1.  (5) The wording "specified separately by the Society" specified in 4.3(2), Annex 16.1.1-3, Part N of the Rules refers to 2.4.3 of Annex 1.  N16.3 Arrangement of Spaces Containing Gas	Changes due to the renaming of the "Guidance for the Approval"  Changes due to the renaming of the "Guidance for the Approval"
Consumers  N16.3.4 Vents and Bleed Lines	Consumers  N16.3.4 Vents and Bleed Lines	
The "flame screen" specified in 16.3.4, Part N of the Rules is to be a type approved in accordance with the provisions of Chapter 7, Part 6 of Guidance for the Approval of Materials and Equipment for Marine Use.	The "flame screen" specified in 16.3.4, Part N of the Rules is to be a type approved in accordance with the provisions of Chapter 7, Part 6 of Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval"

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)			
Amended	Original	Remarks	
N16.5 Gas Fuel Plants and Related Storage Tanks	N16.5 Gas Fuel Plants and Related Storage Tanks		
N16.5.3 Heating and Cooling Mediums  The wording "flame screen of an approved type" specified in 16.5.3, Part N of the Rules refers to ones approved in accordance with the provisions of Chapter 7, Part 6 of Guidance for the Approval of Materials and Equipment for Marine Use.	N16.5.3 Heating and Cooling Mediums  The wording "flame screen of an approved type" specified in 16.5.3, Part N of the Rules refers to ones approved in accordance with the provisions of Chapter 7, Part 6 of Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to renaming of "Guidance for Approval"	the the the
N16.7 Special Requirements for Gas-fired Internal Combustion Engines	N16.7 Special Requirements for Gas-fired Internal Combustion Engines		
N16.7.1 Arrangements  2 A suitable pressure relief system is to be provided for air inlet manifolds, scavenge spaces and exhaust systems which are not designed to accommodate the worst-case overpressure due to ignited gas leaks or justified by the safety concept of the engine. Pressure relief systems provided for air inlet manifolds, scavenge spaces and for exhaust gas manifolds composing exhaust systems are to be approved by the Society in accordance with Chapter 13, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use. A detailed evaluation regarding the hazard potential of overpressure in air inlet manifolds, scavenge spaces and exhaust systems is to be carried out and reflected in the safety concept of the engine. In the case of crankcases, explosion relief valves, as required in 2.4.3, Part D of the Rules, are considered suitable for the gas operation of the engine. For engines not covered by 2.4.3, Part D of the Rules, a detailed evaluation regarding the hazard potential of fuel gas	N16.7.1 Arrangements  2 A suitable pressure relief system is to be provided for air inlet manifolds, scavenge spaces and exhaust systems which are not designed to accommodate the worst-case overpressure due to ignited gas leaks or justified by the safety concept of the engine. Pressure relief systems provided for air inlet manifolds, scavenge spaces and for exhaust gas manifolds composing exhaust systems are to be approved by the Society in accordance with Chapter 13, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use. A detailed evaluation regarding the hazard potential of overpressure in air inlet manifolds, scavenge spaces and exhaust systems is to be carried out and reflected in the safety concept of the engine. In the case of crankcases, explosion relief valves, as required in 2.4.3, Part D of the Rules, are considered suitable for the gas operation of the engine. For engines not covered by 2.4.3, Part D of the Rules, a detailed evaluation regarding the	Changes due to renaming of "Guidance for Approval"	the the the

Amended	Original	Remarks
accumulation in the crankcase is to be carried out.	hazard potential of fuel gas accumulation in the crankcase is to be carried out.	
Annex 1 GUIDANCE FOR EQUIPMENT AND FITTINGS OF SHIPS CARRYING LIQUEFIED GASES IN BULK	Annex 1 GUIDANCE FOR EQUIPMENT AND FITTINGS OF SHIPS CARRYING LIQUEFIED GASES IN BULK	
Chapter 2 CARGO COMPRESSORS	Chapter 2 CARGO COMPRESSORS	
2.6 Tests and Inspections	2.6 Tests and Inspections	
2.6.1 Type Tests  1 Each size and type of gas compressor is to be subjected type tests in the presence of a Society surveyor and type approved in accordance with Chapter 2, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	2.6.1 Type Tests  1 Each size and type of gas compressor is to be subjected type tests in the presence of a Society surveyor and approved for use in accordance with Chapter 2, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment
Chapter 3 CARGO PUMPS	Chapter 3 CARGO PUMPS	
3.6 Tests and Inspections	3.6 Tests and Inspections	
<ul> <li>3.6.1 Type Tests</li> <li>1 Each size and type of pump is to be subjected to type tests in the presence of a Society surveyor and type approved</li> </ul>	3.6.1 Type Tests  1 Each size and type of pump is to be subjected to type tests in the presence of a Society surveyor and approved for	Changes due to the renaming of the

	provar of Materials and Equipment for Marine Ose)	
Amended	Original	Remarks
in accordance with Chapter 2, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	use in accordance with Chapter 2, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	"Guidance for the Approval" Terminology alignment
Chapter 5 VALVES	Chapter 5 VALVES	
5.3 Tests and Inspections 5.3.1 Type Test	<ul><li>5.3 Tests and Inspections</li><li>5.3.1 Type Test</li></ul>	
1 Valves whose design temperatures are below -55°C are to be subjected to the tests and inspections specified in (1) to (9) below, taking into consideration 5.13.1-1, Part N of the Rules and type approved in accordance with Chapter 2, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.  ((1) to (9) are omitted)	1 Valves whose design temperatures are below -55°C are to be subjected to the tests and inspections specified in (1) to (9) below, taking into consideration 5.13.1-1, Part N of the Rules and approved for use in accordance with Chapter 2, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  ((1) to (9) are omitted)	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment
2 For valves not conforming to 5.2-2, detailed data on construction and strength are to be submitted to the Society, and such valves are to be type approved in accordance with Chapter 2, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	2 For valves not conforming to 5.2-2, detailed data on construction and strength are to be submitted to the Society, and such valves are to be type approved in accordance with Chapter 2, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment

Amended	Original	Remarks
Chapter 6 RELIEF VALVES	Chapter 6 RELIEF VALVES	
6.4 Tests and Inspection	6.4 Tests and Inspection	
6.4.1 Prototype Test  1 Relief valves other than those fitted to cargo piping and process piping with a design temperature of -55°C or above are to be subjected to prototype tests to verify that they are possess the necessary performance and are to be type approved in accordance with Chapter 2, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	6.4.1 Prototype Test  1 Relief valves other than those fitted to cargo piping and process piping with a design temperature of -55°C or above are to be subjected to prototype tests to verify that they are possess the necessary performance and are to be approved for use in accordance with Chapter 2, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment
Chapter 7 EXPANSION JOINTS (For Cargo Piping and Process Piping Systems)	Chapter 7 EXPANSION JOINTS (For Cargo Piping and Process Piping Systems)	
7.3 Tests and Inspections	7.3 Tests and Inspections	
7.3.1 Type Test  Expansion joints, except for those provided in the piping with open pipe ends and installed in the cargo tanks, are to be subjected to the type test specified in 5.13.1-2, Part N of the Rules for each type. In addition, such expansion joints are to be type approved in accordance with Chapter 2, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	7.3.1 Type Test  Expansion joints, except for those provided in the piping with open pipe ends and installed in the cargo tanks, are to be subjected to the type test specified in 5.13.1-2, Part N of the Rules for each type. In addition, such expansion joints are to be approved for use in accordance with Chapter 2, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment

Amended	Original Original	Remarks
Chapter 9 LEVEL INDICATORS AND LEVEL ALARMS	Chapter 9 LEVEL INDICATORS AND LEVEL ALARMS	
9.1 General	9.1 General	
<ul> <li>9.1.1 Application</li> <li>1 The level gauges to measure the liquid levels of the cargo in cargo containment system and process pressure vessels and levels in liquid nitrogen tank are to conform to the requirements in Chapter 4, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use.</li> <li>2 The level alarm system that detects one point or more of the specific cargo liquid level in cargo containment system and process pressure vessel is to conform to the requirements in Chapter 4, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use in a</li> </ul>	<ul> <li>9.1.1 Application</li> <li>1 The level gauges to measure the liquid levels of the cargo in cargo containment system and process pressure vessels and levels in liquid nitrogen tank are to conform to the requirements in Chapter 4, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.</li> <li>2 The level alarm system that detects one point or more of the specific cargo liquid level in cargo containment system and process pressure vessel is to conform to the requirements in Chapter 4, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine</li> </ul>	Changes due to the renaming of the "Guidance for the Approval"  Changes due to the renaming of the "Guidance for the Approval"
Chapter 10 PRESSURE GAUGES	Use in a corresponding manner.  Chapter 10 PRESSURE GAUGES	
10.5 Electrical Installations	10.5 Electrical Installations	
<ul> <li>10.5.1 General</li> <li>2 The electrical installations of pressure gauges are to be subjected to the tests corresponding to the Environmental Test in accordance with the requirements in Chapter 1, Part 7 of</li> </ul>	<ul> <li>10.5.1 General</li> <li>2 The electrical installations of pressure gauges are to be subjected to the tests corresponding to the Environmental Test in accordance with the requirements in Chapter 1, Part 7 of</li> </ul>	Changes due to the renaming of the "Guidance for the Approval"

	provar of Materials and Equipment for Marine Ose)	
Amended	Original	Remarks
the Guidance for the Approval of Materials and Equipment for Marine Use and to pass the testing requirements.  Chapter 11 TEMPERATURE INDICATING	the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use and to pass the testing requirements.  Chapter 11 TEMPERATURE INDICATING	
DEVICES  11.4 Electrical Installations	DEVICES  11.4 Electrical Installations	
11.4.1 General  2 The electrical installations of the temperature indicating devices are to be subjected to the environmental test specified in the requirements in Chapter 1, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use and to pass the testing requirements.	11.4.1 General  2 The electrical installations of the temperature indicating devices are to be subjected to the environmental test specified in the requirements in Chapter 1, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use and to pass the testing requirements.	Changes due to the renaming of the "Guidance for the Approval"
(Delete)	Chapter 12 INSULATION MATERIALS  (Chapter 12 text is omitted)	In order to add "TYPE APPROVAL OF INSULATION MATERIALS USED IN CARGO CONTAINMENT SYSTEMS FOR LIQUEFIED GASES" to
		Chapter 7, Part 5 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine

Amended	Original	Remarks
Chapter 14 OXYGEN CONTENT MEASURING EQUIPMENT	Chapter 14 OXYGEN CONTENT MEASURING EQUIPMENT	Use, the current requirement have been deleted.(Transfer from Annex 1 of Part N and GF.)
14.4 Tests and Inspection  14.4.2 Approval Tests for Use	14.4 Tests and Inspection  14.4.2 Approval Tests for Use	Terminology alignment
Chapter 20 CARGO HOSES  20.5 Tests and Inspection	Chapter 20 CARGO HOSES  20.5 Tests and Inspection	
20.5.1 Type approval Test  1 In principle, cargo hoses are to be subjected to the prototype tests in -2 for each type and hose bore and are to be type approved in accordance with Chapter 2, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	20.5.1 Approval Test for Use  1 In principle, cargo hoses are to be subjected to the prototype tests in -2 for each type and hose bore and are to be approved for use in accordance with Chapter 2, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment
20.5.2 Product Inspection  When the hoses type approved are shipped, each hose is to be subjected to the following tests and inspection (1) to (3) in the attendance of the Surveyor:  ((1) to (3) are omitted)	20.5.2 Product Inspection  When the hoses approved for use are shipped, each hose is to be subjected to the following tests and inspection (1) to (3) in the attendance of the Surveyor:  ((1) to (3) are omitted)	Terminology alignment

Amended	Original Original	Remarks
GUIDANCE FOR THE SURVEY AND	GUIDANCE FOR THE SURVEY AND	
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS	
Part S SHIPS CARRYING DANGEROUS CHEMICALS IN BULK	Part S SHIPS CARRYING DANGEROUS CHEMICALS IN BULK	
S5 CARGO TRANSFER	S5 CARGO TRANSFER	
S5.4 Tests Requirements for Piping	S5.4 Tests Requirements for Piping	
S5.4.1 Application	S5.4.1 Application	
pipe joints of a slip-on sleeve welded type (such treatment is carried out during their manufacturin	omitted) al standards such as <i>ISO</i> , <i>JIS</i> , etc. may be used for pipe joints of butt welded type and has elbows, reducers, tees, bends and sockets, etc.) for which hot forming or heat g process in accordance with the requirements of D12.6.1-1(1)(a)ii) on the condition ty in accordance with Chapter 12, Part 6 of the Guidance for the Approval and	Changes due to the renaming of the "Guidance for the Approval" Terminology alignment

Amended	Original	Remarks
S13 INSTRUMENTATION	S13 INSTRUMENTATION	
S13.1 Gauging	S13.1 Gauging	
S13.1.1 Types of Gauging Devices  5 The performance and construction of liquid level indicator are to have been approved in accordance with the Guidance for the Approval of Materials and Equipment for Marine Use.	S13.1.1 Types of Gauging Devices  5 The performance and construction of liquid level indicator are to have been approved in accordance with the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval"
S15 SPECIAL REQUIREMENTS	S15 SPECIAL REQUIREMENTS	
S15.19 Overflow Control	S15.19 Overflow Control	
S15.19.6 Installation of High Level Alarm  The level detecting devices used for high level alarm system and overflow control system are to be of type approved in accordance with the requirements of Chapter 4, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use. When modular units are provided in the control room or on bridge, level indicators and visible alarms independent from those (a), (b) and (c) given in the preceding S15.19.5 are to be provided. Such audible alarms are not intended to identify alarms and thus they may not necessarily be independent. Visible and audible alarms are to be provided also in the cargo areas. Visible alarms are to be provided at such locations readily recognizable also from shore side. In	S15.19.6 Installation of High Level Alarm  The level detecting devices used for high level alarm system and overflow control system are to be of type approved in accordance with the requirements of Chapter 4, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use. When modular units are provided in the control room or on bridge, level indicators and visible alarms independent from those (a), (b) and (c) given in the preceding S15.19.5 are to be provided. Such audible alarms are not intended to identify alarms and thus they may not necessarily be independent. Visible and audible alarms are to be provided also in the cargo areas. Visible alarms are to be provided at such locations readily	Changes due to the renaming of the "Guidance for the Approval"

Amended	Original	Remarks
case where no control room is provided, audible and visible	recognizable also from shore side. In case where no control	
alarms are to be provided in the cargo control room. Except	room is provided, audible and visible alarms are to be	
for entering the cargo tanks which have thoroughly been	provided in the cargo control room. Except for entering the	
washed clean, the testing device for detecting ends is to be	cargo tanks which have thoroughly been washed clean, the	
provided outside the tank. Simulation test of electric circuit or	testing device for detecting ends is to be provided outside the	
self-monitoring circuit may be accepted.	tank. Simulation test of electric circuit or self-monitoring	
	circuit may be accepted.	

Amended	Original	Remarks	
GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS	GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS		
Part P MOBILE OFFSHORE DRILLING UNITS AND SPECIAL PURPOSE BARGES	Part P MOBILE OFFSHORE DRILLING UNITS AND SPECIAL PURPOSE BARGES		
P10 POSITIONING SYSTEMS	P10 POSITIONING SYSTEMS		
P10.7 Dynamic Positioning Systems	P10.7 Dynamic Positioning Systems		
P10.7.1 General	P10.7.1 General		
1 The DP-control systems and computer systems used for the Class 2 DPS and Class 3 DPS are to be approved by the Society in accordance with the requirements of Chapter 1, Part 7 of the Guidance for the Approval of Materials and	1 The DP-control systems and computer systems used for the Class 2 DPS and Class 3 DPS are to be approved by the Society in accordance with the requirements of Chapter 1, Part 7 of the Guidance for the Approval and Type	Changes due to the renaming of the "Guidance for the Approval"	ie
Equipment for Marine Use.  2 The DP-control systems and computer systems used for the Class 1 DPS, as a rule, are to be approved by the Society in accordance with the requirements of Chapter 1, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use as far as practicable.	Approval of Materials and Equipment for Marine Use.  2 The DP-control systems and computer systems used for the Class 1 DPS, as a rule, are to be approved by the Society in accordance with the requirements of Chapter 1, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use as far as practicable.	Changes due to the renaming of the "Guidance for the Approval"	ie

Amended	Original	Remarks
P12 ELECTRICAL INSTALLATIONS	P12 ELECTRICAL INSTALLATIONS	
P12.1 General	P12.1 General	
P12.1.3 Tests	P12.1.3 Tests	
The wording "to be subject to type tests" in 12.1.3-3,		Changes due to the
Part P of the Rules means Part 8 of the "Guidance for the	Part P of the Rules means Part 8 of the "Guidance for the	renaming of the
Approval of Materials and Equipment for Marine Use".	Approval and Type Approval of Materials and Equipment	"Guidance for the
Equipment and cables approved are made public on the "List		Approval"
of Approved Materials and Equipment".	public on the "List of Approved Materials and Equipment".	

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND	GUIDANCE FOR THE SURVEY AND	
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS	
Part PS FLOATING OFFSHORE FACILITIES FOR CRUDE OIL/PETROLEUM GAS PRODUCTION, STORAGE AND OFFLOADING	Part PS FLOATING OFFSHORE FACILITIES FOR CRUDE OIL/PETROLEUM GAS PRODUCTION, STORAGE AND OFFLOADING	
PS8 ELECTRICAL INSTALLATIONS	PS8 ELECTRICAL INSTALLATIONS	
PS8.1 General	PS8.1 General	
PS8.1.3 Tests  2 The wording "to be subject to type tests" in 8.1.3-3, Part PS of the Rules means Part 8 of the Guidance for the Approval of Materials and Equipment for Marine Use. Equipment and cables approved for use are made public on the "List of Approved Materials and Equipment".	PS8.1.3 Tests  2 The wording "to be subject to type tests" in 8.1.3-3, Part PS of the Rules means Part 8 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use. Equipment and cables approved for use are made public on the "List of Approved Materials and Equipment".	Changes due to the renaming of the "Guidance for the Approval"

Amended	Original Original	Remarks
GUIDANCE FOR THE SURVEY AND	GUIDANCE FOR THE SURVEY AND	
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS	
Part R FIRE PROTECTION, DETECTION AND EXTINCTION	Part R FIRE PROTECTION, DETECTION AND EXTINCTION	
R4 PROBABILITY OF IGNITION	R4 PROBABILITY OF IGNITION	
R4.2 Arrangements for Oil Fuel, Lubrication Oil and Other Flammable Oils	R4.2 Arrangements for Oil Fuel, Lubrication Oil and Other Flammable Oils	
R4.2.2 Arrangements for Oil Fuel  9 The wording "the approved ones by the Society" in 4.2.2(3)(e)ii), Part R of the Rules means the oil level gauges approved in accordance with the requirements of Chapter 4, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use and the wording "the standard deemed approved by the Society" means the JIS F 7215 "Flat glass oil level gauges" or equivalent.	R4.2.2 Arrangements for Oil Fuel  9 The wording "the approved ones by the Society" in 4.2.2(3)(e)ii), Part R of the Rules means the oil level gauges approved in accordance with the requirements of Chapter 4, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use and the wording "the standard deemed approved by the Society" means the JIS F 7215 "Flat glass oil level gauges" or equivalent.	Changes due to the renaming of the "Guidance for the Approval"
R4.5 Cargo Areas of Tankers	R4.5 Cargo Areas of Tankers	
R4.5.3 Cargo Tank Venting  3 The design, arrangement, etc. of devices to prevent the passage of flame (hereinafter referred to as the devices in	R4.5.3 Cargo Tank Venting  3 The design, arrangement, etc. of devices to prevent the passage of flame (hereinafter referred to as the devices in	

Amended	Original	Remarks
R4.5.3) specified in 4.5.3-3, Part R of the Rules are to comply with the following requirements.  (1) Terms used in this Chapter are defined as follows.  (a) A device to prevent the passage of flame is a device to prevent the passage of flame through the venting system into the cargo tanks, and includes a flame screen, a flame arrester, a detonation flame arrester and a high velocity device. Such devices are to be of approved type in accordance with the provisions of Chapter 7, Part 6 of Guidance for the Approval of Materials and Equipment for Marine Use, or those deemed as equivalent by the Society.  ((b) to (g) are omitted)  ((2) to (6) are omitted)	R4.5.3) specified in 4.5.3-3, Part R of the Rules are to comply with the following requirements.  (1) Terms used in this Chapter are defined as follows.  (a) A device to prevent the passage of flame is a device to prevent the passage of flame through the venting system into the cargo tanks, and includes a flame screen, a flame arrester, a detonation flame arrester and a high velocity device. Such devices are to be of approved type in accordance with the provisions of Chapter 7, Part 6 of Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use, or those deemed as equivalent by the Society.  ((b) to (g) are omitted)  ((2) to (6) are omitted)	Changes due to the renaming of the "Guidance for the Approval"
R11 STRUCTURAL INTEGRITY	R11 STRUCTURAL INTEGRITY	
R11.6 Protection of Cargo Tank Structure against Pressure or Vacuum	R11.6 Protection of Cargo Tank Structure against Pressure or Vacuum	
R11.6.1 General  The performance, installation procedures, etc. of pressure/vacuum valves (hereinafter referred to as "PV valves") specified in 11.6.1(1), Part R of the Rules are to comply with the following requirements. The wording "the procedure deemed appropriate by the Society" in 11.6.1(1), Part R of the Rules means the procedure specified in	R11.6.1 General  The performance, installation procedures, etc. of pressure/vacuum valves (hereinafter referred to as "PV valves") specified in 11.6.1(1), Part R of the Rules are to comply with the following requirements. The wording "the procedure deemed appropriate by the Society" in 11.6.1(1), Part R of the Rules means the procedure specified in	Changes due to the renaming of the "Guidance for the Approval"

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)

(Review of Guidance for the Ap	(Review of Guidance for the Approval of Materials and Equipment for Marine Use)								
Amended	Original	Remarks							
Chapter 7, Part 6 of "Guidance for the Approval of Materials and Equipment for Marine Use". Approved PV valves are made public on "List of approved materials and equipment".  ((1) to (3) are omitted)	Chapter 7, Part 6 of "Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use". Approved PV valves are made public on "List of approved materials and equipment".  ((1) to (3) are omitted)								
R11.6.3 Safety Measures in Cargo Tanks  1 The design, arrangement, etc. of high level alarms and level detecting devices of an overflow control system specified in 11.6.3-1, Part R of the Rules are to comply with the following requirements. The wording "procedure deemed appropriate by the Society" in 11.6.3-1, Part R of the Rules means the procedure specified in Chapter 7, Part 6 of Guidance for the Approval of Materials and Equipment for Marine Use. Approved high level alarms and level detecting devices are made public on "List of approved materials and equipment".  ((1) and (2) are omitted)	R11.6.3 Safety Measures in Cargo Tanks  1 The design, arrangement, etc. of high level alarms and level detecting devices of an overflow control system specified in 11.6.3-1, Part R of the Rules are to comply with the following requirements. The wording "procedure deemed appropriate by the Society" in 11.6.3-1, Part R of the Rules means the procedure specified in Chapter 7, Part 6 of Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use. Approved high level alarms and level detecting devices are made public on "List of approved materials and equipment".  ((1) and (2) are omitted)	Changes due to the renaming of the "Guidance for the Approval"							
<ul> <li>3 "A secondary means of allowing full flow relief of vapour, air or inert gas mixtures" specified in 11.6.3-2, Part R of the Rules is to comply with the following requirements: <ol> <li>The venting arrangements specified in 11.6.1(2), Part R of the Rules, the rupture disks or the pressure-vacuum breaking devices may be used as a secondary means. The rupture disk is to be of a type approved by the Society in accordance with the provisions of Chapter 7, Part 6 of Guidance for the Approval of Materials and Equipment for Marine Use.</li> </ol> </li> <li>((2) and (3) are omitted)</li> <li>The pressure monitoring system specified in 11.6.3-2,</li> </ul>	3 "A secondary means of allowing full flow relief of vapour, air or inert gas mixtures" specified in 11.6.3-2, Part R of the Rules is to comply with the following requirements:  (1) The venting arrangements specified in 11.6.1(2), Part R of the Rules, the rupture disks or the pressure-vacuum breaking devices may be used as a secondary means. The rupture disk is to be of a type approved by the Society in accordance with the provisions of Chapter 7, Part 6 of Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  ((2) and (3) are omitted)  4 The pressure monitoring system specified in 11.6.3-2,	Changes due to the renaming of the "Guidance for the Approval"							

(	(Review of	Guidance	for the	Approval	of Mate	erials and	Eaui	pment for	Marine	Use)

Amended	Original	Remarks
Part R of the Rules is to comply with the following requirements in addition to the requirements specified in 11.6.3-2, Part R of the Rules:  (1) The pressure monitoring system is to be of an approved type by the Society in accordance with the provisions of Chapter 7, Part 6 of Guidance for the Approval of Materials and Equipment for Marine Use.  ((2) to (7) are omitted)	Part R of the Rules is to comply with the following requirements in addition to the requirements specified in 11.6.3-2, Part R of the Rules:  (1) The pressure monitoring system is to be of an approved type by the Society in accordance with the provisions of Chapter 7, Part 6 of Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  ((2) to (7) are omitted)	Changes due to the renaming of the "Guidance for the Approval"
R21 SPECIAL REQUIREMENTS FOR SMALL SHIPS AND SHIPS FOR RESTRICTED SERVICE  R21.2 Special Requirements	R21 SPECIAL REQUIREMENTS FOR SMALL SHIPS AND SHIPS FOR RESTRICTED SERVICE  R21.2 Special Requirements	
R21.2.1 Requirements for Ships of less than 500 Gross Tonnage  8 With respect to the provisions of 4.5.3-3, Part R of the Rules, suitable wire gauze complying with the requirements in 7.4.2-2(3)(a)i) through ix) and (b), Part 6 of GUIDANCE FOR THE APPROVAL OF MATERIALS AND EQUIPMENT FOR MARINE USE and those in D14.3.2-3(1) may be substituted for the flame screen or flame arrester to be fitted at the openings specified in R4.5.3-3(2)(a); and a flame screen or such wire gauze may be substituted for the flame arrester to be fitted at the openings specified in R4.5.3-3(2)(b). Flame arresters required for openings specified in R4.5.3-3(2) may be of a type for which an endurance burning test is dispensed with. High velocity	R21.2.1 Requirements for Ships of less than 500 Gross Tonnage  8 With respect to the provisions of 4.5.3-3, Part R of the Rules, suitable wire gauze complying with the requirements in 7.4.2-2(3)(a)i) through ix) and (b), Part 6 of GUIDANCE FOR THE APPROVAL AND TYPE APPROVAL OF MATERIALS AND EQUIPMENT FOR MARINE USE and those in D14.3.2-3(1) may be substituted for the flame screen or flame arrester to be fitted at the openings specified in R4.5.3-3(2)(a); and a flame screen or such wire gauze may be substituted for the flame arrester to be fitted at the openings specified in R4.5.3-3(2)(b). Flame arresters required for openings specified in R4.5.3-3(2) may be of a type for which an endurance burning test is dispensed with.	Changes due to the renaming of the "Guidance for the Approval"

Amended	Original	Remarks
devices required for outlets specified in R4.5.3-3(2)(b) and (c)	High velocity devices required for outlets specified in R4.5.3-	
may be of a type for which a flash back test and an endurance	3(2)(b) and (c) may be of a type for which a flash back test	
burning test are dispensed with.	and an endurance burning test are dispensed with.	



(	Review	of Guidai	nce for the	Approval	of Mater	rials and	Eaui	pment for	Marine 1	Use)
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Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND	GUIDANCE FOR THE SURVEY AND	
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS	
Part X COMPUTER-BASED SYSTEMS	Part X COMPUTER-BASED SYSTEMS	
X3 COMPUTER-BASED SYSTEMS	X3 COMPUTER-BASED SYSTEMS	
X3.2 Approval of Systems and Components	X3.2 Approval of Systems and Components	
X3.2.1 System Certification  The wording "requirements specified otherwise by the Society" in 3.2.1-2, Part X of the Rules, means confirmation of the following when assessments are carried out based on the Rules for Approval of Manufacturers and Service Suppliers.  (1) The computer-based system in question is to acquire the type approval (including the approval of quality plan (and quality manual) specified in 2.2.1-1, Part X of the Rules) specified in 3.2.2, Part X of the Rules.  Tests for approval of use may be carried out at the same time as an assessment based on the Rules for Approval of Manufacturers and Service Suppliers.  (2) The manufacturers in question perform quality management based on the quality plan (and quality manual) specified in 2.2.1-1, Part X of the Rules.	X3.2.1 System Certification  The wording "requirements specified otherwise by the Society" in 3.2.1-2, Part X of the Rules, means confirmation of the following when assessments are carried out based on the Rules for Approval of Manufacturers and Service Suppliers.  (1) The computer-based system in question is to acquire the approval of use (including the approval of quality plan (and quality manual) specified in 2.2.1-1, Part X of the Rules) specified in 3.2.2, Part X of the Rules.  Tests for approval of use may be carried out at the same time as an assessment based on the Rules for Approval of Manufacturers and Service Suppliers.  (2) The manufacturers in question perform quality management based on the quality plan (and quality manual) specified in 2.2.1-1, Part X of the Rules.	Terminology alignment

Amended	Original	Remarks	
GUIDANCE FOR MARINE POLLUTION	GUIDANCE FOR MARINE POLLUTION		
PREVENTION SYSTEMS	PREVENTION SYSTEMS		
FREVENTION SYSTEMS	FREVENTION SISIEMS		
D. 47 EQUIDMENT EOD THE DDEVENTION	D. 47 FOLLDWENE FOR THE DREVENITION		
Part 7 EQUIPMENT FOR THE PREVENTION	Part 7 EQUIPMENT FOR THE PREVENTION		
OF POLLUTION BY SEWAGE	OF POLLUTION BY SEWAGE		
Chapter 2 EQUIPMENT FOR THE	Chapter 2 EQUIPMENT FOR THE		
PREVENTION OF POLLUTION BY SEWAGE	PREVENTION OF POLLUTION BY SEWAGE		
FROM SHIPS	FROM SHIPS		
2.2 Requirements for Installation of Equipment	2.2 Requirements for Installation of Equipment		
2.2.1 Equipment for the Prevention of Pollution by	2.2.1 Equipment for the Prevention of Pollution by		
Sewage  The "sewage treatment plant as deemed appropriate by	Sewage 1 The "sewage treatment plant as deemed appropriate by		
the Society" referred to in 2.2.1(1)(a)i), Part 7 of the Rules	the Society" referred to in 2.2.1(1)(a)i), Part 7 of the Rules		
means one that satisfies the following:	means one that satisfies the following:		
(1) It complies with one of the following (a) to (c) in	(1) It complies with one of the following (a) to (c) in		
addition to either being approved by the Society in	addition to either being approved by the Society in		
accordance with Chapter 8, Part 3 of the Guidance	accordance with Chapter 8, Part 2 of the Guidance	Changes due t	to the
for the Approval of Materials and Equipment for	for the Approval and Type Approval of Materials	renaming of	the
Marine Use or having passed an inspection by an	and Equipment for Marine Use or having passed an	"Guidance for	the
organization authorized by the Administration or	inspection by an organization authorized by the	Approval"	
deemed appropriate by the Society.	Administration or deemed appropriate by the Society.		
((a) to (c) are omitted)	((a) to (c) are omitted)		
(2) (Omitted)	(2) (Omitted)	Changes	41
2 The wording "sewage comminuting and disinfecting	2 The wording "sewage comminuting and disinfecting	Changes due t	to the

Amended	Original	Remarks	
system as deemed appropriate by the Society" referred to in	system as deemed appropriate by the Society" referred to in	renaming of	the
2.2.1(1)(a)ii), Part 7 of the Rules means one that satisfies the	2.2.1(1)(a)ii), Part 7 of the Rules means one that satisfies the	"Guidance for	the
following:	following:	Approval"	
(1) It is approved by the Society in accordance with	(1) It is approved by the Society in accordance with		
Chapter 8, Part <u>3</u> of the Guidance for the Approval	Chapter 8, Part <u>2</u> of the Guidance for the Approval		
of Materials and Equipment for Marine Use or	and Type Approval of Materials and Equipment		
have passed an inspection by an organization	for Marine Use or have passed an inspection by an		
authorized by the Administration or deemed	organization authorized by the Administration or		
appropriate by the Society.	deemed appropriate by the Society.		
(2) (Omitted)	(2) (Omitted)		
6 The "sewage treatment plant as deemed appropriate by	6 The "sewage treatment plant as deemed appropriate by	Changes due to	the
the Society" referred to in 2.2.1(1)(b)i), Part 7 of the Rules	the Society" referred to in 2.2.1(1)(b)i), Part 7 of the Rules	renaming of	the
means one that satisfies the following:	means one that satisfies the following:	"Guidance for Approval"	the
(1) It complies with the requirements of <i>IMO Res</i> .	(1) It complies with the requirements of IMO Res.	Approvar	
MEPC.227(64) (including 4.2 of the Annex), as	MEPC.227(64) (including 4.2 of the Annex), as		
amended by <i>IMO Res</i> . MEPC.284(70), in addition to	amended by <i>IMO Res</i> . MEPC.284(70), in addition to		
either being approved by the Society in accordance	either being approved by the Society in accordance		
with Chapter 8, Part 3 of the Guidance for the	with Chapter 8, Part 2 of the Guidance for the		
Approval of Materials and Equipment for Marine	Approval and Type Approval of Materials and		
Use or having passed an inspection by an	Equipment for Marine Use or having passed an		
organization authorized by the Administration or	inspection by an organization authorized by the		
deemed appropriate by the Society.	Administration or deemed appropriate by the		
	Society.		
(2) (Omitted)	(2) (Omitted)		

Amended	Original	Remarks
GUIDANCE FOR CARGO REFRIGERATING	GUIDANCE FOR CARGO REFRIGERATING	
INSTALLATIONS	INSTALLATIONS	
Chapter 3 REFRIGERATING MACHINERY	Chapter 3 REFRIGERATING MACHINERY	
3.1 General	3.1 General	
3.1.3 Materials and Welding	3.1.3 Materials and Welding	
The wording "to be approved by the Society" specified to in 3.1.3-6 of the Rules means that approval is to be made in accordance with the requirements in Chapter 2 or 6, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	The wording "to be approved by the Society" specified to in 3.1.3-6 of the Rules means that approval is to be made in accordance with the requirements in Chapter 2 or 6, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval"

Amended	Original	Remarks
GUIDANCE FOR PREVENTIVE MACHINERY	GUIDANCE FOR PREVENTIVE MACHINERY	
MAINTENANCE SYSTEMS	MAINTENANCE SYSTEMS	
Chapter 2 SURVEYS	Chapter 2 SURVEYS	
2.2 Registration Surveys	2.2 Registration Surveys	
<ul> <li>2.2.2 Shop Tests</li> <li>2 Test procedures for environmental tests are to be in accordance with Chapter 1, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use.</li> </ul>	2.2.2 Shop Tests  2 Test procedures for environmental tests are to be in accordance with Chapter 1, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval"

Amended	Original	Remarks
GUIDANCE FOR CENTRALIZED CARGO	GUIDANCE FOR CENTRALIZED CARGO	
MONITORING AND CONTROL SYSTEMS	MONITORING AND CONTROL SYSTEMS	
Chapter 2 SURVEYS	Chapter 2 SURVEYS	
2.2 Registration Surveys	2.2 Registration Surveys	
2.2.2 Shop Tests	2.2.2 Shop Tests	
1 The wording "deemed appropriate by the Society" specified in 2.2.2 of the Rules means devices satisfy the	1 The wording "deemed appropriate by the Society" specified in 2.2.2 of the Rules means devices satisfy the	Changes due to the renaming of the
requirements specified in Chapters 1 and 4, Part 7 of the	requirements specified in Chapters 1 and 4, Part 7 of the	"Guidance for the
Guidance for the Approval of Materials and Equipment	Guidance for the Approval and Type Approval of	Approval"
for Marine Use.	Materials and Equipment for Marine Use.	

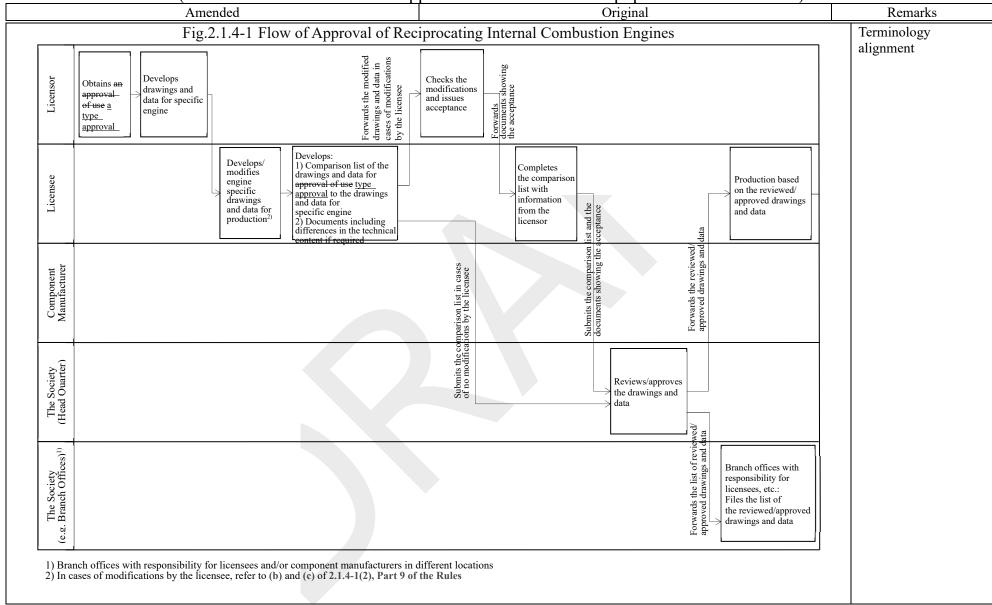
(Review of Guidance for the Approval of Materials and Equipment for Marine Use)
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Amended	Original	Remarks
GUIDANCE FOR HIGH SPEED CRAFT	GUIDANCE FOR HIGH SPEED CRAFT	
Part 9 MACHINERY INSTALLATIONS	Part 9 MACHINERY INSTALLATIONS	
Chapter 2 RECIPROCATING INTERNAL COMBUSTION ENGINES	Chapter 2 RECIPROCATING INTERNAL COMBUSTION ENGINES	
2.1 General	2.1 General	
2.1.1 General 1 The wording "as specified separately by the Society" specified in 2.1.1-2, Part 9 of the Rules means "in accordance with Chapter 8, Part 6 of Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use".	2.1.1 General 1 The wording "as specified separately by the Society" specified in 2.1.1-2, Part 9 of the Rules means "in accordance with Chapter 8, Part 6 of Guidance for the Approval of Materials and Equipment for Marine Use".	Changes due to the renaming of the "Guidance for the Approval"
2.1.4 Approval of Reciprocating Internal Combustion Engines  2 The phrase "design approval is to be obtained as specified separately by the Society" specified in 2.1.4-1(1)(a), Part 9 of the Rules means that the design approval and design appraisal are to be obtained in accordance with Chapter 8, Part 6 of Guidance for the Approval of Materials and Equipment for Marine Use.  3 The wording "the drawings and data of the engine of the specific states of the engine of the specific states."	2.1.4 Approval of Reciprocating Internal Combustion Engines  2 The phrase "design approval is to be obtained as specified separately by the Society" specified in 2.1.4-1(1)(a), Part 9 of the Rules means that the design approval and design appraisal are to be obtained in accordance with Chapter 8, Part 6 of Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  3 The wording "the drawings and data of the engine	Changes due to the renaming of the "Guidance for the Approval"  Changes due to the
3 The wording "the drawings and data of the engine whose type approval has been obtained" specified in (1)(c), (1)(d), (2)(a) and (2)(b) of 2.1.4-1, Part 9 of the Rules means	3 The wording "the drawings and data of the engine whose approval of use has been obtained" specified in (1)(c), (1)(d), (2)(a) and (2)(b) of 2.1.4-1, Part 9 of the Rules means	renaming of the "Guidance for the Approval"

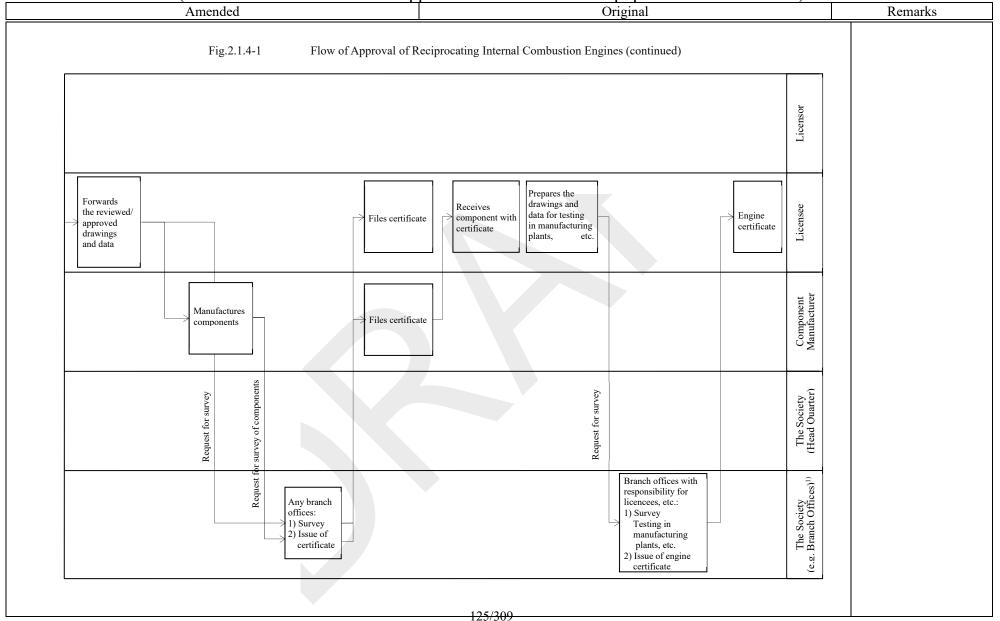
(	Review or	f Guidance	for the Appro	oval of Mate	erials and	Equipme	nt for Marine	Use)
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Amended	Original	Remarks
those listed in 8.2.2, Part 6 of Guidance for the Approval of	those listed in 8.2.2, Part 6 of Guidance for the Approval	Terminology alignment
Materials and Equipment for Marine Use.	and Type Approval of Materials and Equipment for	
	Marine Use.	
4 The wording "as specified separately by the Society"	4 The wording "as specified separately by the Society"	Changes due to the renaming of the
specified in 2.1.4-1(1)(d), Part 9 of the Rules means "in	specified in 2.1.4-1(1)(d), Part 9 of the Rules means "in	"Guidance for the
accordance with 8.2.2-2, Part 6 of Guidance for the	accordance with 8.2.2-2, Part 6 of Guidance for the	Approval"
Approval of Materials and Equipment for Marine Use".	Approval and Type Approval of Materials and Equipment	T-PPT-0 - WI
	for Marine Use".	
6 The wording "as specified separately by the Society"	6 The wording "as specified separately by the Society"	Changes due to the
specified in 2.1.4-1(4)(a), Part 9 of the Rules means "in	specified in 2.1.4-1(4)(a), Part 9 of the Rules means "in	renaming of the "Guidance for the
accordance with 8.2.2-4, Part 6 of Guidance for the	accordance with 8.2.2-4, Part 6 of Guidance for the	Approval"
Approval of Materials and Equipment for Marine Use".	Approval and Type Approval of Materials and Equipment	Approvar
	for Marine Use".	
2.1.5 Construction, Installation and General	2.1.5 Construction, Installation and General	

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)



(Review of Guidance for the Approval of Materials and Equipment for Marine Use)



Amended	Original	Remarks
Chapter 7 PIPES, VALVES PIPE FITTINGS AND AUXILIARIES	Chapter 7 PIPES, VALVES PIPE FITTINGS AND AUXILIARIES	
7.1 General	7.1 General	
<ul> <li>7.1.2 Materials The wording "requirements specified otherwise" in 7.1.2, Part</li> <li>9 of the Rules means as follows. (1) In cases where rubber hoses, Teflon hoses or nylon hoses are used for the following pipes, only materials approved in accordance with the Guidance for the Approval of Materials and Equipment for Marine Use are to be used. (a) Pipes of Group I or Group II (b) Pipes likely to cause fire or flooding in case of their fracture (2) Only plastics pipes (including vinyl pipes) approved by the Society in accordance with Chapter 6, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use are to be used. (3) and (4) are omitted)</li> </ul>	7.1.2 Materials  The wording "requirements specified otherwise" in 7.1.2,  Part 9 of the Rules means as follows.  (1) In cases where rubber hoses, Teflon hoses or nylon hoses are used for the following pipes, only materials approved in accordance with the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use are to be used.  (a) Pipes of Group I or Group II  (b) Pipes likely to cause fire or flooding in case of their fracture  (2) Only plastics pipes (including vinyl pipes) approved by the Society in accordance with Chapter 6, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use are to be used.  ((3) and (4) are omitted)	Changes due to the renaming of the "Guidance for the Approval"  Changes due to the renaming of the

Amended					Origi	inal		Rema	rks	
Part 10	ELECTRICAL	INSTALLATIONS	Part 1	0	ELECT	RICAL I	<b>NSTALLATIONS</b>	3		
CI	hapter 1 GEN	NERAL		Ch	napter 1	GEN	ERAL			
1.2 Testing			1.2	Testing						
1.2.1 Shop To	ests		1.2.1	Shop T	Tests					
3 The wording	g "to be subjected to	type test" in 1.2.1-3, Part	3	The wordi	ing "to be	subjected t	to type test" in 1.2.1-3	3, Changes of	due to	the
10 of the Rules me	ans Part 8 of the Gu	idance for the Approval	Part 10	of the Ru	ules means	s Part 8 of	the Guidance for th	e renaming	of	the
of Materials and	<b>Equipment for M</b>	Iarine Use. Cables type	A A				of Materials and	A nnroval"	for	the
tested are made p	ublic in the List of	Approved Materials and					type tested are mad	e Approval"		
Equipment.			public i	n the List	of Approv	ed Materia	ls and Equipment.			

(	Review of Guidance for	or the Approval	of Materials and Ed	quipment for Marine Use)

Amended	Original	Remarks
GUIDANCE FOR HIGH SPEED CRAFT	GUIDANCE FOR HIGH SPEED CRAFT	
Part 2 CLASS SURVEY	Part 2 CLASS SURVEY	
Chapter 2 CLASSIFICATION SURVEYS	Chapter 2 CLASSIFICATION SURVEYS	
2.1 Classification Survey during Construction	2.1 Classification Survey during Construction	
<ul> <li>2.1.8 Verification of Coating Application</li> <li>2 The "certificate deemed appropriate by the Society" stipulated in 2.1.8(1), Part 2 of the Rules refers to one of the following (1) to (3): <ol> <li>The Society's approval certificate specified in Chapter 4, Part 5 of Guidance for the Approval of Materials and Equipment for Marine Use</li> <li>Statement of Compliance issued by the Research Institute of Marine Engineering, Japan (RIME), the Japan Paint Inspection and testing Association or MARINTEK</li> <li>Other documents approved by the Society</li> </ol> </li></ul>	<ul> <li>2.1.8 Verification of Coating Application</li> <li>2 The "certificate deemed appropriate by the Society" stipulated in 2.1.8(1), Part 2 of the Rules refers to one of the following (1) to (3): <ol> <li>The Society's approval certificate specified in Chapter 4, Part 4 of Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use</li> <li>Statement of Compliance issued by the Research Institute of Marine Engineering, Japan (RIME), the Japan Paint Inspection and testing Association or MARINTEK</li> <li>Other documents approved by the Society</li> </ol> </li></ul>	"Guidance for the Approval"

Amended	Original	Remarks
Part 3 HULL CONSTRUCTION AND EQUIPMENT	Part 3 HULL CONSTRUCTION AND EQUIPMENT	
Chapter 6 WATERTIGHT BULKHEAD AND THE OPENING	Chapter 6 WATERTIGHT BULKHEAD AND THE OPENING	
6.3 Openings of Watertight Bulkhead	6.3 Openings of Watertight Bulkhead	
<ul> <li>6.3.2 Pipes and Penetrations</li> <li>3 The application of 6.3.2-3, Part 3 of the Rules is to comply with the following (1) to (7).  ((1) to (5) are omitted)</li> <li>(6) Penetrations used for the passage of heat sensitive piping systems through watertight boundaries are to be tested with heat sensitive piping and are to be approved in accordance with the following (a) to (j).  (a) Chapter 1, Part 5, Guidance for the Approval of Materials and Equipment for Marine Use applies correspondingly to procedures for approval, tests, etc. for pipe penetrations.</li> <li>(b) Approval of the pipe penetrations is to be included a watertightness test which is carried out after completing fire test under provision of Chapter 1 of Part 5 of the Guidance for the Approval of Materials and Equipment for Marine Use.</li> <li>((c) to (i) are omitted)</li> </ul>	6.3.2 Pipes and Penetrations  3 The application of 6.3.2-3, Part 3 of the Rules is to comply with the following (1) to (7).  ((1) to (5) are omitted)  (6) Penetrations used for the passage of heat sensitive piping systems through watertight boundaries are to be tested with heat sensitive piping and are to be approved in accordance with the following (a) to (j).  (a) Chapter 1, Part 4, Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use applies correspondingly to procedures for approval, tests, etc. for pipe penetrations.  (b) Approval of the pipe penetrations is to be included a watertightness test which is carried out after completing fire test under provision of Chapter 1 of Part 4 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  ((c) to (i) are omitted)	Changes due to the renaming of the "Guidance for the Approval"

Amended	Original	Remarks
(7) (Omitted)	(7) (Omitted)	



Amended	Original Original	Remarks
GUIDANCE FOR THE SURVEY AND	GUIDANCE FOR THE SURVEY AND	
CONSTRUCTION OF	CONSTRUCTION OF	
INLAND WATERWAY SHIPS	INLAND WATERWAY SHIPS	
Part 2 CLASS SURVEYS  Chapter 8 PROPELLER SHAFT AND STERN TUBE SHAFT SURVEYS	Part 2 CLASS SURVEYS  Chapter 8 PROPELLER SHAFT AND STERN TUBE SHAFT SURVEYS	
8.1 General	8.1 General	
8.1.2 Preventive Maintenance System of Shafts  2 The wording "Remote monitoring devices for weardown of shaft deemed appropriate by the Society" in 8.1.2-2(7), Part 2 of the Rules means devices approved by the Society in accordance with Chapter 1, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use.	8.1.2 Preventive Maintenance System of Shafts  2 The wording "Remote monitoring devices for weardown of shaft deemed appropriate by the Society" in 8.1.2-2(7), Part 2 of the Rules means devices approved by the Society in accordance with Chapter 1, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval"

Amended	Original Original	Remarks
Part 4 HULL CONSTRUCTION AND EQUIPMENT OF TUGS AND PUSHERS	Part 4 HULL CONSTRUCTION AND EQUIPMENT OF TUGS AND PUSHERS	
Chapter 2 RUDDERS AND STERN FRAMES	Chapter 2 RUDDERS AND STERN FRAMES	
2.1 Rudders	2.1 Rudders	
2.1.13 Bearings of Rudder Stock and Pintles  2 "The type as deemed appropriate by the Society" stipulated in Table 4.2.2, Part 4 of the Rules means that approval is to be made in accordance with the requirements of Chapter 5, Part 5 of Guidance for the Approval of Materials and Equipment for Marine Use.	2.1.13 Bearings of Rudder Stock and Pintles  2 "The type as deemed appropriate by the Society" stipulated in Table 4.2.2, Part 4 of the Rules means that approval is to be made in accordance with the requirements of Chapter 5, Part 4 of Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	Changes due to the renaming of the "Guidance for the Approval"
Part 7 MACHINERY INSTALLATIONS	Part 7 MACHINERY INSTALLATIONS	
Chapter 2 RECIPROCATING INTERNAL COMBUSTION ENGINES	Chapter 2 RECIPROCATING INTERNAL COMBUSTION ENGINES	
2.1 General	2.1 General	
<ul><li>2.1.1 General</li><li>1 The wording "as specified separately by the Society"</li></ul>	<ul><li>2.1.1 General</li><li>1 The wording "as specified separately by the Society"</li></ul>	Changes due to the

· · · · · · · · · · · · · · · · · · ·	Original	Damantra	
Amended	Original	Remarks	
specified in 2.1.1-2, Part 7 of the Rules means "in accordance	specified in 2.1.1-2, Part 7 of the Rules means "in accordance	renaming of	the
with Chapter 8, Part 6 of Guidance for the Approval of	with Chapter 8, Part 6 of Guidance for the Approval and	"Guidance for	the
Materials and Equipment for Marine Use".	Type Approval of Materials and Equipment for Marine	Approval"	
	Use".		
2.1.4 Approval of Reciprocating Internal	2.1.4 Approval of Reciprocating Internal		
<b>Combustion Engines</b>	Combustion Engines		
2 The phrase "design approval is to be obtained as	2 The phrase "design approval is to be obtained as	Changes due to	the
specified separately by the Society" specified in 2.1.4-1(1)(a),	specified separately by the Society" specified in 2.1.4-1(1)(a),	renaming of	the
Part 7 of the Rules means that the design approval and	Part 7 of the Rules means that the design approval and	"Guidance for	the
design appraisal are to be obtained in accordance with	design appraisal are to be obtained in accordance with	Approval"	
Chapter 8, Part 6 of Guidance for the Approval of	Chapter 8, Part 6 of Guidance for the Approval and Type		
Materials and Equipment for Marine Use.	Approval of Materials and Equipment for Marine Use.		
3 The wording "the drawings and data of the	3 The wording "the drawings and data of the	Changes due to	the
		renaming of	the
reciprocating internal combustion engine whose approval of	reciprocating internal combustion engine whose approval of	"Guidance for	the
use has been obtained" specified in (1)(c), (1)(d), (2)(a) and	use has been obtained" specified in (1)(c), (1)(d), (2)(a) and	Approval"	
(2)(b) of 2.1.4-1, Part 7 of the Rules means those listed in	(2)(b) of 2.1.4-1, Part 7 of the Rules means those listed in		
8.2.2, Part 6 of Guidance for the Approval of Materials	8.2.2, Part 6 of Guidance for the Approval and Type		
and Equipment for Marine Use.	Approval of Materials and Equipment for Marine Use.	C1 1	.1
4 The wording "as specified separately by the Society"	4 The wording "as specified separately by the Society"	Changes due to	the
specified in 2.1.4-1(1)(d), Part 7 of the Rules means "in	specified in 2.1.4-1(1)(d), Part 7 of the Rules means "in	renaming of "Guidance for	the the
accordance with 8.2.2-2, Part 6 of Guidance for the	accordance with 8.2.2-2, Part 6 of Guidance for the	Approval"	uic
Approval of Materials and Equipment for Marine Use".	Approval and Type Approval of Materials and Equipment	rippiovai	
	for Marine Use".		
6 The wording "as specified separately by the Society"	6 The wording "as specified separately by the Society"	Changes due to	the
specified in 2.1.4-1(4)(a), Part 7 of the Rules means "in	specified in 2.1.4-1(4)(a), Part 7 of the Rules means "in	renaming of	the
accordance with 8.2.2-4, Part 6 of Guidance for the	accordance with 8.2.2-4, Part 6 of Guidance for the	"Guidance for	the
Approval of Materials and Equipment for Marine Use".	Approval and Type Approval of Materials and Equipment	Approval"	
	for Marine Use".		

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)			
Amended	Original	Remarks	
2.4 Safety Devices	2.4 Safety Devices		
2.4.3 Protection against Crankcase Explosion  1 The wording "explosion relief valves of approved type" in 2.4.3-1, Part 7 of the Rules means those valves approved by the Society in accordance with Chapter 10, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	2.4.3 Protection against Crankcase Explosion  1 The wording "explosion relief valves of approved type" in 2.4.3-1, Part 7 of the Rules means those valves approved by the Society in accordance with Chapter 10, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	renaming of	the the the
2.4.5 Crankcase Oil Mist Detection Arrangements 2 The wording "crankcase oil mist detection arrangements required to be fitted to engines are to be approved type" stipulated in 2.4.5-2, Part 7 of the Rules refers to crankcase oil mist detection arrangement approved in accordance with Chapter 6, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use.	2.4.5 Crankcase Oil Mist Detection Arrangements 2 The wording "crankcase oil mist detection arrangements required to be fitted to engines are to be approved type" stipulated in 2.4.5-2, Part 7 of the Rules refers to crankcase oil mist detection arrangement approved in accordance with Chapter 6, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	renaming of	the the the
2.6 Tests	2.6 Tests		
2.6.1 Shop Tests	2.6.1 Shop Tests		
1 The wording "a procedure deemed appropriate by the Society" in 2.6.1-2(6)(c), Part 7 of the Rules means the tests specified in 8.5.2-2(10), Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	1 The wording "a procedure deemed appropriate by the Society" in 2.6.1-2(6)(c), Part 7 of the Rules means the tests specified in 8.5.2-2(10), Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.	renaming of	the the the
4 The wording "procedures deemed appropriate by the Society" in 2.6.1-5, Part 7 of the Rules means the tests specified in Chapter 11, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	4 The wording "procedures deemed appropriate by the Society" in 2.6.1-5, Part 7 of the Rules means the tests specified in Chapter 11, Part 6 of the Guidance for the Approval and Type Approval of Materials and Equipment	renaming of	the the the

Amended	Original	Remarks
Chapter 4 SHAFTINGS  4.2 Materials, Construction and Strength	for Marine Use.  Chapter 4 SHAFTINGS  4.2 Materials, Construction and Strength	
4.2.7 Corrosion Protection of Propeller Shafts and Stern Tube Shafts  2 The wording "corrosion resistant materials approved by the Society" in 4.2.7-1(3) means those materials which have been subjected to approval tests specified in 2.4.2-5, Chapter 2, Part 6 of the "Guidance for the Approval of Materials and Equipment for Marine Use" and then which obtain type approval of machinery and equipment as a corrosion resistant material for propeller shafts or stern tube shafts.	4.2.7 Corrosion Protection of Propeller Shafts and Stern Tube Shafts  2 The wording "corrosion resistant materials approved by the Society" in 4.2.7-1(3) means those materials which have been subjected to approval tests specified in 2.4.2-5, Chapter 2, Part 6 of the "Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use" and then which obtain type approval of use of machinery and equipment as a corrosion resistant material for propeller shafts or stern tube shafts.	Changes due to the renaming of the "Guidance for the Approval"
Chapter 10 PIPES, VALVES, PIPE FITTINGS AND AUXILIARIES	Chapter 10 PIPES, VALVES, PIPE FITTINGS AND AUXILIARIES	
10.1 General	10.1 General	
<ul> <li>10.1.6 Use of Special Materials</li> <li>1 The wording "requirements specified otherwise" in</li> <li>10.1.6-1, Part 7 of the Rules means as follows.</li> <li>(1) In cases where rubber hoses, Teflon hoses or nylon</li> </ul>	10.1.6Use of Special Materials  1 The wording "requirements specified otherwise" in 10.1.6-1, Part 7 of the Rules means as follows.  (1) In cases where rubber hoses, Teflon hoses or nylon	Changes due to the renaming of the "Guidance for the Approval"

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)			
Amended	Original	Remarks	
hoses are used for the following pipes, only materials approved in accordance with the Guidance for the Approval of Materials and Equipment for Marine Use are to be used.  (a) Pipes of Group I or Group II  (b) Pipes likely to cause fire or flooding in cases where they rupture  (2) Only plastic pipes (including vinyl pipes) approved by the Society in accordance with Chapter 6, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use are to be used.  (3) (Omitted)  10.3 Construction of Valves and Pipe Fittings	approved in accordance with the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use are to be used.  (a) Pipes of Group I or Group II  (b) Pipes likely to cause fire or flooding in cases where they rupture  (2) Only plastic pipes (including vinyl pipes) approved by the Society in accordance with Chapter 6, Part 6		
10.3.3 Mechanical Joints  The wording "mechanical joints are to be of a Society approved type" stipulated in 10.3.3-1, Part 7 of the Rules refers to those mechanical joints approved in accordance with Chapter 9, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	10.3.3 Mechanical Joints  The wording "mechanical joints are to be of a Society approved type" stipulated in 10.3.3-1, Part 7 of the Rules refers to those mechanical joints approved in accordance with	Changes due to the renaming of the "Guidance for the Approval"	
10.3.4 Flexible Hose Assemblies 1 The wording "to be approved by the Society" in 10.3.4-2, Part 7 of the Rules means that approval is to be made in accordance with 2.4.2-11, Chapter 2, Part 6 of the Guidance for the Approval of Materials and Equipment for Marine Use.	10.3.4-2, Part 7 of the Rules means that approval is to be made in accordance with 2.4.2-11, Chapter 2, Part 6 of the	Changes due to the renaming of the "Guidance for the Approval"	

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)			
Amended	Original	Remarks	
Chapter 11 PIPING SYSTEMS	Chapter 11 PIPING SYSTEMS		
11.8 Sounding Pipes	11.8 Sounding Pipes		
The wording "a type that has been approved by the Society" in 11.8.4, Part 7 of the Rules means those liquid level indicators approved in accordance with the requirements of Chapter 4, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use and the wording "other standards approved by the Society" means JIS F 7211 "5K level gauges with valves", JIS F 7215 "Flat glass oil level gauges" or any equivalent standards.	The wording "a type that has been approved by the Society" in 11.8.4, Part 7 of the Rules means those liquid level indicators approved in accordance with the requirements of Chapter 4, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use and the wording "other standards approved by the Society" means JIS F 7211 "5K level gauges with valves", JIS F 7215 "Flat glass oil level gauges" or any equivalent standards.	Changes due to the renaming of the "Guidance for the Approval"	
Chapter 14 AUTOMATIC AND REMOTE CONTROL	Chapter 14 AUTOMATIC AND REMOTE CONTROL		
14.7 Tests	14.7 Tests		
14.7.1 Shop Tests  2 The wording "The procedures for these tests are to be deemed appropriate by the Society" specified in 14.7.1(1), Part 7 of the Rules means those procedures in accordance with Chapter 1, Part 7 of "Guidance for the Approval of Materials and Equipment for Marine Use."	14.7.1 Shop Tests  2 The wording "The procedures for these tests are to be deemed appropriate by the Society" specified in 14.7.1(1), Part 7 of the Rules means those procedures in accordance with Chapter 1, Part 7 of "Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use."	Changes due to the renaming of the "Guidance for the Approval"	

Part 8 ELECTRICAL INSTALLATIONS	Part 8 ELECTRICAL INSTALLATIONS	
Chapter 1 GENERAL	Chapter 1 GENERAL	
1.2 Testing	1.2 Testing	
the Approval of Materials and Equipment for Marine Use. Equipment and cables approved are made public in the List of Approved Materials and Equipment.	1.2.1 Shop Tests 5 The wording "to be subjected to type tests" in 1.2.1-4, Part 8 of the Rules means Part 8 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use. Equipment and cables approved are made public in the List of Approved Materials and Equipment.	Changes due to the renaming of the "Guidance for the Approval"
Chapter 2 ELECTRICAL INSTALLATIONS AND SYSTEM DESIGN	Chapter 2 ELECTRICAL INSTALLATIONS AND SYSTEM DESIGN	
2.9 Cables	2.9 Cables	
those tests specified in 3.4.2, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use.	2.9.13 Supports and Fixing of Cables  4 The wording "any tests otherwise specified by the Society" referred to in 2.9.13-3(4)(a), Part 8 of the Rules are those tests specified in 3.4.2, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use.  5 The wording "those tests" referred to in 2.9.13-3(4)(f),	Changes due to the renaming of the "Guidance for the Approval"  Changes due to the

(Review of Guidance for the Ap	provar of whaterials and Equipment for what me use)
Amended	Original
Part & of the Rules are those safe working load tests specified	Part & of the Rules are those safe working load tests specifie

	provar of Materials and Equipment for Marine Use)		
Amended	Original	Remarks	
Part 8 of the Rules are those safe working load tests specified	Part 8 of the Rules are those safe working load tests specified	renaming of	the
in 3.4.2(3), Part 7 of the Guidance for the Approval of	in 3.4.2(3), Part 7 of the Guidance for the Approval and	"Guidance for	the
Materials and Equipment for Marine Use.	Type Approval of Materials and Equipment for Marine Use.	Approval"	
Part 9 FIRE PROTECTION, DETECTION AND EXTINCTION	Part 9 FIRE PROTECTION, DETECTION AND EXTINCTION		
Chapter 2 DEFINITIONS	Chapter 2 DEFINITIONS		
2.1 General	2.1 General		
2.1.1 General Rules	2.1.1 General Rules		
In respect of fire protection materials specified in Part 9 of		Changes due to	the the
the Rules, the wording "approved by the Society in accordance with the Fire Test Procedures Code" means those complying with the test standards specified in Chapter 1, Part 4 of GUIDANCE FOR THE APPROVAL OF MATERIALS AND EQUIPMENT FOR MARINE USE and approved by the Society.	9 of the Rules, the wording "approved by the Society in accordance with the Fire Test Procedures Code" means those complying with the test standards specified in Chapter 1, Part 4 of GUIDANCE FOR THE APPROVAL AND TYPE APPROVAL OF MATERIALS AND EQUIPMENT FOR MARINE USE and approved by the Society.	renaming of "Guidance for Approval"	the the

Amended	Original	Remarks
		Keniarks
Chapter 3 PROBABILITY OF IGNITION  3.2 Arrangements for Oil Fuel, Lubrication Oil and Other Flammable Oils	Chapter 3 PROBABILITY OF IGNITION  3.2 Arrangements for Oil Fuel, Lubrication Oil and Other Flammable Oils	
3.2.2 Arrangements for Oil Fuel 8 The wording "ones approved by the Society" in 3.2.2(3)(e)ii), Part 9 of the Rules means the oil level gauges approved in accordance with the requirements of Chapter 4, Part 7 of the Guidance for the Approval of Materials and Equipment for Marine Use and the wording "the standard deemed approved by the Society" means the JIS F 7215 "Flat glass oil-level gauges" or equivalent.	3.2.2 Arrangements for Oil Fuel 8 The wording "ones approved by the Society" in 3.2.2(3)(e)ii), Part 9 of the Rules means the oil level gauges approved in accordance with the requirements of Chapter 4, Part 7 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use and the wording "the standard deemed approved by the Society" means the JIS F 7215 "Flat glass oil-level gauges" or equivalent.	Changes due to the renaming of the "Guidance for the Approval"
3.5 Special Requirements for Tank Barges	3.5 Special Requirements for Tank Barges	
3.5.4 Cargo Tank Venting  3 The design, arrangement, etc. of devices to prevent the passage of flame (including high velocity devices specified in 3.5.4-5(1)(d), Part 9 of the Rules) specified in 3.5.4-4, Part 9 of the Rules are to comply with the following requirements.	3.5.4 Cargo Tank Venting 3 The design, arrangement, etc. of devices to prevent the passage of flame (including high velocity devices specified in 3.5.4-5(1)(d), Part 9 of the Rules) specified in 3.5.4-4, Part 9 of the Rules are to comply with the following requirements.  (1) Torms used in this Chapter are defined as follows:	
(1) Terms used in this Chapter are defined as follows.  (a) A device to prevent the passage of flame is a device to prevent the passage of flame through the venting system into the cargo tanks, and includes a flame screen, a flame arrester, a detonation flame arrester and a high velocity	<ul> <li>(1) Terms used in this Chapter are defined as follows.</li> <li>(a) A device to prevent the passage of flame is a device to prevent the passage of flame through the venting system into the cargo tanks, and includes a flame screen, a flame arrester, a detonation flame arrester and a high velocity</li> </ul>	Changes due to the renaming of the

Amended	Original	Remarks
device. Such devices are to be of approved type		"Guidance for the
in accordance with the provisions of Chapter 7	in accordance with the provisions of Chapter 7,	Approval"
Part 6 of Guidance for the Approval and Type	Part 6 of Guidance for the Approval and Type	
Approval of Materials and Equipment for	Approval of Materials and Equipment for	
Marine Use.	Marine Use.	
((b) to (g) are omitted)	((b) to (g) are omitted)	
(2) Devices to prevent the passage of flame (hereinafter	(2) Devices to prevent the passage of flame (hereinafter	
referred to as the devices in 3.5.4) is to be fitted	· · · · · · · · · · · · · · · · · · ·	
according to the respective types at such a position	according to the respective types at such a position	
that the passage of flame through the openings	that the passage of flame through the openings	
specified in the followings into the cargo tanks can be		
prevented. Notwithstanding the above, flame arresters		
and the devices to be fitted in a venting system for		
cargo tanks protected against a flammable condition		
by an inert gas system complying with Chapter 35		
Part R of the Rules for the Survey and	· ·	
Construction of Steel Ships, may be of a type for		
which an endurance burning test is dispensed with		
High velocity devices may be of a type for which a		
flash back test and an endurance burning test are		
dispensed with.	dispensed with.	Changes due to the
(a) A flame screen, a flame arrester, a detonation		renaming of the
flame arrester, or a suitable wire gauze complying		"Guidance for the
with the requirements in 7.4.2-2(3)(a)i) through	1 ()())	Approval"
ix), Part 6 of GUIDANCE FOR THE		
APPROVAL OF MATERIALS AND		
EQUIPMENT FOR MARINE USE as wel		
as those in 15.6.14-3(1), Part 7 is to be fitted a		
the following openings:	3(1), Part 7 is to be fitted at the following	
	openings:	
(i) to iii) are omitted)	(i) to iii) are omitted)	

Amended	Original	Remarks	
((b) and (c) are omitted)	((b) and (c) are omitted)		
((3) to (5) are omitted)	((3) to (5) are omitted)		
3.5.8 Gas Measurement  2 The wording "deemed appropriate by the Society" in 3.5.8(1) and (2), Part 9 of the Rules means to be approved by the Society in accordance with Chapter 7, Part 7 of "Guidance for the Approval of Materials and Equipment for Marine Use" or to pass the test of the organization deemed appropriate by the Society.	3.5.8 Gas Measurement  2 The wording "deemed appropriate by the Society" in 3.5.8(1) and (2), Part 9 of the Rules means to be approved by the Society in accordance with Chapter 7, Part 7 of "Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use" or to pass the test of the organization deemed appropriate by the Society.	renaming of t	the the the
Chapter 7 CONTAINMENT OF FIRE AND STRUCTURAL INTEGRITY	Chapter 7 CONTAINMENT OF FIRE AND STRUCTURAL INTEGRITY		
7.3 Special Requirements for Tank Barges	7.3 Special Requirements for Tank Barges		
7.3.2 Protection of Cargo Tank Structure against	7.3.2 Protection of Cargo Tank Structure against		
Pressure or Vacuum	Pressure or Vacuum		
1 The performance, installation procedures, etc. of	1 The performance, installation procedures, etc. of	•	he
pressure/vacuum valves specified in 7.3.2-1(1), Part 9 of the	pressure/vacuum valves specified in 7.3.2-1(1), Part 9 of the	8	the the
Rules are to comply with the following requirements. The wording "the procedure deemed appropriate by the Society"	Rules are to comply with the following requirements. The wording "the procedure deemed appropriate by the Society"	Approval"	
means the procedure specified in Chapter 7, Part 6 of	means the procedure specified in Chapter 7, Part 6 of		
"Guidance for the Approval of Materials and Equipment	"Guidance for the Approval and Type Approval of		
for Marine Use". Approved pressure/vacuum valves are	Materials and Equipment for Marine Use". Approved		
made public on "List of approved materials and	pressure/vacuum valves are made public on "List of		
equipment".	approved materials and equipment".		
((1) to (3) are omitted)	((1) to (3) are omitted)		
3 The design, arrangement, etc. of high level alarms and	3 The design, arrangement, etc. of high level alarms and		

Amended	Original	Remarks
level detecting devices of an overflow control system	level detecting devices of an overflow control system	
specified in 7.3.2-3(1), Part 9 of the Rules are to comply with	specified in 7.3.2-3(1), Part 9 of the Rules are to comply with	
the following requirements. The wording "procedure deemed	the following requirements. The wording "procedure deemed	
appropriate by the Society" in 7.3.2-3(1), Part 9 of the Rules	appropriate by the Society" in 7.3.2-3(1), Part 9 of the Rules	Changes due to the
means the procedure specified in Chapter 7, Part 6 of	means the procedure specified in Chapter 7, Part 6 of	renaming of the
"Guidance for the Approval of Materials and Equipment	"Guidance for the Approval and Type Approval of	"Guidance for the
for Marine Use". Approved high level alarms and level	Materials and Equipment for Marine Use". Approved high	Approval"
detecting devices are made public on "List of approved	level alarms and level detecting devices are made public on	
materials and equipment".	"List of approved materials and equipment".	
((1) and (2) are omitted)	((1) and (2) are omitted)	

,	provar of waterials and Equipment for warme ose	B 1
Amended	Original	Remarks
GUIDANCE FOR THE APPROVAL OF MATERIALS AND EQUIPMENT FOR	GUIDANCE FOR THE APPROVAL AND TYPE APPROVAL OF MATERIALS AND	To align with the structure of other rules, the General
MARINE USE	EQUIPMENT FOR MARINE USE	Provisions are designated
Part 1 GENERAL	Part <u>I</u> GENERAL	as Part 1, and the former Parts 1 to 4 are reorganized accordingly.
1.1 Application	1.1 Application	
1 This guidance applies to tests and inspection of materials and equipment for marine use for which advance approval by the NIPPON KAIJI KYOKAI (hereinafter referred to as "the Society") are required by the relevant requirements in Rules for the Survey and Construction of Steel Ships, Rules for Cargo Handling Appliances, Rules for Cargo Refrigerating Installations, Rules for Diving Systems, Rules for Marine Pollution Prevention Systems, Rules for Ballast Water Management Installations, Rules for Safety Equipment, Rules for the Survey and Construction of Passenger Ships, Rules for High Speed Craft, Rules for the Survey and Construction of Inland Waterway Ships, Rules for the Survey and Construction of Ships of Fibreglass Reinforced Plastics and Rules for Floating Docks, and their Guidance (hereinafter referred to as "Rules etc.").	1 This guidance applies to tests and inspection of materials and equipment for marine use for which advance approval or type approval by the NIPPON KAIJI KYOKAI (hereinafter referred to as "the Society") are required by the relevant requirements in Rules for the Survey and Construction of Steel Ships, Rules for Cargo Handling Appliances, Rules for Cargo Refrigerating Installations, Rules for Diving Systems, Rules for Marine Pollution Prevention Systems, Rules for Ballast Water Management Installations, Rules for Safety Equipment, Rules for the Survey and Construction of Passenger Ships, Rules for High Speed Craft, Rules for the Survey and Construction of Inland Waterway Ships, Rules for the Survey and Construction of Ships of Fibreglass Reinforced Plastics and Rules for Floating Docks, and their Guidance (hereinafter referred to as "Rules etc.").	Terminology alignment
Notwithstanding the absence of specific requirements in this guidance, the Society may, upon application, conduct examination, testing, and inspection in accordance with the	(Newly added)	For equipment and other items for which approval requirements are not specified in the Rules,

	provar of iviaterials and Equipment for iviarine ose)	
Amended	Original	Remarks
intent of the said guidance, and issue a certificate to manufacturers attesting that the equipment complies with technical requirements deemed appropriate by the Society.		provisions for certification of conformity shall be established for those deemed appropriate by
<u>3</u> This guidance is, in principle, to apply to each manufacturing plant.	<u>2</u> This guidance is, in principle, to apply to each manufacturing plant.	the Society.
4 The confirmation survey of manufacturing and quality control procedure required in the guidance may be dispensed with partly or totally subject to the approval in accordance with "Rules for Approval of Manufacturers and Service Suppliers".  5 In cases where the manufacturing process and the test result have been approved by another organization and the manufacturer has a data showing actual manufacturing records within the specific period, the Society will take into account such records and tests results and may exempt the part or all of the approval tests for the manufacturing processes for materials and equipment for marine use required by this guidance.	<ul> <li>3 The confirmation survey of manufacturing and quality control procedure required in the guidance may be dispensed with partly or totally subject to the approval in accordance with "Rules for Approval of Manufacturers and Service Suppliers".</li> <li>4 In cases where the manufacturing process and the test result have been approved by another organization and the manufacturer has a data showing actual manufacturing records within the specific period, the Society will take into account such records and tests results and may exempt the part or all of the approval tests for the manufacturing processes for materials and equipment for marine use required by this guidance.</li> </ul>	
6 At the inspections, tests, and surveys, etc. (hereinafter referred together as "surveys" in this sub-paragraph), in lieu of traditional ordinary surveys where the Surveyor is in attendance, the Society may approve other survey methods which it considers to be appropriate.	<u>5</u> At the inspections, tests, and surveys, etc. (hereinafter referred together as "surveys" in this sub-paragraph), in lieu of traditional ordinary surveys where the Surveyor is in attendance, the Society may approve other survey methods which it considers to be appropriate.	
1.2 Purpose	1.2 Purpose	
The purpose of this guidance is to specify the procedures for	The purpose of this guidance is to specify the procedures for	Terminology alignment

#### Amended-Original Requirements Comparison Table

(	(Review of	Guidance	for the	Approval	of Mate	erials and	Eaui	pment for	Marine	Use)

Amended	Original Original	Remarks
approval by the Society of the materials and equipment for marine use delivered from manufacturing plants as finished products in the course of examinations for the construction, materials, scantlings and workmanship of the hull, equipment and machinery required by 2.1.1, Part B of Rules for the Survey and Construction of Steel Ships excluding the examinations for hull outfitting work and machinery assembly and installation work carried out at shipyards or manufacturer's shops.  Chapter 2 DEFINITIONS	approval and type approval by the Society of the materials and equipment for marine use delivered from manufacturing plants as finished products in the course of examinations for the construction, materials, scantlings and workmanship of the hull, equipment and machinery required by 2.1.1, Part B of Rules for the Survey and Construction of Steel Ships excluding the examinations for hull outfitting work and machinery assembly and installation work carried out at shipyards or manufacturer's shops.  Chapter 2 DEFINITIONS  2.1 Approval	
Approval <u>in this guidance</u> means to certify for the manufacturers of materials and equipment for marine use that materials and equipment comply with this guidance <u>based on</u> the examinations, tests and inspections <u>there</u> . In <u>principle</u> , the types of approval are to be those specified in 2.2 and 2.3. Approvals that do not fall under these categories are to be treated as specified in 2.4.	Approval means to certify for the manufacturers of the materials and equipment for marine use that the materials and equipment comply with this guidance by carrying out the examination, tests and inspection specified in this guidance for the materials and equipment.	To amend the definition of "approval"
(Delete) (Delete)	2.2 Type Approval  Type Approval means to certify for the manufacturers of the materials and equipment for marine use that the materials and equipment comply with the provisions for the type approved products in this guidance by carrying out the examination, tests and inspection specified in this guidance for the materials and	Delete

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)					
Amended	Original	Remarks			
(Delete)  2.2 Approval of Manufacturing Process  Approval of Manufacturing Process means, on	<ul> <li>equipment. For type approved products, tests and inspection are not required to individual products.</li> <li>2.3 Approval of Mass Produced Machinery and Equipment</li> <li>2.4 Approval of Manufacturing Process</li> <li>Approval of Manufacturing Process means, on</li> </ul>	To revise the definition of			
condition that the uniform quality of the products can be ensured, to certify for the manufacturers that the manufacturing process complies with the provisions in this guidance by carrying out the examination, tests and inspection specified in this guidance for their typical sample. Additionally, the inspection of products at the time of shipment is subject to relevant requirement in the Rules for the Survey and Construction of Steel Ships and other technical rules of the Society.	condition that the uniform quality of the products can be ensured, to certify for the manufacturers that the manufacturing process complies with the provisions in this guidance by carrying out the examination, tests and inspection specified in this guidance in advance for their typical sample.	approval of anufacturing process			
2.3 Type Approval	2.5 Approval of Use				
Approval of Use means, for the equipment for marine use to which the advance approval by the Society for their use is required by the Rules etc. before installed on board, to certify for the manufacturers that the equipment and materials complies with the provisions regarding quality management and products in this guidance by carrying out the examination, tests and inspection for their typical sample in principal. Additionally, the inspection of products at the time of shipment is subject to relevant requirements in the Rules for the Survey and Construction of Steel Ships and other	Approval of Use means, for the equipment for marine use to which the advance approval by the Society for their use is required by the Rules etc. before installed on board, to certify for the manufacturers that the equipment complies with the provisions in this guidance by carrying out the examination, tests and inspection for their typical sample.	To change "approval of use" to "type approval" To include provisions related to quality control in the definition			

Amended	Original	Remarks
technical rules of the Society.		
2.4 Other Approval	(Newly added)	
Approvals which do not fall under 2.2 and 2.3, and which are carried out to prove the conformity of onboard materials, onboard equipment, etc. to the functions, performance, etc. specified in the construction method, standards, regulations, etc.	(Newly added)	To define approvals for items not covered by 2.2 and 2.3 of this chapter, such as "approval of cable laying"
(Delete)	2.6 Approval of Standardized Design	To delete "Approval of standard design" due to its transfer to Appendix of Part B.
(Delete)	Approval of Standardized Design means a method to certifies for the manufacturers that the drawings and documents specifying the particulars, construction, dimensions and materials of equipment for marine use may be dealt with as the standard design, by conducting the approval for these drawings in advance.	
(Delete)	2.7 Approval of Prototype	To delete the prototype approval in order to replace it with type approval
(Delete)	Approval of prototype means to certify for the manufacturers that machinery and equipment for marine use comply with the provisions in this Guidance by carrying out the examinations, tests and inspection against the prototype of these products which are required by the Rules or Guidance that prototype of products is to be approved by the Society in advance before products are sent to markets.	

Amended	Original	Remarks
Part 2 METALLIC MATERIALS  Chapter 1 APPROVAL OF MANUFACTURING PROCESS OF ROLLED STEELS	Part 1 METALLIC MATERIALS  Chapter 1 APPROVAL OF MANUFACTURING PROCESS OF ROLLED STEELS	To align with the structure of other rules, the General Provisions are designated as Part 1, and the former Parts 1 to 4 are reorganized accordingly. Terminology alignment
1.2 Approval Application	1.2 Approval Application	
1.2.1 Approval Application Form  Manufacturer who applies for the approval of the manufacturing process of rolled steels is to submit the appropriate application form (Form 1-1) filled in with required data and information to the Society (branch office concerned). For applications for the approval of the manufacturing process of corrosion resistant steel for cargo oil tanks specified in 3.13, Part K of the Rules for the Survey and Construction of Steel Ships, the appropriate application form (Form 1-2) is to be used.	1.2.1 Approval Application Form  Manufacturer who applies for the approval of the manufacturing process of rolled steels is to submit a copy of the appropriate application form (Form 1-1) filled in with required data and information to the Society (branch office concerned). For applications for the approval of the manufacturing process of corrosion resistant steel for cargo oil tanks specified in 3.13, Part K of the Rules for the Survey and Construction of Steel Ships, the appropriate application form (Form 1-2) is to be used.	To delete the specification of the number of copies due to digitization
1.2.2 Documents to be Submitted  1 Each of the documents given in (1) and (2) are to be submitted together with the appropriate application form specified in 1.2.1.  ((1) and (2) are omitted)	1.2.2 Documents to be Submitted  1 Three copies each of the documents given in (1) and (2) are to be submitted together with the appropriate application form specified in 1.2.1.  ((1) and (2) are omitted)	To delete the specification of the number of copies due to digitization

### Amended-Original Requirements Comparison Table

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)				
Amended	Original	Remarks		
1.4 Approval Test	1.4 Approval Test			
1.4.2 Selection of Test Samples  4 Where the maximum manufacturing thicknesses of rolled steels for hulls, rolled steels for low temperature service and high strength rolled steels for offshore structures is more than 50 mm and in cases where the first approval of at least one item of deoxidation practice, grain refining and microalloying elements, heat treatment, steel making process and steel casting process, the Society may request an additional test sample of which thickness is indicated with a  mark in Table 2.1-1 or some other proper thickness, in addition to the test samples in accordance with -2.	1.4.2 Selection of Test Samples  4 Where the maximum manufacturing thicknesses of rolled steels for hulls, rolled steels for low temperature service and high strength rolled steels for offshore structures is more than 50 mm and in cases where the first approval of at least one item of deoxidation practice, grain refining and microalloying elements, heat treatment, steel making process and steel casting process, the Society may request an additional test sample of which thickness is indicated with a  mark in Table 1.1-1 or some other proper thickness, in addition to the test samples in accordance with -2.	Figure and table numbers have been changed due to reorganization		
Fig. <u>2</u> .1-1 Selection of Test Samples (an example) (Figure is omitted)	Fig. 1.1-1 Selection of Test Samples (an example) (Figure is omitted)	Figure and table numbers have been changed due to reorganization		
Table <u>2</u> .1-1 Standard Thickness and Dimensions of Test Samples (Table is omitted)	Table <u>1</u> .1-1 Standard Thickness and Dimensions of Test Samples (Table is omitted)	Figure and table numbers have been changed due to reorganization		
1.4.3 Details of Test  1 Approval tests for each of rolled steels are to be performed for each test item indicated with a ○ mark in Table 2.1-2 and the test procedure and judgement standard are to be accordance with Table 2.1-3. However, when deemed necessary by the Society, Society may request the increase of test piece, addition of test item (except the test item indicated in Table 2.1-2 which is included the test related to hot workability, fatigue test, weld cracking test, CTOD tests of welded joints etc.) and submission of proper technical	1.4.3 Details of Test  1 Approval tests for each of rolled steels are to be performed for each test item indicated with a ○ mark in Table 1.1-2 and the test procedure and judgement standard are to be accordance with Table 1.1-3. However, when deemed necessary by the Society, Society may request the increase of test piece, addition of test item (except the test item indicated in Table 1.1-2 which is included the test related to hot workability, fatigue test, weld cracking test, CTOD tests of welded joints etc.) and submission of proper technical	Figure and table numbers have been changed due to reorganization		

information.

information.

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)				
Amended	Original	Remarks		
3 For approval of the manufacturing process of the rolling bars for offshore chains, in the case of initial approval and/or changes in any approved conditions, the approval test specified in 2.4, Part 3 is to be carried out in addition to the test specified in this Chapter.	3 For approval of the manufacturing process of the rolling bars for offshore chains, in the case of initial approval and/or changes in any approved conditions, the approval test specified in 2.4, Part 2 is to be carried out in addition to the test specified in this Chapter.	To align with the structure of other rules, the General Provisions are designated as Part 1, and the former Parts 1 to 4 are reorganized accordingly.		
Table <u>2</u> .1-2 Approval Test Items for Rolled Steels (Table is omitted)	Table <u>1</u> .1-2 Approval Test Items for Rolled Steels (Table is omitted)	Figure and table numbers have been changed due to reorganization		
Table <u>2</u> .1-3 Approval Testing Method and Acceptance Criteria (Table is omitted)	Table <u>1</u> .1-3 Approval Testing Method and Acceptance Criteria (Table is omitted)	Figure and table numbers have been changed due to reorganization		
1.4.5 Test Reports  1 After completion of the approval test, the manufacturer is to produce a report of the approval test and is to submit to the Society (branch office concerned) upon receiving confirmation by the Society's Surveyor.	1.4.5 Test Reports  1 After completion of the approval test, the manufacturer is to produce a report of the approval test and is to submit three copies to the Society (branch office concerned) upon receiving confirmation by the Society's Surveyor.	To delete the specification of the number of copies due to digitization		
Table <u>2</u> .1-4 Impact Test Temperature for Rolled Steel for Hull (Table is omitted)	Table <u>1</u> .1-4 Impact Test Temperature for Rolled Steel for Hull (Table is omitted)	Figure and table numbers have been changed due to reorganization		
Table <u>2</u> .1-5 Impact Test Temperature for High Strength Rolled Steel for Offshore Structures (Table is omitted)	Table 1.1-5 Impact Test Temperature for High Strength Rolled Steel for Offshore Structures (Table is omitted)	Figure and table numbers have been changed due to reorganization		
Table <u>2</u> .1-6 Test Samples for Weldability Tests (Table is omitted)	Table <u>1</u> .1-6 Test Samples for Weldability Tests (Table is omitted)	Figure and table numbers have been changed due to reorganization		
Table 2.1-7 Post Weld Heat Treatment Procedures for High Strength Rolled Steels for Offshore Structures (Table is omitted)	Table <u>1</u> .1-7 Post Weld Heat Treatment Procedures for High Strength Rolled Steels for Offshore Structures (Table is omitted)	Figure and table numbers have been changed due to reorganization		

Amended	Original	Remarks
		Figure and table numbers
Table 2.1-8 Maximum Hardness of Welding Hardness Test	Table 1.1-8 Maximum Hardness of Welding Hardness Test	have been changed due to
(Table is omitted)	(Table is omitted)	reorganization
Table 2.1-9 Selection of CTOD Test Specimens for	Table 1.1-9 Selection of CTOD Test Specimens for	Figure and table numbers
Weldability Tests of High Strength Rolled Steels for Offshore	Weldability Tests of High Strength Rolled Steels for Offshore	have been changed due to
Structurers	Structurers	reorganization
(Table is omitted)	(Table is omitted)	
(Tuble is diffitted)	(Table is diffitted)	
Fig 2.1-2 Examples of Notch Locations for Butt Welding	Fig 1.1-2 Examples of Notch Locations for Butt Welding	Figure and table numbers
Impact Tests	Impact Tests	have been changed due to
(Figure is omitted)	(Figure is omitted)	reorganization
(Figure is continued)	(Figure is consider)	
1.5 Approval	1.5 Approval	
**		
1.5.1 Notification of Approval	1.5.1 Notification of Approval	
3 Notwithstanding -1 above, for the corrosion resistant	3 Notwithstanding -1 above, for the corrosion resistant	Terminology alignment
steel for cargo oil tanks specified in 3.13, Part K of the Rules	steel for cargo oil tanks specified in 3.13, Part K of the Rules	
for the Survey and Construction of Steel Ships, the Society	for the Survey and Construction of Steel Ships, the Society	
grants approval of the manufacturing process for corrosion	grants approval of the manufacturing process for corrosion	
resistant steel for cargo oil tanks which have been deemed	resistant steel for cargo oil tanks which have been deemed	
appropriate on the basis of the reports of the Surveyor and	appropriate on the basis of the reports of the Surveyor and	
documents submitted in accordance with requirements in 1.2	documents submitted in accordance with requirements in 1.2	
through 1.4. In this case, a "Certificate of Approval" is	through 1.4. In this case, a "Type Approval Certificate" is	
published including the name of works, kind of corrosion	published including the name of works, kind of corrosion	
resistant steel for cargo oil tanks, term of validity of approval	resistant steel for cargo oil tanks, term of validity of approval	
etc. and at least the following items are described in	etc. and at least the following items are described in	
"Particulars of Approval Conditions".	"Particulars of Approval Conditions".	
((1) to (5) are omitted)	((1)  to  (5)  are omitted)	
1.5.2 Validity of Approval	1.5.2 Validity of Approval	T. 1 1
Valid term of the "Certificate of Approval" specified in	Valid term of the "Certificate of Approval" specified in	Terminology alignment

#### Amended-Original Requirements Comparison Table

(	Review of Guidance for	or the Approval	of Materials and Ed	quipment for Marine Use)

1.5.1-1 and 1.5.1-3 will be 5 years from the date of approval.
In case when the renewal of approval is carried out in
accordance with the requirements in 1.5.3, valid term will be
5 years from the next day after the expiry date of the previous
validity (hereinafter referred to as "date of renewal").

Amended

#### 1.5.3 Renewal of Approval

- 1 In case of application for renewal of approval, the applicant is to submit a "Certificate of Approval" (copy) and the data showing actual manufacturing records (for example, chemical composition, mechanical properties, brittle crack arrest properties (in the case of steels considered to have the brittle crack arrest properties specified in 3.12, Part K of the Rules) and thickness or dimension expressed in the form of histogram or statistics for each heat treatment) of the rolled steels or semi-finished products within the specific period together with the appropriate application form (Form 1-1) (in the case of corrosion resistant steel for cargo oil tanks, Form 1-2).
- 3 The factory inspection specified in -2 is to be completed within the valid term of "Certificate of Approval" in principle. However, for unavoidable circumstance, the factory inspection may be completed within a period of 3 months after the valid term upon the approval by the Society.
- 6 Manufacturers whose approval is renewed are to return the old "Certificate of Approval" to the Society as soon as

**1.5.1-1** and the "Type Approval Certificate" specified in 1.5.1-3 will be 5 years from the date of approval. In case when the renewal of approval is carried out in accordance with the requirements in 1.5.3, valid term will be 5 years from the next day after the expiry date of the previous validity (hereinafter referred to as "date of renewal").

Original

#### 1.5.3 Renewal of Approval

- In case of application for renewal of approval, the applicant is to submit a "Certificate of Approval" (copy) (in the case of the corrosion resistant steel for cargo oil tanks specified in 3.13, Part K of the Rules for the Survey and Construction of Steel Ships, the "Type Approval Certificate" (copy)) and three copies of the data showing actual manufacturing records (for example, chemical composition, mechanical properties, brittle crack arrest properties (in the case of steels considered to have the brittle crack arrest properties specified in 3.12, Part K of the Rules) and thickness or dimension expressed in the form of histogram or statistics for each heat treatment) of the rolled steels or semi-finished products within the specific period together with the appropriate application form (Form 1-1) (in the case of corrosion resistant steel for cargo oil tanks, Form 1-2).
- 3 The factory inspection specified in -2 is to be completed within the valid term of "Certificate of Approval" or "Type Approval Certificate" in principle. However, for unavoidable circumstance, the factory inspection may be completed within a period of 3 *months* after the valid term upon the approval by the Society.
- 6 Manufacturers whose approval is renewed are to return the old "Certificate of Approval" or the "Type Approval

Handling change

To delete the specification of the number of copies due to digitization

Remarks

Terminology alignment

Terminology alignment

Amended	Original	Remarks
possible after receiving the new certificate and the term of validity of the old certificate expires.	Certificate" to the Society as soon as possible after receiving the new certificate and the term of validity of the old certificate expires.	
1.5.4 Changes in the Approved Content	1.5.4 Changes in the Approved Content	
1 In case of changes in the approved content such as	1 In case of changes in the approved content such as	To delete the specification
those given in the following (1) through (9) are occurred, in	those given in the following (1) through (9) are occurred, in	of the number of copies
response to the content of changes, documents corresponding	response to the content of changes, three copies of documents	due to digitization
to the requirements in 1.2.2 are to be submitted to the Society,	corresponding to the requirements in 1.2.2 are to be submitted	
in addition to the appropriate application form (Form 1-1) and	to the Society, in addition to a copy of the appropriate	
a "Certificate of Approval" (copy).	application form (Form 1-1) and a "Certificate of Approval"	
((1) to (9) are omitted)	(copy).	
2 5 4 1 1 1 1 1 1 1 1	((1) to (9) are omitted)	Tamain ala ary ali ammant
2 For the corrosion resistant steel for cargo oil tanks	2 For the corrosion resistant steel for cargo oil tanks	Terminology alignment
specified in 3.13, Part K of the Rules for the Survey and Construction of Steel Ships, in case of changes in the	specified in 3.13, Part K of the Rules for the Survey and Construction of Steel Ships, in case of changes in the	
approved content such as those given in the above -1(1)	approved content such as those given in the above -1(1)	
through (9) and following (1) and (2) are occurred, in	through (9) and following (1) and (2) are occurred, in	
response to the content of changes, each of documents	response to the content of changes, three copies each of	
corresponding to the requirements in 1.2.2 are to be submitted	documents corresponding to the requirements in 1.2.2 are to	
to the Society, in addition to the appropriate application form	be submitted to the Society, in addition to a copy of the	
(Form 1-2) for Changes in the Approved Content of	appropriate application form (Form 1-2) for Changes in the	
Manufacturing Process of Corrosion Resistant Steel for Cargo	Approved Content of Manufacturing Process of Corrosion	
Oil Tanks" and the "Certificate of Approval" (copy).	Resistant Steel for Cargo Oil Tanks" and the "Type Approval	
	Certificate" (copy).	
((1) and (2) are omitted)	((1) and (2) are omitted)	
4 The Society is to examine the submitted data specified	4 The Society is to examine the submitted data specified	Terminology alignment
in -1 or -2 and reports of factory inspection and approval test	in -1 or -2 and reports of factory inspection and approval test	
specified in -3, and if the Society considers them appropriate,	specified in -3, and if the Society considers them appropriate,	
is to approve the changes in the approved content. In this case,	is to approve the changes in the approved content. In this case,	
as a rule, the validity of the "Certificate of Approval" specified	as a rule, the validity of the "Certificate of Approval" specified	

### Amended-Original Requirements Comparison Table

(Review of Guidance for the Ap	proval of Materials and Equipment for Marine Use)
Amended	Original

	Original	Damadra	
Amended	Original	Remarks	
<ul> <li>in -1 or -2 are not changed.</li> <li>5 Manufacturers whose request for changes in approved content is accepted are to return the old "Certificate of Approval" and the relevant "Particulars of Approval Conditions" to the Society as soon as possible after receiving</li> </ul>	<ul> <li>in -1 or the "Type Approval Certificate" specified in -2 are not changed.</li> <li>5 Manufacturers whose request for changes in approved content is accepted are to return the old "Certificate of Approval" or old "Type Approval Certificate" and the relevant "Particulars of Approval Conditions" to the Society as soon as</li> </ul>	Terminology alignment	
the new certificate.  1.5.5 Revocation of Approval In case any of the following (1) through (5) is relevant, the Society may revoke approval of the manufacturing process	possible after receiving the new certificate.  1.5.5 Revocation of Approval In case any of the following (1) through (5) is relevant, the Society may revoke approval of the manufacturing process	Terminology alignment	
based on the requirements in this Chapter and give notice of the revocation to the manufacturer. The manufacturer which noticed the approval is withdrawn is to return "Certificate of Approval" and "Particulars of Approval Conditions" in question to the Society.  ((1) to (5) are omitted)	based on the requirements in this Chapter and give notice of the revocation to the manufacturer. The manufacturer which noticed the approval is withdrawn is to return "Certificate of Approval" or "Type Approval Certificate" and "Particulars of Approval Conditions" in question to the Society.  ((1) to (5) are omitted)		
Chapter 1A WELDABILITY CONFIRMATION OF ROLLED STEELS FOR HULL	Chapter 1A WELDABILITY CONFIRMATION OF ROLLED STEELS FOR HULL		
1A.1 General	1A.1 General		
1A.1.1 Scope 1 (Omitted) 2 (Omitted) 3 The time of the weldability confirmation may be different from that of approval of manufacturing process specified in Chapter 2 in this part.	1A.1.1 Scope 1 (Omitted) 2 (Omitted) 3 The time of the weldability confirmation may be different from that of approval of manufacturing process specified in Chapter 1 in this part.	Terminology alignment  To align with the structure of other rules, the General Provisions are designated as Part 1, and the former	

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)				
Amended	Original	Remarks		
4 The requirements provided in Chapter 2 in this part are applicable unless otherwise specified in this chapter.  1A.2 Application of the Weldability Confirmation	4 The requirements provided in Chapter 1 in this part are applicable unless otherwise specified in this chapter.  1A.2 Application of the Weldability Confirmation	Parts 1 to 4 are reorganized accordingly. Terminology alignment		
1A.2.1 Application Form  Manufacturer who applies for the weldability confirmation of the rolled steels is to submit the appropriate application form (Form 1-3) filled in with required data and information to the Society (branch office concerned).	1A.2.1 Application Form  Manufacturer who applies for the weldability confirmation of the rolled steels is to submit <u>a copy of</u> the appropriate application form (Form 1-3) filled in with required data and information to the Society (branch office concerned).	To delete the specification of the number of copies due to digitization		
1 Each of the documents given in (1) and (2) are to be submitted together with the application form specified in 1A.2.1.  ((1) and (2) are omitted)	1 Three copies each of the documents given in (1) and (2) are to be submitted together with the application form specified in 1A.2.1.  ((1) and (2) are omitted)	To delete the specification of the number of copies due to digitization		
1A.4.5 Test Reports  1 After completion of the confirmation test, the manufacturer is to produce a report of the confirmation test and is to submit to the Society (branch office concerned) upon receiving confirmation by the Society's Surveyor.	1A.4.5 Test Reports  1 After completion of the confirmation test, the manufacturer is to produce a report of the confirmation test and is to submit three copies to the Society (branch office concerned) upon receiving confirmation by the Society's Surveyor.	To delete the specification of the number of copies due to digitization		

#### Amended-Original Requirements Comparison Table

(Review of Guidance for the Approval of Materials and Equipment for Marine Us
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Amended	Original	Remarks
Chapter 1B APPROVAL OF MANUFACTURING PROCESS OF SEMI-FINISHED PRODUCTS	Chapter 1B APPROVAL OF MANUFACTURING PROCESS OF SEMI-FINISHED PRODUCTS	Terminology alignment
1B.2 Approval Application	1B.2 Approval Application	
1B.2.1 Approval Application Form  Manufacturer who applies for the approval of the manufacturing process of semi-finished products is to submit the appropriate application form (Form 1-4) filled in with required data and information to the Society (branch office concerned).	1B.2.1 Approval Application Form  Manufacturer who applies for the approval of the manufacturing process of semi-finished products is to submit a copy of the appropriate application form (Form 1-4) filled in with required data and information to the Society (branch office concerned).	To delete the specification of the number of copies due to digitization
1B.2.2 Documents to be Submitted  1 Each of the documents given in (1) and (2) are to be submitted together with the appropriate application form specified in 1B.2.1.  ((1) and (2) are omitted)	1 Three copies each of the documents given in (1) and (2) are to be submitted together with the appropriate application form specified in 1B.2.1.  ((1) and (2) are omitted)	To delete the specification of the number of copies due to digitization
1B.4 Approval Test	1B.4 Approval Test	
1B.4.4 Test Reports  1 After completion of the approval test, the manufacturer is to produce a report of the approval test and is to submit to the Society (branch office concerned) upon receiving confirmation by the Society's Surveyor.	1B.4.4 Test Reports  1 After completion of the approval test, the manufacturer is to produce a report of the approval test and is to submit three copies to the Society (branch office concerned) upon receiving confirmation by the Society's Surveyor.	To delete the specification of the number of copies due to digitization

,	provar of Waterials and Equipment for Warme Ose)	D 1
Amended	Original	Remarks
1B.5 Approval	1B.5 Approval	
1B.5.3 Renewal of Approval  1 In case of application for renewal of approval, the applicant is to submit a "Certificate of Approval" (copy) and of the data showing actual manufacturing records (for example, chemical composition, mechanical properties and thickness or dimension expressed in the form of histogram or statistics) of the semi-finished products within the specific period together with the appropriate application form (Form 1-4).	1B.5.3 Renewal of Approval  1 In case of application for renewal of approval, the applicant is to submit a "Certificate of Approval" (copy) and three copies of the data showing actual manufacturing records (for example, chemical composition, mechanical properties and thickness or dimension expressed in the form of histogram or statistics) of the semi-finished products within the specific period together with the appropriate application form (Form 1-4).	To delete the specification of the number of copies due to digitization
1B.5.4 Changes in the Approved Content  1 In case of changes in the approved content such as those given in the following (1) through (5) are occurred, in response to the content of changes, documents corresponding to the requirements in 1B.2.2 are to be submitted to the Society, in addition to the appropriate application form (Form 1-4) and a "Certificate of Approval" (copy).  ((1) to (5) are omitted)	1B.5.4 Changes in the Approved Content  1 In case of changes in the approved content such as those given in the following (1) through (5) are occurred, in response to the content of changes, three copies of documents corresponding to the requirements in 1B.2.2 are to be submitted to the Society, in addition to a copy of the appropriate application form (Form 1-4) and a "Certificate of Approval" (copy).  ((1) to (5) are omitted)	To delete the specification of the number of copies due to digitization

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)				
Amended	Original	Remarks		
Chapter 2 APPROVAL OF MANUFACTURING	Chapter 2 APPROVAL OF MANUFACTURING	Terminology alignment		
PROCESS OF STEEL PIPES	PROCESS OF STEEL PIPES			
2.2 Approval Application	2.2 Approval Application			
2.2.1 Approval Application Form  Manufacturers who applies for approval of the manufacturing process of steel pipes are to submit the appropriate application form (Form 1-5) filled in with required data and information to the Society.	2.2.1 Approval Application Form  Manufacturers who applies for approval of the manufacturing process of steel pipes are to submit a single copy of the appropriate application form (Form 1-5) filled in with required data and information to the Society.	Terminology alignment To delete the specification of the number of copies due to digitization		
2.2.2 Data to be Submitted  1 Each of the drawings and documents given in (1) through (8) are to be submitted together with the appropriate application form specified in 2.2.1.  ((1) to (8) are omitted)	2.2.2 Data to be Submitted  1 Three copies each of the drawings and documents given in (1) through (8) are to be submitted together with the appropriate application form specified in 2.2.1.  ((1) to (8) are omitted)	To delete the specification of the number of copies due to digitization		

#### 2.4 Approval Test

#### 2.4.2 **Details of Test**

Items of the approval test are to be as given in Table <u>2</u>.2-1.

#### **Test Records** 2.4.4

After completion of the approval test, manufacturer is to produce a record of the approval test and is to submit to the Society upon receiving confirmation by the Society's Surveyor.

#### 2.4 Approval Test

#### 2.4.2 **Details of Test**

Items of the approval test are to be as given in Table <u>1</u>.2-1.

#### **Test Records** 2.4.4

After completion of the approval test, the manufacturer is to produce a record of the approval test and is to submit three copies to the Society upon receiving confirmation by the Society's Surveyor.

## n

Figure and table numbers have been changed due to reorganization

To delete the specification of the number of copies due to digitization

Amended	Original Original	Remarks	
Table 2.2-1 Approval Test Items for Steel Pipes (Table is omitted)	Table 1.2-1 Approval Test Items for Steel Pipes (Table is omitted)	Figure and table numbers have been changed due to reorganization	
2.5.3 Renewal of Approval  1 In case of application for renewal of approval, the applicant is to submit a "Certificate of Approval" (copy) and the data showing actual manufacturing records (for example, chemical composition, mechanical properties, outer diameter and thickness expressed in the form of histogram or statistics) of the steel pipes within the specific period together with the appropriate application from (Form 1-5).	2.5.3 Renewal of Approval  1 In case of application for renewal of approval, the applicant is to submit a "Certificate of Approval" (copy) and three copies of the data showing actual manufacturing records (for example, chemical composition, mechanical properties, outer diameter and thickness expressed in the form of histogram or statistics) of the steel pipes within the specific period together with the appropriate application from (Form 1-5).	To delete the specification of the number of copies due to digitization	
2.5.4 Changes in the Approved Content  1 In case of changes in the approved content such as those given in the following (1) through (9) are occurred, in response to the content of changes, documents corresponding to the requirements in 2.2.2 are to be submitted to the Society, in addition to the appropriate application form (Form 1-5) and a "Certificate of Approval" (copy).  ((1) to (9) are omitted)	2.5.4 Changes in the Approved Content  1 In case of changes in the approved content such as those given in the following (1) through (9) are occurred, in response to the content of changes, three copies of documents corresponding to the requirements in 2.2.2 are to be submitted to the Society, in addition to one copy of the appropriate application form (Form 1-5) and a "Certificate of Approval" (copy).  ((1) to (9) are omitted)	To delete the specification of the number of copies due to digitization	

Amended	Original	Remarks
Chapter 3 APPROVAL OF MANUFACTURING	Chapter 3 APPROVAL OF MANUFACTURING	TOMARIO
PROCESS OF STEEL CASTINGS AND STEEL	PROCESS OF STEEL CASTINGS AND STEEL	
FORGINGS	FORGINGS	
TORGINGS	rondings	
3.2 Application Procedure	3.2 Application Procedure	
3.2 Application Procedure	3.2 Application Procedure	
3.2.1 Application	2.2.1 Application	
3.2.1 Application  Manufacturer who applies for the approval is to submit	3.2.1 Application  Manufacturer who applies for the approval is to submit	To delete the specification
the appropriate application form (Form 1-6) filled in with the	a single copy of the appropriate application form (Form 1-6)	of the number of copies
required items to the Society (branch office concerned).	filled in with the required items to the Society (branch office	due to digitization
required items to the society (oranen errice concerned).	concerned).	
3.2.2 Data to be Submitted	3.2.2 Data to be Submitted	
1 The reference data listed in (1) through (7) below,	1 The reference data listed in (1) through (7) below, <u>each</u>	To delete the specification
are to be submitted together with the application form	three copies, are to be submitted together with the application	of the number of copies due to digitization
specified in 3.2.1.	form specified in 3.2.1.	due to digitization
((1) to (7) are omitted)	((1) to (7) are omitted)	
3.4 Approval Test	3.4 Approval Test	
3.4.3 Details of Test	3.4.3 Details of Test	
Details of the tests for those listed in 3.4.1(1) are as	Details of the tests for those listed in 3.4.1(1) are as	
follows.	follows.	
((1) and (2) are omitted)	((1) and (2) are omitted)	
(3) Tests	(3) Tests	
The tests consist of the following items are to be	The tests consist of the following items are to be	
carried out on the test samples, as the standard	carried out on the test samples, as the standard	
practice:  (a) Sulphur print test and macro structure analysis	practice:  (a) Sulphur print test and macro structure analysis	Figure and table numbers
(a) Sulphur print test and macro-structure analysis	(a) Sulphur print test and macro-structure analysis	have been changed due to

,		ii of Materials and Equipment for Marine Use)	
Amended	Original	Remarks	
(The specimens are to be taken from sections A-	(The specimens are to be taken from sections A-	reorganization	
A, B-B and C-C specified in Fig. 2.3-1.)	A, B-B and C-C specified in <b>Fig. <u>1</u>.3-1</b> .)		
(b) Chemical composition analysis test (The	(b) Chemical composition analysis test (The		
specimens are to be taken from the positions	specimens are to be taken from the positions		
asterisked in Fig. 2.3-1.)	asterisked in Fig. 1.3-1.)		
(c) Micro-structure analysis (The specimens are to	(c) Micro-structure analysis (The specimens are to		
be taken from the positions asterisked in Fig. 2.3-	be taken from the positions asterisked in Fig. 1.3-		
1.)	1.)		
(d) Hardness test (Positions in the vicinity of pin or	(d) Hardness test (Positions in the vicinity of pin or		
journal surface. In the case of quenched and	journal surface. In the case of quenched and		
tempered steels, hardness distribution from the	tempered steels, hardness distribution from the		
surface to the shaft centre.)	surface to the shaft centre.)		
(e) Tensile test and impact test (or bend test)(Tensile	(e) Tensile test and impact test (or bend test)(Tensile		
test specimens are to be taken as specified in Fig.	test specimens are to be taken as specified in Fig.		
2.3-2, and impact test (or bend test) specimens are	1.3-2, and impact test (or bend test) specimens		
to be taken as specified in Fig. 2.3-3, as the	are to be taken as specified in Fig. 1.3-3, as the		
standard practice.)	standard practice.)		
(f) Non-destructive testing (The requirements	(f) Non-destructive testing (The requirements		
specified in 5.1.10 or 6.1.10, Part K of the	specified in 5.1.10 or 6.1.10, Part K of the		
Rules for the Survey and Construction of Steel	Rules for the Survey and Construction of Steel		
Ships apply correspondingly.)	Ships apply correspondingly.)		
(g) Other tests deemed necessary by the Society	(g) Other tests deemed necessary by the Society		
Fig. 2.3-1 Sampling Positions	Fig. <u>1</u> .3-1 Sampling Positions	Figure and table numbers	
(Figure is omitted)	(Figure is omitted)	have been changed due to	
		reorganization	
Fig. 2.3-2 Sampling Positions of Tensile Test Specimens	Fig. <u>1</u> .3-2 Sampling Positions of Tensile Test Specimens	Figure and table numbers	
(Figure is omitted)	(Figure is omitted)	have been changed due to	
(1 iguit is cimuta)	(Tigure is diminida)	reorganization	
Fig. 2.3-3 Sampling Positions of Impact Test (or Bend Test)	Fig. 1.3-3 Sampling Positions of Impact Test (or Bend Test)	Figure and table numbers	
Specimens	Specimens	have been changed due to	
	<u> </u>	<u> </u>	

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)  Amended  Original  Remarks				
Amended	Original (Trick of the Control of th			
(Figure is omitted)	(Figure is omitted)	reorganization		
3.4.5 Test Records  1 After completion of the approval test, the manufacturer is to produce records of approval test, and is to submit to the Society (branch office concerned) upon receiving confirmation by the Society's Surveyor.	3.4.5 Test Records  1 After completion of the approval test, the manufacturer is to produce records of approval test, and is to submit three copies to the Society (branch office concerned) upon receiving confirmation by the Society's Surveyor.	To delete the specification of the number of copies due to digitization		
3.5 Approval	3.5 Approval			
3.5.3 Renewal of Approval and Changes in the Approved Content  2 In case of application for renewal of approval specified in -1, data showing actual manufacturing records for the material classification (for example, chemical composition and mechanical properties expressed in the form of histogram of statistics) within the specific period are to be included. In this case, the Society conducts the factory inspection.	3.5.3 Renewal of Approval and Changes in the Approved Content  2 In case of application for renewal of approval specified in -1, three copies of data showing actual manufacturing records for the material classification (for example, chemical composition and mechanical properties expressed in the form of histogram of statistics) within the specific period are to be included. In this case, the Society conducts the factory inspection.	To delete the specification of the number of copies due to digitization		
Chapter 4 APPROVAL OF MANUFACTURING PROCESS OF CRANKSHAFTS UNDER SPECIAL REQUIREMENTS	Chapter 4 APPROVAL OF MANUFACTURING PROCESS OF CRANKSHAFTS UNDER SPECIAL REQUIREMENTS	Terminology alignment		
4.2 Application Procedures	4.2 Application Procedures			
4.2.1 Data to be Submitted  The manufacturer who applies for an approval of the	4.2.1 Data to be Submitted  The manufacturer who applies for an approval of the	To delete the specification		

#### Amended-Original Requirements Comparison Table

(	Review of Guidance	for the Approval of	f Materials and Eq	uipment for Marine Use)	
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Amended	Original	Remarks
manufacturing process mentioned in 4.1.1-1(2) is to submit the data showing the details of surface treatment in addition to those listed in 3.2.2-1.	manufacturing process mentioned in 4.1.1-1(2) is to submit three copies of the data showing the details of surface treatment in addition to those listed in 3.2.2-1.	of the number of copies due to digitization
4.3 Approval Tests	4.3 Approval Tests	
Approval tests are to be carried out in accordance with 3.4 to adopt the manufacturing process mentioned in 4.1.1-1(1) or (2). In this regard, the requirements in 3.4.3 are to be applied as follows.  (1) Approval test for special forged crankshafts  The test items listed below are to be added to those listed in 3.4.3(3).  (a) Microscopic testing method for the non-metallic inclusions (as per JIS G 0555) (The specimens are to be taken from the positions asterisked in Fig. 2.3-1.)  (b) Bending fatigue test on actual crank throw  The number of test specimens is to be at least 2.  (c) Rotational bending fatigue test on small-size test specimens (Dia. 10~20 mm)  The number of test specimens is to be not less than 10 and they are to be taken from the positions described in Fig. 2.4-1 as the standard practice. In cases of approval for carbon steel forgings or where previous data on this test is available, this test may be omitted subject to approval by the Society.  (2) (omitted)	Approval tests are to be carried out in accordance with 3.4 to adopt the manufacturing process mentioned in 4.1.1-1(1) or (2). In this regard, the requirements in 3.4.3 are to be applied as follows.  (1) Approval test for special forged crankshafts  The test items listed below are to be added to those listed in 3.4.3(3).  (a) Microscopic testing method for the non-metallic inclusions (as per JIS G 0555) (The specimens are to be taken from the positions asterisked in Fig. 1.3-1.)  (b) Bending fatigue test on actual crank throw  The number of test specimens is to be at least 2.  (c) Rotational bending fatigue test on small-size test specimens (Dia. 10~20 mm)  The number of test specimens is to be not less than 10 and they are to be taken from the positions described in Fig. 1.4-1 as the standard practice. In cases of approval for carbon steel forgings or where previous data on this test is available, this test may be omitted subject to approval by the Society.  (2) (omitted)	Figure and table numbers have been changed due to reorganization

Amended	Original	Remarks
Fig. <u>2</u> .4-1 Sampling Positions of Bend Test Specimens (Figure is omitted)	Fig. <u>1</u> .4-1 Sampling Positions of Bend Test Specimens (Figure is omitted)	
Chapter 5 APPROVAL OF MANUFACTURING PROCESS OF ALUMINIUM ALLOYS	Chapter 5 APPROVAL OF MANUFACTURING PROCESS OF ALUMINIUM ALLOYS	Terminology alignment
5.2 Approval Application	5.2 Approval Application	
5.2.1 Approval Application Form  Manufactures who applies for approval of the manufacturing process of aluminium alloys are to submit the appropriate application form (Form 1-7) filled in with required data and information to the Society.	5.2.1 Approval Application Form  Manufactures who applies for approval of the manufacturing process of aluminium alloys are to submit a single copy of the appropriate application form (Form 1-7) filled in with required data and information to the Society.	Terminology alignment To delete the specification of the number of copies due to digitization
5.2.2 Data to be Submitted  1 Each of the drawings and documents given in (1) through (8) are to be submitted together with the appropriate application form specified in 1.2.1.  ((1) to (8) are omitted)	5.2.2 Data to be Submitted  1 Three copies each of the drawings and documents given in (1) through (8) are to be submitted together with the appropriate application form specified in 1.2.1.  ((1) to (8) are omitted)	To delete the specification of the number of copies due to digitization
5.4 Approval Test	5.4 Approval Test	
<ul> <li>5.4.2 Details of Test</li> <li>1 (omitted)</li> <li>2 The approval test items, method and evaluation criteria of the approval test are to be as given in Table 2.5-1 and Table 2.5-2 respectively.</li> </ul>	<ul> <li>5.4.2 Details of Test</li> <li>1 (omitted)</li> <li>2 The approval test items, method and evaluation criteria of the approval test are to be as given in Table 1.5-1 and Table 1.5-2 respectively.</li> </ul>	Figure and table numbers have been changed due to reorganization

Amended	Original	Remarks
5.4.4 Test Records  1 After completion of the approval test, the manufacturer is to produce a record of the approval test and is to submit to the Society upon receiving confirmation by the Society's Surveyor.	5.4.4 Test Records  1 After completion of the approval test, the manufacturer is to produce a record of the approval test and is to submit three copies to the Society upon receiving confirmation by the Society's Surveyor.	To delete the specification of the number of copies due to digitization
Table <u>2</u> .5-1 Approval Test Items for Aluminium Alloys (Table is omitted)	Table <u>1</u> .5-1 Approval Test Items for Aluminium Alloys (Table is omitted)	Figure and table numbers have been changed due to reorganization
Table <u>2</u> .5-2 Approval Testing Method and Acceptance Criteria (Table is omitted)	Table 1.5-2 Approval Testing Method and Acceptance Criteria (Table is omitted)	Figure and table numbers have been changed due to reorganization
5.5 Approval	5.5 Approval	
5.5.3 Renewal of Approval  1 In case of application for renewal of approval, the applicant is to submit a "Certificate of Approval" (copy) and the data showing actual manufacturing records (for example, chemical composition, mechanical properties for each grade and thickness expressed in the form of histogram or statistics) of the aluminium alloys within the specific period together with the appropriate application form (Form 1-7).	5.5.3 Renewal of Approval  1 In case of application for renewal of approval, the applicant is to submit a "Certificate of Approval" (copy) and three copies of the data showing actual manufacturing records (for example, chemical composition, mechanical properties for each grade and thickness expressed in the form of histogram or statistics) of the aluminium alloys within the specific period together with the appropriate application form (Form 1-7).	To delete the specification of the number of copies due to digitization
5.5.4 Changes in the Approved Content  1 In case of changes in the approved content such as those given in the following (1) through (9) is occurred, in response to the content of changes, documents corresponding to the requirements in 5.2.2 are to be submitted to the Society,	5.5.4 Changes in the Approved Content  1 In case of changes in the approved content such as those given in the following (1) through (9) is occurred, in response to the content of changes, three copies of documents corresponding to the requirements in 5.2.2 are to be submitted	To delete the specification of the number of copies due to digitization

Amended	Original Original	Remarks
in addition to the appropriate application form (Form 1-7) and a "Certificate of Approval" (copy).  ((1) to (9) are omitted)	to the Society, in addition to <u>one copy of</u> the appropriate application form (Form 1-7) and a "Certificate of Approval" (copy).  ((1) to (9) are omitted)	
Chapter 6 APPROVAL OF MANUFACTURING PROCESS OF PROPELLER CASTINGS	Chapter 6 APPROVAL OF MANUFACTURING PROCESS OF PROPELLER CASTINGS	Terminology alignment
6.2 Application Procedures	6.2 Application Procedures	
6.2.2 Data to be Submitted  1 Each of the documents given in (1) through (6) are to be submitted together with the appropriate application form specified in 6.2.1.  ((1) to (6) are omitted)	6.2.2 Data to be Submitted  1 Three copies each of the documents given in (1) through (6) are to be submitted together with the appropriate application form specified in 6.2.1.  ((1) to (6) are omitted)	To delete the specification of the number of copies due to digitization
Chapter 7 APPROVAL OF MANUFACTURING PROCESS OF ALUMINIUM ALLOY SEAMLESS PIPES	Chapter 7 APPROVAL OF MANUFACTURING PROCESS OF ALUMINIUM ALLOY SEAMLESS PIPES	Terminology alignment
7.2 Approval Application	7.2 Approval Application	
7.2.1 Approval Application Form  Manufacturers who apply for approval of the manufacturing process of aluminium alloy seamless pipes are to submit an application form filled in with the required data	7.2.1 Approval Application Form  Manufacturers who apply for approval of the manufacturing process of aluminium alloy seamless pipes are to submit a single copy of an application form filled in with	To delete the specification of the number of copies due to digitization

Amended	Original	Remarks
and information to the Society.	the required data and information to the Society.	
7.2.2 Data to be Submitted  1 Each of the drawings and documents given in (1) through (8) are to be submitted together with the appropriate application form specified in 7.2.1.  ((1) to (8) are omitted)	7.2.2 Data to be Submitted  1 Three copies each of the drawings and documents given in (1) through (8) are to be submitted together with the appropriate application form specified in 7.2.1.  ((1) to (8) are omitted)	To delete the specification of the number of copies due to digitization
7.4 Approval Tests	7.4 Approval Tests	
7.4.2 Test Details  Approval tests for each of aluminium alloy seamless pipes are to be performed for each test item given in Table 2.7-1 and the test procedure and judgement standard are to be accordance with Table 2.7-2. However, additional test pieces and test items as well as the submission of proper technical information may be requested when deemed necessary by Society.	7.4.2 Test Details  Approval tests for each of aluminium alloy seamless pipes are to be performed for each test item given in Table 1.7-1 and the test procedure and judgement standard are to be accordance with Table 1.7-2. However, additional test pieces and test items as well as the submission of proper technical information may be requested when deemed necessary by Society.	Figure and table numbers have been changed due to reorganization
7.4.4 Test Reports  1 Upon completion of approval test, the manufacturer is to produce a record of the approval test, have the record verified by the Society surveyor and then submit to the Society.	7.4.4 Test Reports  1 Upon completion of approval test, the manufacturer is to produce a record of the approval test, have the record verified by the Society surveyor and then submit three copies to the Society.	To delete the specification of the number of copies due to digitization
Table <u>2</u> .7-1 Approval Test Items for Aluminium Alloy Seamless Pipes (Table is omitted)	Table <u>1</u> .7-1 Approval Test Items for Aluminium Alloy Seamless Pipes (Table is omitted)	Figure and table numbers have been changed due to reorganization
Table <u>2</u> .7-2 Approval Testing Method and Acceptance Criteria (Table is omitted)	Table <u>1</u> .7-2 Approval Testing Method and Acceptance Criteria	Figure and table numbers have been changed due to

Amended	Original	Remarks
	(Table is omitted)	reorganization
7.5 Approval	7.5 Approval	
7.5.3 Renewal of Approval  1 In case of application for renewal of approval, the applicant is to submit a "Certificate of Approval" (copy) and the data showing actual manufacturing records (for example, chemical composition, mechanical properties, outer diameter and thickness expressed in the form of histogram or statistics for each heat treatment) of the aluminium alloy seamless pipes within the specific period together with the appropriate application form.	7.5.3 Renewal of Approval  1 In case of application for renewal of approval, the applicant is to submit a "Certificate of Approval" (copy) and three copies of the data showing actual manufacturing records (for example, chemical composition, mechanical properties, outer diameter and thickness expressed in the form of histogram or statistics for each heat treatment) of the aluminium alloy seamless pipes within the specific period together with the appropriate application form.	To delete the specification of the number of copies due to digitization
7.5.4 Changes in the Approved Content  1 In case of changes in the approved content such as those given in the following (1) through (7) is occurred, in response to the content of changes, documents corresponding to the requirements in 7.2.2 are to be submitted to the Society, in addition to the "Certificate of Approval".  ((1) to (7) are omitted)	7.5.4 Changes in the Approved Content  1 In case of changes in the approved content such as those given in the following (1) through (7) is occurred, in response to the content of changes, three copies of documents corresponding to the requirements in 7.2.2 are to be submitted to the Society, in addition to a copy of the "Certificate of Approval".  ((1) to (7) are omitted)	To delete the specification of the number of copies due to digitization

Amended	Original	Remarks
Part <u>3</u> EQUIPMENT	Part 2 EQUIPMENT	
Chapter 1 APPROVAL OF MANUFACTURING PROCESS OF ANCHORS	Chapter 1 APPROVAL OF MANUFACTURING PROCESS OF ANCHORS	
1.2 Approval Application	1.2 Approval Application	
1.2.1 Approval Application Forms  1 Manufacturers who apply for the approval of the manufacturing process of anchor are to submit a copy of the appropriate application form (Form 2-1) filled in with the required data and information to the Society (branch office concerned).	1.2.1 Approval Application Forms  1 Manufacturers who apply for the approval of the manufacturing process of anchor are to submit the appropriate application form (Form 2-1) filled in with the required data and information to the Society (branch office concerned).	To delete the specification of the number of copies due to digitization
1.2.2 Documents to be Submitted  Each of the documents listed below are to be submitted together with the appropriate application form specified in 1.2.1.  ((1) to (8) are omitted)	1.2.2 Documents to be Submitted  Three copies each of the documents listed below are to be submitted together with the appropriate application form specified in 1.2.1.  ((1) to (8) are omitted)	To delete the specification of the number of copies due to digitization
1.5 Approval	1.5 Approval	
1.5.3 Renewal of Approval and Changes in the Approved Content  1 In cases where changes have been made to the approved content of the "Certificate of Approval" specified in 1.5.1, the applicant is to apply for renewal of approval in accordance with the requirements in 1.2. In such cases, the	1.5.3 Renewal of Approval and Changes in the Approved Content  1 In cases where changes have been made to the approved content of the "Certificate of Approval" specified in 1.5.1, the applicant is to apply for renewal of approval in accordance with the requirements in 1.2. In such cases, a copy	To delete the specification of the number of copies due to digitization

(Review of Guidance for the Ap	proval of Materials and Equipment for Marine Use)	
Amended	Original	Remarks
"Certificate of Approval" and the documents specified in 1.2.2 are to be submitted together with the appropriate application form (Form 2-1). However, the data to be submitted may be limited to reference data on the changes.  2 In the case of application for renewal of approval as specified in -1, three sets of data are to be submitted. These data sets are to include an accurate record of all manufacturing that has been performed since the last "Certificate of Approval" was issued. In such cases, the Society will conduct a factory inspection if needed.	of the "Certificate of Approval" and the documents specified in 1.2.2 are to be submitted together with the appropriate application form (Form 2-1). However, the data to be submitted may be limited to reference data on the changes.  2 In the case of application for renewal of approval as specified in -1, data are to be submitted. These data sets are to include an accurate record of all manufacturing that has been performed since the last "Certificate of Approval" was issued. In such cases, the Society will conduct a factory inspection if needed.	To delete the specification of the number of copies due to digitization
1.6 Approval of Manufacturing Process of High Holding Power Anchors	1.6 Approval of Manufacturing Process of High Holding Power Anchors	
1.6.1 High Holding Power Anchors  The approval procedure for manufacturing of high holding power anchor (the anchor specified in 2.1.4-2, Part L of the Rules, having the holding power two times or more of that of ordinary anchor, and if it is used without subjected to the reduction as specified in 14.3.1.2-6, Part 1, Part C of the Rules, such anchor may not be dealt with as a high holding power anchor), is to be as follows in addition to the requirements specified in 1.2 through 1.5 of this chapter.  (1) Application for approval  Manufacturers who apply for the approval of the manufacturing processes of anchors are to submit the appropriate application form (Form 2-1) filled in	1.6.1 High Holding Power Anchors  The approval procedure for manufacturing of high holding power anchor (the anchor specified in 2.1.4-2, Part L of the Rules, having the holding power two times or more of that of ordinary anchor, and if it is used without subjected to the reduction as specified in 14.3.1.2-6, Part 1, Part C of the Rules, such anchor may not be dealt with as a high holding power anchor), is to be as follows in addition to the requirements specified in 1.2 through 1.5 of this chapter.  (1) Application for approval  Manufacturers who apply for the approval of the manufacturing processes of anchors are to submit a copy of the appropriate application form (Form 2-1)	Terminology alignment  To delete the specification of the number of copies due to digitization
with required data and information to the Society (branch office concerned) ((2) to (4) are omitted) (5) Submission of test reports	filled in with required data and information to the Society (branch office concerned)  ((2) to (4) are omitted)  (5) Submission of test reports	

(Keview of Guidance for the Ap	proval of Materials and Equipment for Marine Use)	
Amended	Original	Remarks
The manufacturer, on completion of the tests, is to prepare test records, covering, at least, the following items in addition to those given in 1.4.2, obtain the signature of the attended surveyor of the Society, and to submit them to the Society.  ((a) to (e) are omitted)  1.8 Approval of Manufacturing Process of Anchors	The manufacturer, on completion of the tests, is to prepare test records, in triplicate, covering, at least, the following items in addition to those given in 1.4.2, obtain the signature of the attended surveyor of the Society, and to submit them to the Society.  ((a) to (e) are omitted)  1.8 Approval of Manufacturing Process of Anchors	
1.8.2 Approval Application Forms  1 Manufacturers who apply for the approval of the manufacturing process of anchor are to submit the appropriate application form (Form 2-1) filled in with the required data and information to the Society (branch office concerned).	1.8.2 Approval Application Forms  1 Manufacturers who apply for the approval of the manufacturing process of anchor are to submit a copy of the appropriate application form (Form 2-1) filled in with the required data and information to the Society (branch office	Terminology alignment To delete the specification of the number of copies due to digitization
1.8.3 Documents to be Submitted  Each of the documents listed in below are to be submitted together with the approval application forms specified in 1.8.2.  ((1) to (12) are omitted)	1.8.3 Documents to be Submitted  Three copies each of the documents listed in below are to be submitted together with the approval application forms specified in 1.8.2.  ((1) to (12) are omitted)	To delete the specification of the number of copies due to digitization

Amended	Original	Remarks
Chapter 1A APPROVAL OF ANCHORS INTENDED FOR USE ON VESSELS OR FLOATING OFFSHORE FACILITIES FIXED OR POSITIONED AT SPECIFIC SEA AREAS FOR LONG PERIODS OF TIME	Chapter 1A APPROVAL OF ANCHORS INTENDED FOR USE ON VESSELS OR FLOATING OFFSHORE FACILITIES FIXED OR POSITIONED AT SPECIFIC SEA AREAS FOR LONG PERIODS OF TIME	
1A.2 Approval Application	1A.2 Approval Application	
1A.2.1 Approval Application Form  Manufacturers who apply for the approval of anchor are to submit the appropriate application form (Form 2-1A) filled in with the required data and information to the Society (branch office concerned).	1A.2.1 Approval Application Form  Manufacturers who apply for the approval of anchor are to submit a copy of the appropriate application form (Form 2-1A) filled in with the required data and information to the Society (branch office concerned).	To delete the specification of the number of copies due to digitization
1A.2.2 Documents to be Submitted  Each of the documents given in below are to be submitted together with the appropriate application form specified in 1A.2.1.  ((1) to (4) are omitted)	1A.2.2 Documents to be Submitted  Three copies each of the documents given in below are to be submitted together with the appropriate application form specified in 1A.2.1.  ((1) to (4) are omitted)	To delete the specification of the number of copies due to digitization
Chapter 2 APPROVAL OF MANUFACTURING PROCESS OF CHAINS	Chapter 2 APPROVAL OF MANUFACTURING PROCESS OF CHAINS	
2.2 Application Procedures	2.2 Application Procedures	
2.2.1 Application Procedures and Application Form The approval application procedures are to be in	2.2.1 Application Procedures and Application Form The approval application procedures are to be in	

(Review of Guidance for the Ap	proval of Materials and Equipment for Marine Use)	
Amended	Original	Remarks
accordance with the following requirements:  (1) The manufacturer who intends to newly manufacture chains is to submit the appropriate application form (Form 2-2A) filled with the information on the type of chains accompanied by the reference data, each in triplicate, stated in 2.2.2 to the Society.  (2) The Society, upon examining the application for approval and the attached reference data stated in the above, is to give approval of the test procedure for approval and return them to the applicant.	accordance with the following requirements:  (1) The manufacturer who intends to newly manufacture chains is to submit a single copy of the appropriate application form (Form 2-2A) filled with the information on the type of chains accompanied by the reference data, each in triplicate, stated in 2.2.2 to the Society.  (2) The Society, upon examining the application for approval and the attached reference data stated in the above, is to give approval of the test procedure for approval and return them to the applicant.	To delete the specification of the number of copies due to digitization
2.4 Approval Test	2.4 Approval Test	
2.4.1 Approval Test  1 The approval test is to be carried out on each type of chain and material grade which under application for each manufacturing factory. The contents of the approval test are to be as indicated in Table 3.2-1 and the test is to be carried out in the presence of the Surveyor of the Society unless otherwise specified.	2.4.1 Approval Test  1 The approval test is to be carried out on each type of chain and material grade which under application for each manufacturing factory. The contents of the approval test are to be as indicated in Table 2.2-1 and the test is to be carried out in the presence of the Surveyor of the Society unless otherwise specified.	Figure and table numbers have been changed due to reorganization
Table 3.2-1 Approval Test Items and Acceptance Criteria for Chains (Table is omitted)	Table <u>2</u> .2-1 Approval Test Items and Acceptance Criteria for Chains (Table is omitted)	Figure and table numbers have been changed due to reorganization
Table <u>3</u> .2-2 Impact Test (Table is omitted)	Table <u>2</u> .2-2 Impact Test (Table is omitted)	Figure and table numbers have been changed due to reorganization
Table <u>3</u> .2-3 Standard Value of <i>CTOD</i> test (Table is omitted)	Table <u>2</u> .2-3 Standard Value of <i>CTOD</i> test (Table is omitted)	Figure and table numbers have been changed due to

Amended	Original	Remarks
2.6 Approval	2.6 Approval	reorganization
2.6.3 Renewal of Approval and Changes in the Approved Content  1 In cases where changes have been made to the approved content of the "Certificate of Approval" specified in 2.6.1, the applicant is to apply for renewal of approval in accordance with the requirements of 2.2. In such cases, a copy of the "Certificate of Approval" and the documents specified in 2.2.2 are to be submitted together with the appropriate application form (Form 2-2A). However, the data to be submitted may be limited to reference data on the changes.  2 In the case of application for renewal of approval as specified in -1, three sets of data are to be submitted. These data sets are to include an accurate record of all manufacturing that has been preformed since the last "Certificate of Approval" was issued. In such cases, the Society will conduct a factory inspection if needed.	2.6.3 Renewal of Approval and Changes in the Approved Content  1 In cases where changes have been made to the approved content of the "Certificate of Approval" specified in 2.6.1, the applicant is to apply for renewal of approval in accordance with the requirements of 2.2. In such cases, the "Certificate of Approval" and the documents specified in 2.2.2 are to be submitted together with the appropriate application form (Form 2-2A). However, the data to be submitted may be limited to reference data on the changes.  2 In the case of application for renewal of approval as specified in -1, data are to be submitted. These data sets are to include an accurate record of all manufacturing that has been preformed since the last "Certificate of Approval" was issued. In such cases, the Society will conduct a factory inspection if needed.	To delete the specification of the number of copies due to digitization  To delete the specification of the number of copies due to digitization
Chapter 3 APPROVAL OF MANUFACTURING PROCESS OF CHAIN ACCESSORIES	Chapter 3 APPROVAL OF MANUFACTURING PROCESS OF CHAIN ACCESSORIES	Terminology alignment
3.2 Approval Application Procedures	3.2 Approval Application Procedures	
3.2.1 Approval Application Procedures  Manufacturers are to submit the appropriate application form (Form 2-2B) and are to follow the	3.2.1 Approval Application Procedures  Manufacturers are to submit a copy of the appropriate application form (Form 2-2B) and are to follow the	To delete the specification of the number of copies due to digitization

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)				
Amended	Original	Remarks		
application process specified in the provisions of 2.2.1.	application process specified in the provisions of 2.2.1.			
3.4 Approval Test	3.4 Approval Test			
3.4.1 Approval Test  1 The approval test is to be carried out on each item of chain accessories under application for each manufacturing factory. The details of approval test are to be as indicated in Table 3.3-1, and the test is to be carried out in the presence of the Surveyor of the Society unless otherwise specified.	3.4.1 Approval Test  1 The approval test is to be carried out on each item of chain accessories under application for each manufacturing factory. The details of approval test are to be as indicated in Table 2.3-1, and the test is to be carried out in the presence of the Surveyor of the Society unless otherwise specified.	Figure and table numbers have been changed due to reorganization		
Table <u>3</u> .3-1 Approval Test Items and Acceptance Criteria for Accessories (Table is omitted)	Table 2.3-1 Approval Test Items and Acceptance Criteria for Accessories (Table is omitted)	Figure and table numbers have been changed due to reorganization		
Table <u>3.</u> 3-2 Impact Test (Table is omitted)	Table <u>2.</u> 3-2 Impact Test (Table is omitted)	Figure and table numbers have been changed due to reorganization		
Table <u>3</u> .3-3 Standard Value of <i>CTOD</i> test (Table is omitted)	Table <u>2</u> .3-3 Standard Value of <i>CTOD</i> test (Table is omitted)	Figure and table numbers have been changed due to reorganization		
3.5 Submission of Test Reports	3.5 Submission of Test Reports			
The manufacturer, after completion of the approval test, is to prepare test reports including those covering the manufacturing process of test chain accessories, all endorsed by the Surveyor of the Society. These reports are to be submitted to the Society.	The manufacturer, after completion of the approval test, is to prepare test reports including those covering the manufacturing process of test chain accessories, in triplicate, all endorsed by the Surveyor of the Society. These reports are to be submitted to the Society.	To delete the specification of the number of copies due to digitization		

#### Amended-Original Requirements Comparison Table

(	Review	of Guida	nce for the $\Delta$	Approval c	of Materials	and Equi	pment for	Marine Use	)
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Amended	Original	Remarks
Chapter 4 TYPE APPROVAL OF RAW	Chapter 4 APPROVAL OF RAW TEXTILES	Terminology alignment
TEXTILES FOR SYNTHETIC FIBRE ROPES	FOR SYNTHETIC FIBRE ROPES	
4.2 Application Procedures	4.2 Application Procedures	Terminology alignment
4.2.1 Application Procedures  The manufacturer of raw textiles who intends to	4.2.1 Application Procedures  The manufacturer of raw textiles who intends to	To delete the specification
obtain approval of the manufacturing process of raw textiles	obtain approval of the manufacturing process of raw textiles	of the number of copies due to digitization
is to submit his application for approval the appropriate application form (Form 2-3) filled with the following	is to submit his application for approval a single copy of the appropriate application form (Form 2-3) filled with the	due to digitization
reference data, stated in (1) to (4) below to the Society.	following reference data each in triplicate, stated in (1) to (4)	
In cases where reference data compatible with those to be newly submitted were previously submitted to the Society,	below to the Society.  In cases where reference data compatible with those to	
submission of such reference data may be omitted by giving	be newly submitted were previously submitted to the Society,	
notification to the Society to that extent.	submission of such reference data may be omitted by giving	
	notification to the Society to that extent.	
((1) to (4) are omitted)	((1) to (4) are omitted)	
4.4 Approval Test	4.4 Approval Test	Terminology alignment
4.4.2 Test Procedures	4.4.2 Test Procedures	
The procedures of the tests specified in 4.4.1-1 above	The procedures of the tests specified in 4.4.1-1 above	
are to be in accordance with the following requirements:	are to be in accordance with the following requirements:	E:
(1) Linear strength and elongation tests  The number of test specimens used in the test is to be	(1) Linear strength and elongation tests  The number of test specimens used in the test is to be	Figure and table numbers have been changed due to
10, and average value of the measured values of linear	10, and average value of the measured values of linear	reorganization
strength and elongation on these test specimens are to	strength and elongation on these test specimens are to	
be obtained. The average value of linear strength and	be obtained. The average value of linear strength and	
elongation values thus obtained are to satisfy those	elongation values thus obtained are to satisfy those	

	Amonded Approval of Materials and Equipment for Matrine Use)					
	Amended		Original	Remarks		
(2)	given in Table 3.4-1. Chemical resistance test The chemical resistance tests are to comprise alkaliresistance test and acid-resistance test. In alkaliresistance test, the test specimen is to be soaked in 10% caustic soda solution at a temperature 20±2°C for a period of 24 hours, whereas in acid-resistance test, the test specimen is to be soaked in 10% acid solution at a temperature 20±2°C for a period of 24 hours, and then rinsed with water, and the linear strength is to be measured by the same method as in (1) above. The number of test specimens is to be 10 for each chemical solution. The linear strength is to be converted into the value of residual strength ratio of chemical resistance by the following equation. These average values are to satisfy the values given in Table 3.4-1.  Residual chemical resistance strength ratio	(2)	given in Table 2.4-1. Chemical resistance test The chemical resistance tests are to comprise alkaliresistance test and acid-resistance test. In alkaliresistance test, the test specimen is to be soaked in 10% caustic soda solution at a temperature 20±2°C for a period of 24 hours, whereas in acid-resistance test, the test specimen is to be soaked in 10% acid solution at a temperature 20±2°C for a period of 24 hours, and then rinsed with water, and the linear strength is to be measured by the same method as in (1) above. The number of test specimens is to be 10 for each chemical solution. The linear strength is to be converted into the value of residual strength ratio of chemical resistance by the following equation. These average values are to satisfy the values given in Table 2.4-1.  Residual chemical resistance strength ratio	Figure and table numbers have been changed due to reorganization		
	= Linear strength (g) after chemical processing Linear strength (g) before chemical processing  × 100(%)		$= \frac{\text{Linear strength (g) after chemical processing}}{\text{Linear strength (g) before chemical processing}} \times 100(\%)$			
thereon	Submission of Test Reports  The manufacturer is to prepare test reports after etion of the tests, obtain the surveyor's signature n, and is to submit them, to the Society.  4-1 Standard Tensile Strength Values for Raw Textiles (Table is omitted)	thereon	3 Submission of Test Reports  The manufacturer is to prepare test reports after etion of the tests, obtain the surveyor's signature in, and is to submit them, in triplicate, to the Society.  2.4-1 Standard Tensile Strength Values for Raw Textiles (Table is omitted)	To delete the specification of the number of copies due to digitization		

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)					
Amended	Original	Remarks			
4.5 Approval	4.5 Approval				
4.5.1 Notification of Approval  The Society will grant approval to the raw textiles for synthetic fibre ropes, which have been deemed appropriate on the basis of Surveyor reports and documents submitted in accordance with the requirements in 4.2 through 4.4.	4.5.1 Notification of Approval  The Society will grant approval to the raw textiles for synthetic fibre ropes, which have been deemed appropriate on the basis of Surveyor reports and documents submitted in accordance with the requirements in 4.2 through 4.4.	Terminology alignment			
In this case, a " <u>Certificate</u> of Approval" that includes the approval number, approval date, type of raw textiles etc. will be issued. And, in accordance with the requirements in <b>4.2.1</b> and <b>4.4.3</b> , the Society will stamp the submitted data it deems necessary with a seal of approval and return such date to the applicant.	In this case, a " <u>Notice</u> of Approval" that includes the approval number, approval date, type of raw textiles etc. will be issued. And, in accordance with the requirements in <b>4.2.1</b> and <b>4.4.3</b> , the Society will stamp the submitted data it deems necessary with a seal of approval and return such date to the applicant.				
<ul> <li>4.5.3 Renewal of Approval and Changes in the Approved Content</li> <li>1 In cases where changes have been made to the approved content of the "Certificate of Approval" specified in 4.5.1, the applicant is to apply for renewal of approval in accordance with the requirements of 4.2. In such cases, "Certificate of Approval" and the documents specified in 4.2.1 are to be submitted together with the appropriate application form (Form 2-3). However, the data to be submitted may be limited to reference data on the changes.</li> <li>2 In the case of application for renewal of approval as specified in -1, data are to be submitted. These data sets are to</li> </ul>	4.5.3 Renewal of Approval and Changes in the Approved Content  1 In cases where changes have been made to the approved content of the "Certificate of Approval" specified in 4.5.1, the applicant is to apply for renewal of approval in accordance with the requirements of 4.2. In such cases, a copy of "Certificate of Approval" and the documents specified in 4.2.1 are to be submitted together with the appropriate application form (Form 2-3). However, the data to be submitted may be limited to reference data on the changes.  2 In the case of application for renewal of approval as specified in -1, three sets of data are to be submitted. These	To delete the specification of the number of copies due to digitization  To delete the specification of the number of copies			
include an accurate record of all manufacturing that has been performed since the last "Certificate of Approval" was issued. In such cases, the Society will conduct a factory inspection if needed.	data sets are to include an accurate record of all manufacturing that has been performed since the last "Certificate of Approval" was issued. In such cases, the Society will conduct a factory inspection if needed.	due to digitization			

Original  6 Manufacturers whose renewal is approved are to return the old "Type Approval Certificate" to the Society as	Remarks Terminology alignment
return the old "Type Approval Certificate" to the Society as	Terminology alignment
soon as possible after receiving the new certificate and the term of validity of the old certificate expires.  7 Manufacturers whose request for changes in approved content is accepted are to return the old "Type Approval Certificate" to the Society as soon as possible after receiving the new certificate.	Terminology alignment
Chapter 5 APPROVAL OF MANUFACTURING PROCESS OF SYNTHETIC FIBRE ROPES	
5.2 Application Procedures	
5.2.1 Application Procedures  Manufacturer who applies for the approval of manufacturing process of synthetic fibre ropes is to submit for approval the appropriate application form (Form 2-4) with plans for the approval test as well as the following items attached, to the Society:	To delete the specification of the number of copies due to digitization
((1) to (4) are omitted)	
5.4 Approval Test	
<ul><li>5.4.1 Test Items</li><li>3 The test procedures for -1 above are to be in accordance with the following requirements:</li></ul>	
	7 Manufacturers whose request for changes in approved content is accepted are to return the old "Type Approval Certificate" to the Society as soon as possible after receiving the new certificate.  Chapter 5 APPROVAL OF MANUFACTURING PROCESS OF SYNTHETIC FIBRE ROPES  5.2 Application Procedures  Manufacturer who applies for the approval of manufacturing process of synthetic fibre ropes is to submit for approval the appropriate application form (Form 2-4) with plans for the approval test as well as the following items attached, to the Society:  ((1) to (4) are omitted)  5.4 Approval Test  5.4.1 Test Items  3 The test procedures for -1 above are to be in

	Amended	provarv	Original	Remarks
(1)	Tensile tests in wet and dry conditions	(1)	Tensile tests in wet and dry conditions	
(1)	Tensile tests on three each test specimens are to, in	(1)	Tensile tests on three each test specimens are to, in	
	principle, be carried out for each of the test conditions		principle, be carried out for each of the test conditions	
	given in Table 3.5-1, and breaking strength and		given in Table 2.5-1, and breaking strength and	E' 1, 11 1
	elongation are to be measured. Respective breaking		elongation are to be measured. Respective breaking	Figure and table numbers have been changed due to
	loads are to satisfy the loads guaranteed by		loads are to satisfy the loads guaranteed by	reorganization
	manufacturers. Values with respect to elongation are		manufacturers. Values with respect to elongation are	1 to 1 games and
	to be for reference only. The gauge length of the test		to be for reference only. The gauge length of the test	
	specimen to be 30 times or more the rope diameter,		specimen to be 30 times or more the rope diameter,	
	however it needs not to exceed 1 meter.		however it needs not to exceed 1 meter.	
(2)	Abrasion resistance tensile test	(2)	Abrasion resistance tensile test	
	A total of six test specimens are to be taken from ropes		A total of six test specimens are to be taken from ropes	
	with diameter from 12 to 24 mm. Three of them are to		with diameter from 12 to 24 mm. Three of them are to	
	be set in the abrasion resistance testing machine with		be set in the abrasion resistance testing machine with	
	the following particulars, and are to be subjected to		the following particulars, and are to be subjected to	
	repeated strokes for 500 times.		repeated strokes for 500 times.	
	Stroke: 200-300 mm		Stroke: 200-300 mm	
	Abrasion speed: 50 strokes/min		Abrasion speed: 50 strokes/min	
	Abrasion surface: Grinder with particle size No.120		Abrasion surface: Grinder with particle size No.120	
	Tensile load: 98N		Tensile load: 98N	
	Those three tested specimens together with other three		Those three tested specimens together with other	
	non-tested specimens are to be placed in a thermostatic oven kept at a temperature of 20°C and		three non-tested specimens are to be placed in a thermostatic oven kept at a temperature of 20°C and	
	a humidity of 65%, and left there for one <i>hour</i> . They		a humidity of 65%, and left there for one <i>hour</i> . They	
	are then to be taken out, and be subjected to tensile		are then to be taken out, and be subjected to tensile	
	tests for measuring the tensile strength and		tests for measuring the tensile strength and	
	elongation, whereby the strength values of the rope		elongation, whereby the strength values of the rope	
	before and after abrasion are to be compared. The		before and after abrasion are to be compared. The	
	ratio of the residual abrasion strength to the strength		ratio of the residual abrasion strength to the strength	
	without abrasion (the residual abrasion strength ratio)		without abrasion (the residual abrasion strength ratio)	
	is to satisfy the values given in Table 3.5-2.		is to satisfy the values given in <b>Table 2.5-2</b> .	

	(Review of Guidance for the Ap	provai c	of Materials and Equipment for Marine Use)	
	Amended		Original	Remarks
(3)	For other test conditions than those shown above, they are to considered appropriate by the Society.  Weather resistance test  A total of six test specimens are to be taken from ropes with diameter from 12 to 24 mm. Three of these test specimens are to be placed in the weather resistance test machine controlled to the following conditions where they are to be left for 200 hours or more.  Weathering light: Sunshine carbon are light or ultraviolet carbon are light  Temperature of black panel: 63±1°C  Period of water spray: 18 min/2hours  The six test specimens including those three nontested specimens are then to be placed in a thermostatic oven kept at a temperature of 20°C and a humidity of 65%, and left there for one hour. These test specimens are to be taken out, tensile strength and elongation are to be measured, and the strength after the weathering resistance test and that of the test specimens not subjected to such weathering resistance test are to be compared.  The ratio of the former to the latter (the residual weathering strength ratio) is to satisfy the values	(3)	For other test conditions than those shown above, they are to considered appropriate by the Society.  Weather resistance test  A total of six test specimens are to be taken from ropes with diameter from 12 to 24 mm. Three of these test specimens are to be placed in the weather resistance test machine controlled to the following conditions where they are to be left for 200 hours or more.  Weathering light: Sunshine carbon are light or ultraviolet carbon are light  Temperature of black panel: 63 ± 1°C  Period of water spray: 18 min/2hours  The six test specimens including those three nontested specimens are then to be placed in a thermostatic oven kept at a temperature of 20°C and a humidity of 65%, and left there for one hour. These test specimens are to be taken out, tensile strength after the weathering resistance test and that of the test specimens not subjected to such weathering resistance test are to be compared.  The ratio of the former to the latter (the residual weathering strength ratio) is to satisfy the values	Remarks
5.4.	given in Table 3.5-2.  Table 3.5-1 Test Conditions (Table is omittted)  2 Submission of Test Report The manufacturer is to prepare test report after etion of the tests, receive signature of the surveyor who		given in Table 2.5-2.  Table 2.5-1 Test Conditions (Table is omittted)  Submission of Test Report  The manufacturer is to prepare test report after tion of the tests, receive signature of the surveyor who	Figure and table numbers have been changed due to reorganization  To delete the specification of the number of copies

Amended	original Of Materials and Equipment for Marine Use)	Remarks
		due to digitization
witnessed the tests, and is to submit them, to the Society.	witnessed the tests, and is to submit them, <u>in triplicate</u> , to the	due to digitization
	Society.	
5.5 Annwayal	5.5 Approval	
5.5 Approval	3.5 Approvai	
5.5.3 Renewal of Approval	5.5.3 Renewal of Approval	
1 In the case of application for renewal of approval, the	1 In the case of application for renewal of approval, the	To delete the specification
applicant is to submit the appropriate application form (Form	applicant is to submit the appropriate application form (Form	of the number of copies
2-4) along with the "Certificate of Approval" and a list of the	2-4) along with a copy of the "Certificate of Approval" and	due to digitization
products for which approval is desired to be continued or	three copies of a list of the products for which approval is	
revoked. In such cases, the aforementioned list is to include	desired to be continued or revoked. In such cases, the	
information such as the product name, manufacturer and kind	aforementioned list is to include information such as the	
of filaments used, whether an inspection has been carried out	product name, manufacturer and kind of filaments used,	
by the Society during the previous 5 years, the production	whether an inspection has been carried out by the Society	
output during the previous year, whether the approval is to be	during the previous 5 years, the production output during the	
continued not, etc. Approval is to be revoked, however, in	previous year, whether the approval is to be continued not, etc.	
cases where the filaments used in the rope are no longer being	Approval is to be revoked, however, in cases where the	Figure and table numbers
manufactured.	filaments used in the rope are no longer being manufactured.	have been changed due to
2 (Omitted)	2 (Omitted)	reorganization
3 In addition to the factory inspection specified in -2, the	3 In addition to the factory inspection specified in -2, the	
breaking test specified in 5.1.7, Part L of the Rules for the	breaking test specified in 5.1.7, Part L of the Rules for the	
Survey and Construction of Steel Ships is to be carried out	Survey and Construction of Steel Ships is to be carried out	
according to the categories specified in Table 3.5-3. One	according to the categories specified in Table 2.5-3. One	
specimen each is to be taken from three different coils of rope	specimen each is to be taken from three different coils of rope	
which are larger than 40 mm or the largest size manufactured	which are larger than 40 mm or the largest size manufactured	
in diameter for each category. Each specimen is to satisfy the	in diameter for each category. Each specimen is to satisfy the	
provisions in 5.1.7(5), Part L of the Rules for the Survey	provisions in 5.1.7(5), Part L of the Rules for the Survey	
and Construction of Steel Ships. However, in cases where	and Construction of Steel Ships. However, in cases where	
product inspections (appearance and dimension) for each	product inspections (appearance and dimension) for each	
category have been carried out by the Society during the	category have been carried out by the Society during the	
previous 5 years, breaking tests for the products in this	previous 5 years, breaking tests for the products in this	

	proval of Materials and Equipment for Marine Use)	D 1
Amended	Original	Remarks
category may be dispensed with.	category may be dispensed with.	
5.5.4 Changes in Approved Content  1 In cases where changes have been made to the approved content of the "Certificate of Approval" or the "Particulars of Approval Conditions" specified in 5.5.1-1, the applicant is to apply for approval in accordance with the requirements of 5.2. In such cases, the "Certificate of Approval" and the documents specified in 5.2.1 are to be submitted together with the appropriate application form (Form 2-4). However, the data to be submitted may be limited to that related to the changes.	5.5.4 Changes in Approved Content  1 In cases where changes have been made to the approved content of the "Certificate of Approval" or the "Particulars of Approval Conditions" specified in 5.5.1-1, the applicant is to apply for approval in accordance with the requirements of 5.2. In such cases, a copy of the "Certificate of Approval" and the documents specified in 5.2.1 are to be submitted together with the appropriate application form (Form 2-4). However, the data to be submitted may be limited to that related to the changes.	To delete the specification of the number of copies due to digitization
Table <u>3</u> .5-2 Residual Strength Ratio of Synthetic Fibre Ropes (Table is omitted)	Table <u>2</u> .5-2 Residual Strength Ratio of Synthetic Fibre Ropes (Table is omitted)	
Table <u>3</u> .5-3 Division of Synthetic Ropes (Table is omitted)	Table <u>2</u> .5-3 Division of Synthetic Ropes (Table is omitted)	
Chapter 6 <u>TYPE APPROVAL OF</u> EMERGENCY TOWING ARRANGEMENTS	Chapter 6 EMERGENCY TOWING ARRANGEMENTS	Terminology alignment
6.1 General	6.1 General	
6.1.1 Scope  1 This Chapter applies to the type approval of emergency towing arrangements (Hereinafter referred to as "ETA" in this Chapter.) and examinations, tests and inspection of products of ETA based upon the requirements specified in	6.1.1 Scope 1 This Chapter applies to the <u>approval of prototype</u> of emergency towing arrangements (Hereinafter referred to as "ETA" in this Chapter.) and examinations, tests and inspection of products of ETA based upon the requirements specified in	Terminology alignment

#### Amended-Original Requirements Comparison Table

(Review of Guidance for the Approval of Materials and Equipment for Marine Us
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	proval of Materials and Equipment for Marine Use)	
Amended	Original	Remarks
14.5.2.4, Part 1, Part C of the Rules for the Survey and Construction of Steel Ships. Where tests for type approval of ETA mean the examinations and tests in order to confirm that the prototype of ETA made of components listed in 14.5.2.3, Part 1, Part C of the Rules for the Survey and Construction of Steel Ships complies with the requirements specified in 14.5.2, Part 1, Part C of the Rules for the Survey and Construction of Steel Ships, and production tests of ETA mean the examinations and tests to be carried out against the products of each component of ETA which has obtained the type approval.  2 Test for type approval of ETA and production tests of each component of ETA are to be carried out separately.	14.5.2.4, Part 1, Part C of the Rules for the Survey and Construction of Steel Ships. Where tests for approval of prototype of ETA mean the examinations and tests in order to confirm that the prototype of ETA made of components listed in 14.5.2.3, Part 1, Part C of the Rules for the Survey and Construction of Steel Ships complies with the requirements specified in 14.5.2, Part 1, Part C of the Rules for the Survey and Construction of Steel Ships, and production tests of ETA mean the examinations and tests to be carried out against the products of each component of ETA which has obtained the approval of the prototype.  2 Test for approval of prototype of ETA and production tests of each component of ETA are to be carried out separately.	
<ul> <li>6.2 Application Procedures</li> <li>1 Manufacturer who intends to obtain type approval of ETA is to submit the appropriate application form (Form 2-5) accompanied by the following data. <ul> <li>((1) to (14) are omitted)</li> </ul> </li> <li>6.5 Submission of Test Records</li> </ul>	<ul> <li>6.2 Application Procedures</li> <li>1 Manufacturer who intends to obtain approval of prototype of ETA is to submit the appropriate application form (Form 2-5) accompanied by three sets of the following data. ((1) to (14) are omitted)</li> <li>6.5 Submission of Test Records</li> </ul>	Terminology alignment To delete the specification of the number of copies due to digitization
6.5.1 General  The manufacturer is to make the test records after approval tests described in 6.4 have been completed and is to submit the tests record, endorsed by the attended surveyor to the Society.	6.5.1 General  The manufacturer is to make the test records after approval tests described in 6.4 have been completed and is to submit the tests record in duplicate, endorsed by the attended surveyor to the Society.	To delete the specification of the number of copies due to digitization

(Review of Guidance for the Ap	proval of Materials and Equipment for Marine Use)	
Amended	Original	Remarks
6.6 Approval	6.6 Approval	
6.6.1 Notification of Approval	6.6.1 Notification of Approval	
The Society upon finding that the results of	The Society upon finding that the results of	Terminology alignment
confirmation survey of manufacturing factory and the record	confirmation survey of manufacturing factory and the record	
of prototype tests are all satisfactory, it to type approve of	of prototype tests are all satisfactory, it to approve the	
ETA, and send a notice of approval describing the following	prototype of ETA, and send a notice of approval describing	
contents to the applicant and inform the branch office within jurisdiction of address of the applicant to that effect.	the following contents to the applicant and inform the branch office within jurisdiction of address of the applicant to that	
jurisdiction of address of the applicant to that effect.	effect.	
((1) to (3) are omitted)	((1) to (3) are omitted)	
6.6.3 Renewal of Approval and Changes in the	6.6.3 Renewal of Approval and Changes in the	
Approved Content	Approved Content	
1 In cases where changes have been made to the	1 In cases where changes have been made to the	To delete the specification
approved content of the "Certificate of Approval" specified	approved content of the "Certificate of Approval" specified	of the number of copies due to digitization
in 6.6.1, the applicant is to apply for renewal of approval in	in 6.6.1, the applicant is to apply for renewal of approval in	due to digitization
accordance with the requirements of 6.2. In such cases, the "Certificate of Approval" and the documents specified in 6.2.1	accordance with the requirements of <b>6.2</b> . In such cases, <u>a copy</u> of the "Certificate of Approval" and the documents specified	
are to be submitted together with the appropriate application	in 6.2.1 are to be submitted together with the appropriate	
form (Form 2-5). However, the data to be submitted may be	application form (Form 2-5). However, the data to be	
limited to reference data on the changes.	submitted may be limited to reference data on the changes.	
2 In the case of application for renewal of approval	2 In the case of application for renewal of approval	To delete the specification
specified in -1, data are to be submitted. These data sets are	specified in -1, three sets of data are to be submitted. These	of the number of copies
to include an accurate record of all manufacturing that has	data sets are to include an accurate record of all manufacturing	due to digitization
been performed since the last "Certificate of approval" was	that has been performed since the last "Certificate of	
issued. In such cases, the Society will conduct a factory	approval" was issued. In such cases, the Society will conduct	
inspection if needed.	a factory inspection if needed.	

Amended	Original	Remarks
Chapter 7 TYPE APPROVAL OF LIFE- SAVING APPLIANCES	Chapter 7 LIFE-SAVING APPLIANCES	Terminology alignment
7.2 Type Approval	7.2 Type Approval	
7.2.1 Procedures for Application	7.2.1 Procedures for Application	
1 An applicant for type approval is to submit the appropriate application form (Form 2-6) and the following drawings and documents for examination:  ((1) to (5) are omitted)	1 An applicant for type approval is to submit the appropriate application form (Form 2-6) and the following drawings and documents for examination, each in triplicate: ((1) to (5) are omitted)	To delete the specification of the number of copies due to digitization
2 Irrespective of the above -1, the applicant may submit the appropriate application form (Form 2-8) only, instead of submitting the relevant drawings and documents, if they are identical to drawings and documents already submitted to the Society in relation to appliances or equipment previously type approved by the Society.	2 Irrespective of the above -1, the applicant may submit the appropriate application form (Form 2-8) only, in triplicate, instead of submitting the relevant drawings and documents, if they are identical to drawings and documents already submitted to the Society in relation to appliances or equipment previously type approved by the Society.	To delete the specification of the number of copies due to digitization
<ul> <li>7.2.3 Prototype Tests for Type Approval</li> <li>4 After completion of the prototype test, the applicant is to compile the test results and submit the test records endorsed by the attending Surveyor to the Society.</li> </ul>	7.2.3 Prototype Tests for Type Approval  4 After completion of the prototype test, the applicant is to compile the test results and submit the test records endorsed by the attending Surveyor in triplicate to the Society.	To delete the specification of the number of copies due to digitization
7.2.5 Renewal of Validity of Certificate of Type Approval  1 When a firm that has been issued with a Certificate of Type Approval for a given appliance or item of equipment wishes to renew the Certificate, the firm is to submit the appropriate application form (Form 2-6) with a list of the appliances or equipment manufactured in the past to the Society within the validity of the Certificate.	7.2.5 Renewal of Validity of Certificate of Type Approval  1 When a firm that has been issued with a Certificate of Type Approval for a given appliance or item of equipment wishes to renew the Certificate, the firm is to submit the appropriate application form (Form 2-6) with a list of the appliances or equipment manufactured in the past in triplicate to the Society within the validity of the Certificate.	To delete the specification of the number of copies due to digitization

Amended	Original	Remarks
7.5.2 Type Approval  1 Drawings and documents data to be submitted Drawings and documents to be submitted are specified in 7.2.1-1(2) to (5) and the following: ((1) to (24) are omitted)	7.5.2 Type Approval  1 Drawings and documents data to be submitted Drawings and documents to be submitted are specified in 7.2.1-1(2) to (5) and the following, each in triplicate: ((1) to (24) are omitted)	To delete the specification of the number of copies due to digitization
<ul> <li>7.6.3 Type Approval</li> <li>1 Drawings and documents to be submitted     Drawings and documents to be submitted are specified in 7.2.1-1(2) to (5) and 7.5.2-1(1) to (15) and (18) to (24) and the following:     <ul> <li>((1) to (3) are omitted)</li> </ul> </li> <li>7.7 Inflatable Liferafts</li> </ul>	<ul> <li>7.6.3 Type Approval</li> <li>1 Drawings and documents to be submitted     Drawings and documents to be submitted are specified in 7.2.1-1(2) to (5) and 7.5.2-1(1) to (15) and (18) to (24) and the following, each in triplicate:     ((1) to (3) are omitted)</li> <li>7.7 Inflatable Liferafts</li> </ul>	To delete the specification of the number of copies due to digitization
<ul> <li>7.7.2 Type Approval</li> <li>1 Drawings and documents to be submitted     Drawings and documents to be submitted are specified in 7.2.1-1(2) to (5) and the following:     ((1) and (11) are omitted)</li> </ul>	7.7.2 Type Approval  1 Drawings and documents to be submitted Drawings and documents to be submitted are specified in 7.2.1-1(2) to (5) and the following, each in triplicate: ((1) and (11) are omitted)	To delete the specification of the number of copies due to digitization

Amended	Original	Remarks
7.8 Launching Appliances for Lifeboats, Rescue Boats and Liferafts  7.8.2 Type Approval  1 Drawings and documents to be submitted Drawings and documents to be submitted are listed in  7.2.1-1(2) to (5) and the following: ((1) to (7) are omitted)	7.8 Launching Appliances for Lifeboats, Rescue Boats and Liferafts  7.8.2 Type Approval  1 Drawings and documents to be submitted Drawings and documents to be submitted are listed in  7.2.1-1(2) to (5) and the following, each in triplicate: ((1) to (7) are omitted)	To delete the specification of the number of copies due to digitization
<ul> <li>7.9 Engines for Lifeboats and Rescue Boats (including reduction and reversing gears)</li> <li>7.9.1 Type Approval <ol> <li>Drawings and documents to be submitted Drawings and documents to be submitted are listed in</li> <li>7.2.1-1(2) to (5) and the following: ((1) to (11) are omitted)</li> <li>7.10 Release Mechanisms of Lifeboats or Rescue Boats Launched by Falls other than Free-fall Lifeboats</li> </ol></li></ul>	<ul> <li>7.9 Engines for Lifeboats and Rescue Boats (including reduction and reversing gears)</li> <li>7.9.1 Type Approval <ol> <li>Drawings and documents to be submitted Drawings and documents to be submitted are listed in</li> <li>7.2.1-1(2) to (5) and the following, each in triplicate: <ol> <li>to (11) are omitted)</li> </ol> </li> <li>7.10 Release Mechanisms of Lifeboats or Rescue Boats Launched by Falls other than Free-fall Lifeboats</li> </ol></li></ul>	To delete the specification of the number of copies due to digitization
7.10.1 Type Approval  1 Drawings and documents to be submitted Drawings and documents to be submitted are specified in 7.2.1-1(2) to (5) and the following:  ((1) to (5) are omitted)	7.10.1 Type Approval  1 Drawings and documents to be submitted Drawings and documents to be submitted are specified in 7.2.1-1(2) to (5) and the following, each in triplicate: ((1) to (5) are omitted)	To delete the specification of the number of copies due to digitization

Amended	Original	Remarks
7.11 Fall Preventer Devices Fitted with Lifeboats or Rescue Boats Launched by Falls other than Free-fall Lifeboats	7.11 Fall Preventer Devices Fitted with Lifeboats or Rescue Boats Launched by Falls other than Free-fall Lifeboats	Remarks
<ul> <li>7.11.1 Type Approval</li> <li>1 Drawings and documents to be submitted Drawings and documents to be submitted are specified in 7.2.1-1(2) to (5) and the following: ((1) to (6) are omitted)</li> </ul>	<ul> <li>7.11.1 Type Approval</li> <li>1 Drawings and documents to be submitted     Drawings and documents to be submitted are specified in 7.2.1-1(2) to (5) and the following, each in triplicate:     ((1) to (6) are omitted)</li> </ul>	To delete the specification of the number of copies due to digitization
Chapter 8 TYPE APPROVAL OF SEWAGE TREATMENT PLANT AND SEWAGE COMMINUTING AND DISINFECTING SYSTEM	Chapter 8 SEWAGE TREATMENT PLANT AND SEWAGE COMMINUTING AND DISINFECTING SYSTEM	Terminology alignment
8.2 Application	8.2 Application	
8.2.1 Application Form  The manufacturer, who intends to obtain the type approval, is to submit the appropriate application form (Form 2-9) filled in with necessary data and information to the Society (Head Office).	8.2.1 Application Form  The manufacturer, who intends to obtain the approval of use, is to submit the appropriate application form (Form 2-9) filled in with necessary data and information to the Society (Head Office).	Terminology alignment
8.2.2 Documents  1 The documents listed (1) through (9) below, are to be submitted together with the application form specified in 8.2.1.  ((1) to (10) are omitted)	8.2.2 Documents  1 The documents listed (1) through (9) below, each in triplicate, are to be submitted together with the application form specified in 8.2.1.  ((1) to (10) are omitted)	To delete the specification of the number of copies due to digitization

Amended	Original	Remarks
8.4 Approval Tests for Sewage Treatment Plant	8.4 Approval Tests for Sewage Treatment Plant	
<ul> <li>8.4.4 Tilt and Vibration Test</li> <li>2 Control and sensor components used for the plant are to be subject to the vibration test of which conditions are specified in Table 3.8-1 and Table 3.8-2.</li> </ul>	<ul> <li>8.4.4 Tilt and Vibration Test</li> <li>2 Control and sensor components used for the plant are to be subject to the vibration test of which conditions are specified in Table 2.8-1 and Table 2.8-2.</li> </ul>	
Table <u>3</u> .8-1 Resonance Test Condition (Table is omitted)	Table <u>2</u> .8-1 Resonance Test Condition (Table is omitted)	Figure and table numbers have been changed due to reorganization
Table <u>3</u> .8-2 Endurance Test Condition (Table is omitted)	Table <u>2</u> .8-2 Endurance Test Condition (Table is omitted)	Figure and table numbers have been changed due to reorganization
8.5 Approval Tests for Sewage Comminuting and Disinfecting System	8.5 Approval Tests for Sewage Comminuting and Disinfecting System	
<ul> <li>8.5.1 Approval Tests for Sewage Comminuting and Disinfecting System</li> <li>2 Vibration test     It is to be confirmed that no abnormality is observed during the vibration test of which conditions are specified in Table 3.8-1 and Table 3.8-2.</li> </ul>	<ul> <li>8.5.1 Approval Tests for Sewage Comminuting and Disinfecting System</li> <li>2 Vibration test         It is to be confirmed that no abnormality is observed during the vibration test of which conditions are specified in Table 2.8-1 and Table 2.8-2.     </li> </ul>	Figure and table numbers have been changed due to reorganization
8.6 Approval	8.6 Approval	
8.6.1 Test Records  The manufacturer is to prepare records of the approval test after completion of the test, to obtain verification by the Society's attending surveyor and to submit them, to the	8.6.1 Test Records  The manufacturer is to prepare records of the approval test after completion of the test, to obtain verification by the Society's attending surveyor and to submit them, in triplicate,	To delete the specification of the number of copies due to digitization

Amended	Original	Remarks
Society.  Chapter 9 TYPE APPROVAL OF FIBER REINFORCED PLASTIC (FRP)	to the Society.  Chapter 9 APPROVAL OF USE OF FIBER REINFORCED PLASTIC (FRP)	Terminology alignment
9.1 General	9.1 General	
9.1.1 Scope In accordance with the requirements in Annex 3.2, Part 1, Part C of the Rules for the Survey and Construction of Steel Ships, the requirements in this Chapter apply to tests and inspection for the type approval of fiber reinforced plastic (hereinafter referred to as "FRP").	9.1.1 Scope In accordance with the requirements in Annex 3.2, Part 1, Part C of the Rules for the Survey and Construction of Steel Ships, the requirements in this Chapter apply to tests and inspection for the approval of use of fiber reinforced plastic (hereinafter referred to as "FRP").	Terminology alignment
9.2 Application Procedure	9.2 Application Procedure	
9.2.1 Approval Application  Manufacturers who wish to obtain type approval of FRP products are to submit the appropriate application form (Form 2-10) and, as shown in 9.2.3, any drawings and documents as well as the test plan to either the Society's main office or a branch office.  9.5 Notice of Approval	9.2.1 Approval Application  Manufacturers who wish to obtain approval to use FRP products are to submit the appropriate application form (Form 2-10) and, as shown in 9.2.3, three copies of any drawings and documents as well as three copies of the test plan to either the Society's main office or a branch office.  9.5 Notice of Approval	Terminology alignment To delete the specification of the number of copies due to digitization
9.5.3 Renewal of Approval 1 In case of application for renewal of approval, the	9.5.3 Renewal of Approval  1 In case of application for renewal of approval, the	Terminology alignment

Amended	Original Original	Remarks	
applicant is to submit "Certificate of Approval" and data showing actual manufacturing records of the FRP within the specific period of time together with the appropriate application from (Form 2-10).	applicant is to submit <u>a copy of</u> "Certificate of Approval" and <u>three copies of</u> data showing actual manufacturing records of the FRP within the specific period of time together with the appropriate application from (Form 2-10).		
9.5.4 Changes in Approval Content  1 In case of changes to an approved FRP, the applicant is to submit the "Certificate of Approval" and the documents specified in 9.2.3 together with the appropriate application form (Form 2-10).	9.5.4 Changes in Approval Content  1 In case of changes to an approved FRP, the applicant is to submit a copy of the "Certificate of Approval" and three copies of the documents specified in 9.2.3 together with the appropriate application form (Form 2-10).	To delete the specification of the number of copies due to digitization	
Chapter 10 TYPE APPROVAL OF SHIPBOARD INCINERATOR	Chapter 10 SHIPBOARD INCINERATOR	Terminology alignment	
10.2 Application Procedure	10.2 Application Procedure		
10.2.3 Documents  1 The data given in the following (1) through (7) are to be submitted together with the Application Form referred to in 10.2.1.  ((1) to (7) are omitted)	10.2.3 Documents  1 Three copies of the data given in the following (1) through (7) are to be submitted together with the Application Form referred to in 10.2.1.  ((1) to (7) are omitted)		
10.5 Approval	10.5 Approval		
10.5.1 Test Records  After completion of the approval test, the manufacturer is to produce records of approval test, and is to submit to the Society upon receiving confirmation by the	10.5.1 Test Records  After completion of the approval test, the manufacturer is to produce records of approval test, and is to submit three copies to the Society upon receiving	To delete the specification of the number of copies due to digitization	

Amended	Original	Remarks
Society's Surveyor.	confirmation by the Society's Surveyor.	
Chapter 11 TYPE APPROVAL OF BALLAST WATER MANAGEMENT SYSTEMS	Chapter 11 BALLAST WATER MANAGEMENT SYSTEMS	Terminology alignment
11.2 Approval Application	11.2 Approval Application	
11.2.2 Documents to be Submitted  1 The drawings and documents listed below are to be submitted together with the application specified in 11.2.1.  ((1) to (9) are omitted)	11.2.2 Documents to be Submitted  1 The drawings and documents listed below are to be submitted in triplicate together with the application specified in 11.2.1.  ((1) to (9) are omitted)	To delete the specification of the number of copies due to digitization
11.5 Approval Test	11.5 Approval Test	
11.5.5 Land-based Testing	11.5.5 Land-based Testing	
3 Influent Water	3 Influent Water	
((1) to (3) are omitted)	((1) to (3) are omitted)	
(4) For any given set of test cycles (five are considered a set) a salinity range is to be chosen for each cycle. Given the salinity of the test set up for a test cycle in	(4) For any given set of test cycles (five are considered a set) a salinity range is to be chosen for each cycle. Given the salinity of the test set up for a test cycle in	
fresh, brackish and marine water, each is to have dissolved and particulate content in one of the	fresh, brackish and marine water, each is to have dissolved and particulate content in one of the	
following combinations in Table 3.11-1. Deviations	following combinations in Table 2.11-1. Deviations	
from the marine and brackish salinity ranges of the	from the marine and brackish salinity ranges of the	
table are to be reported and justified and the resulting tests are not to be less challenging for the <i>BWMS</i> than	table are to be reported and justified and the resulting tests are not to be less challenging for the <i>BWMS</i> than	
would be the circumstance if the deviations had not	would be the circumstance if the deviations had not	

Amended	Original	Remarks		
		Kelliaiks		
occurred: [Annex / 2.29]	occurred: [Annex / 2.29]			
(5) (Omitted)	(5) (Omitted)			
(6) The <i>BWMS</i> is to be tested in conditions for which it	(6) The <i>BWMS</i> is to be tested in conditions for which it			
will be approved. For a <i>BWMS</i> to achieve an unlimited	will be approved. For a BWMS to achieve an			
Type Approval Certificate specified in 11.6.2 with	unlimited Type Approval Certificate specified in			
respect to salinity, one set of test cycles is to be	11.6.2 with respect to salinity, one set of test cycles is			
conducted within each of the three salinity ranges	to be conducted within each of the three salinity			
with the associated dissolved and particulate content	ranges with the associated dissolved and particulate			
as prescribed in Table 3.11-2. Tests under adjacent	content as prescribed in Table 2.11-2. Tests under			
salinity ranges in the above table are to be separated	adjacent salinity ranges in the above table are to be			
by at least 10 PSU (Practical Salinity Unit). [Annex /	separated by at least 10 PSU (Practical Salinity Unit).			
2.31]	[Annex / 2.31]			
4 Test Items	4 Test Items			
The methods and acceptance criteria for land-based testing	The methods and acceptance criteria for land-based testing			
are specified in Table 3.11-2.	are specified in Table 2.11-2.			
m11 011 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		F: 1.11 1		
Table $\underline{3.11-1}$ Influent Water	Table $\underline{2}.11-1$ Influent Water	Figure and table numbers have been changed due to		
(Table is omitted)	(Table is omitted)	reorganization		
		Figure and table numbers		
Table <u>3</u> .11-2 Methods and Acceptance Criteria for Land-	Table <u>2</u> .11-2 Methods and Acceptance Criteria for Land-	have been changed due to		
based Testing	based Testing	reorganization		
(Table is omitted)	(Table is omitted)	Tergunian		
11.5.6 Shipboard Testing	11.5.6 Shipboard Testing			
During shipboard testing, it is to be verified that the	During shipboard testing, it is to be verified that the	Figure and table numbers		
entire BWMS is in good working order and complies with the	entire BWMS is in good working order and complies with the	have been changed due to		
ballast water performance standard on a ship in which it is	ballast water performance standard on a ship in which it is	reorganization		
actually in use.	actually in use.			
(1) Testing Requirements	(1) Testing Requirements			
(a) (Omitted)	(a) (Omitted)			
(b) In evaluating the performance of BWMS				
(a) In a randoming the performance of Births	105/200			

Amended	Original	Remarks
		Kelliaiks
installation(s) on a ship or ships, the following	installation(s) on a ship or ships, the following	
information and results are to be supplied to the	information and results are to be supplied to the	
satisfaction of the Society. [Annex / 2.8]	satisfaction of the Society. [Annex / 2.8]	
(i) to v) are omitted)	(i) to v) are omitted)	
vi) Sampling regime and volumes for	vi) Sampling regime and volumes for	
analysis(refer to -2 in Table 3.11-3): [Annex	analysis(refer to -2 in Table 2.11-3): [Annex	
/ 2.8.6]	/ 2.8.6]	
(2) Test Items	(2) Test Items	
The test method and acceptance criteria are shown in <b>Table</b>	The test method and acceptance criteria are shown in	
<u>3</u> .11-3.	Table <u>2</u> .11-3.	
-	-	
Table <u>3</u> .11-3 Test Method and Acceptance Criteria of	Table 2.11-3 Test Method and Acceptance Criteria of	Figure and table numbers
Shipboard Testing	Shipboard Testing	have been changed due to
(Table is omitted)	(Table is omitted)	reorganization
11.6 Approval	11.6 Approval	
11.6.1 Test Records	11.6.1 Test Records	
1 The manufacturer is to prepare records of the approval	1 The manufacturer is to prepare records of the approval	To delete the specification
test after completion of the test, to obtain verification by the	test after completion of the test, to obtain verification by the	of the number of copies
Society's attending surveyor and then to submit them, to the	Society's attending surveyor and then to submit them, in	due to digitization
Society. Then, following items are to be incorporated.	triplicate, to the Society. Then, following items are to be	
	incorporated.	
((1) to (14) are omitted)	((1)  to  (14)  are omitted)	
		·

#### Amended-Original Requirements Comparison Table

(Review of Guidance for the Approval of Materials and Equipment for Marine Us
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Amended	Original	Remarks
Chapter 12 TYPE APPROVAL OF CONTAINER SECURING FITTINGS	Chapter 12 APPROVAL OF CONTAINER SECURING FITTINGS	
12.1 General	12.1 General	
12.1.1 Application  Type approval procedures for fittings specified in 9.1.5, Part L of the Rules for the Survey and Construction of Steel Ships are to be in accordance with this chapter.	12.1.1 Application  Approval procedures for fittings specified in 9.1.5, Part L of the Rules for the Survey and Construction of Steel Ships are to be in accordance with this chapter.	Terminology alignment
Part 4 WELDING CONSUMABLES  Chapter 1 TYPE APPROVAL OF WELDING	Part <u>3</u> WELDING CONSUMABLES  Chapter 1 <u>APPROVAL</u> OF WELDING	To align with the structure of other rules, the General Provisions are designated as Part 1, and the former Parts 1 to 4 are reorganized accordingly. Terminology alignment
CONSUMABLES  1.1 General	CONSUMABLES  1.1 General	
1.1.1 Scope In accordance with the requirements in 6.1.3 and 6.1.4, Part M of Rules for the Survey and Construction of Steel Ships (hereinafter referred to as "the Rules"), the requirements in this chapter apply to tests and inspection regarding type approval of welding consumables.	In accordance with the requirements in 6.1.3 and 6.1.4, Part M of Rules for the Survey and Construction of Steel Ships (hereinafter referred to as "the Rules"), the requirements in this chapter apply to tests and inspection for the purpose of treating welding consumables as approved welding consumables.	Terminology alignment

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Amended	Original	Remarks
1.2.1 Approval Application Form  Manufacturers wishing to obtain approval are to submit to the Society (Branch Office) the appropriate application form (Form 3-1), which includes for each manufacturing plant the brands of the welding consumables (for submerged arc welding consumables, each brand of core	1.2.1 Approval Application Form  Manufacturers wishing to obtain approval are to submit to the Society (Branch Office) a single copy of the appropriate application form (Form 3-1), which includes for each manufacturing plant the brands of the welding consumables (for submerged arc welding consumables, each	To delete the specification of the number of copies due to digitization
wire and combination flux), kind, symbol, purpose, maximum core wire diameter produced and the maximum quantity hydrogen (this is limited to non-low-hydrogen electrodes for high tensile sheets), together with each of documents and data specified in 1.2.3.  1.4 Approval Tests	brand of core wire and combination flux), kind, symbol, purpose, maximum core wire diameter produced and the maximum quantity hydrogen (this is limited to non-low-hydrogen electrodes for high tensile sheets), together with two copies each of documents and data specified in 1.2.3.  1.4 Approval Tests	
1.4.3 Test Records  After completion of the approval test, the manufacturer is to produce records of approval test and is to submit them to the Society (Branch Office) upon receiving confirmation by the attending surveyor.  1.5 Approval	1.4.3 Test Records  After completion of the approval test, the manufacturer is to produce records of approval test and is to submit three copies of them to the Society (Branch Office) upon receiving confirmation by the attending surveyor.  1.5 Approval	To delete the specification of the number of copies due to digitization
1.5.1 Notification of Approval  The Society examines the submitted test record and results of confirmation survey, and if found satisfactory, the welding consumables shall be approved and an approval certificate specifying the approval number, date of approval, type, model,	1.5.1 Notification of Approval  The Society examines the submitted test record and results of confirmation survey, and if found satisfactory, the welding consumables shall be approved and an approval certificate shall be issued to each brand. The date of issue of	Terminology alignment

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Amended	Original	Remarks
<ul> <li>and other relevant particulars shall be issued for each brand.</li> <li>The date of issue of the approval certificate is to be coincided with the date of completion of the approval test.</li> <li>1.6 Annual Inspection</li> </ul>	the approval certificate is to be coincided with the date of completion of the approval test.  1.6 Annual Inspection	
<ul> <li>1.6.3 Test Records After completion of the test in annual inspection, the manufacturer is to prepare test reports and submit them to the Society (Branch Office) upon receiving confirmation by the attending surveyor.</li> <li>1.7 Change in the Approval Content</li> </ul>	<ul> <li>1.6.3 Test Records After completion of the test in annual inspection, the manufacturer is to prepare two copies of test reports and submit them to the Society (Branch Office) upon receiving confirmation by the attending surveyor. </li> <li>1.7 Change in the Approval Content</li> </ul>	To delete the specification of the number of copies due to digitization
1.7.1 Application for Change  1 In case when the particulars of the welding consumables which being mentioned in the certificate of approval, such as grade, welding position, maximum diameter of electrodes or shield gas, is changed, the manufacturer is to submit the appropriate application form (Form 3-1) for change together with necessary data to the Society (Branch Office), and necessary additional approval tests are to be carried out accordingly.	1.7.1 Application for Change  1 In case when the particulars of the welding consumables which being mentioned in the certificate of approval, such as grade, welding position, maximum diameter of electrodes or shield gas, is changed, the manufacturer is to submit a single copy of the appropriate application form (Form 3-1) for change together with two copies of necessary data to the Society (Branch Office), and necessary additional approval tests are to be carried out accordingly.	To delete the specification of the number of copies due to digitization
When the significant changes in compositions or manufacturing process of the wire and flux or removal of manufacturing plant is made, the manufacturer is to submit notification of alternation in any preferred form together with necessary data to the Society (Branch Office), and necessary confirmation survey and test may be carried out accordingly.	When the significant changes in compositions or manufacturing process of the wire and flux or removal of manufacturing plant is made, the manufacturer is to submit a single copy of notification of alternation in any preferred form together with three copies of necessary data to the Society (Branch Office), and necessary confirmation survey and test may be carried out accordingly.	To delete the specification of the number of copies due to digitization

Amended	Original	Remarks
1.10 Reduction of Approval Test for the Same Brand of	1.10 Reduction of Approval Test for the Same Brand of	Terminology alignment
Approved Consumables	Approved Consumables	Terminology ariginment
Approved Consumables	Approved Consumables	
		Terminology alignment
1.10.1 Approval Application	1.10.1	
In case when the manufacturer request reduction of	In case when the manufacturer request reduction of	To delete the specification
part of approval test under the provisions of 6.1.3-4 and -5,	part of approval test under the provisions of 6.1.3-4 and -5,	of the number of copies
Part M of the Rules, the manufacturer is to submit the	Part M of the Rules, the manufacturer is to submit the	due to digitization
appropriate application form (Form 3-1) with descriptions for	appropriate application form (Form 3-1) with descriptions for	
this reduction and the following data to the Society (Head	this reduction and three copies of the following data to the	
office).	Society (Head office).	
((1) to $(5)$ are omitted.)	((1) to (5) are omitted.)	
		Terminology alignment
1.10.2 <u>Approval Test Plan</u>	1.10.2	
The society studies the application and data being	The society studies the application and data being	
submitted and, if deemed appropriate, may permit the reduced	submitted and, if deemed appropriate, may permit the reduced	
approval test at least equivalent to annual test. In this case the	approval test at least equivalent to annual test. In this case the	
approval test plan will be approved and returned to the	approval test plan will be approved and returned to the	
manufacturer.	manufacturer.	
	1.11 A 1.17 A 1.4 A C SWITE	
1.11 Approval Test and Annual Inspection for Welding	1.11 Approval Test and Annual Inspection for Welding	
Consumables which are Not Specified in the Rules	Consumables which are Not Specified in the Rules	
1.11.1 Approval Test	1.11.1 Approval Test	
1 The manufacturer, who wishes the approval of welding	1 The manufacturer, who wishes the approval of	To delete the specification
consumables to which the provisions in 6.1.3-3, Part M of the	welding consumables to which the provisions in 6.1.3-3, Part	of the number of copies
Rules has been applied, is to submit the appropriate	M of the Rules has been applied, is to submit the appropriate	due to digitization
application form (Form 3-1) and the following data to the	application form (Form 3-1) and three copies of the following	
Society (Head office).	data to the Society (Head office).	
((1) to (3) are omitted)	((1) to (3) are omitted)	

Amended	Original Original	Remarks
Part <u>5</u> NON-METALLIC MATERIALS AND COATING MATERIALS FOR HULL	Part 4 NON-METALLIC MATERIALS AND COATING MATERIALS FOR HULL	
Chapter 1 <u>TYPE APPROVAL OF FIRE</u> PROTECTION MATERIALS	Chapter 1 APPROVAL OF FIRE PROTECTION MATERIALS	Terminology alignment
1.1 General	1.1 General	
1.1.1 Scope  1 The requirements of this Chapter apply to the tests and inspections for the type approval of fire protection material specified in (1) through (12) below in accordance with the requirements of Part P and Part R of the Rules for the Survey and Construction of Steel Ships (hereinafter referred to as "the Rules").  ((1) to (12) are omitted)	1.1.1 Scope  1 The requirements of this Chapter apply to the tests and inspections for the approval of fire protection material specified in (1) through (12) below in accordance with the requirements of Part P and Part R of the Rules for the Survey and Construction of Steel Ships (hereinafter referred to as "the Rules").  ((1) to (12) are omitted)	Terminology alignment
1.4 Application Procedure for Approval	1.4 Application Procedure for Approval	
<ul> <li>1.4.1 Application Form for Approval</li> <li>1 When obtaining the approval of fire protection materials except fire retardant coatings, the appropriate application form (Form 4-1) accompanied by the documents specified in 1.4.3-1 is submitted to the Society (Head Office).</li> <li>2 When obtaining the approval for fire retardant coatings, the appropriate application form (Form 4-2_5)</li> </ul>	<ul> <li>1.4.1 Application Form for Approval</li> <li>1 When obtaining the approval of fire protection materials except fire retardant coatings, the appropriate application form (Form 4-1) accompanied by the documents specified in 1.4.3-1 (one for each item) is submitted to the Society (Head Office).</li> <li>2 When obtaining the approval for fire retardant coatings, the appropriate application form (Form 4-2_5)</li> </ul>	To delete the specification of the number of copies due to digitization  To delete the specification of the number of copies due to digitization

#### Amended-Original Requirements Comparison Table

(	Review	of Guidance	for the A	Approval o	of Material	s and Equ	ipment for	Marine Use)
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	proval of Materials and Equipment for Marine Use)	T
Amended	Original	Remarks
accompanied by the documents specified in 1.4.3-2 is submitted to the Society (Head Office).	accompanied by the documents specified in 1.4.3-2 (one for each item) is submitted to the Society (Head Office).	
1.7 Notice of Approval	1.7 Notice of Approval	
1.7.1 Notice of Approval  1 The Society issues the Certificate of Approval specifying the approval number, date of approval, type, model, and other relevant particulars, in accordance with the FTP Code after having approved the material by the general judgment on the basis of the results of examination of the submitted documents and the results of the confirmatory survey of manufacturer for approval and approval tests.  2 When the Society approves watertightness or gastightness in accordance with 1.3.2-2 and 1.3.3-2, such information may be added to the Certificate of Approval by the Society along with the approved maximum design pressure. In cases where maximum design pressure is different for each installation, each design pressure is to be indicated.	<ul> <li>1.7.1 Notice of Approval 1 The Society issues the Certificate of Approval for Fire Protection Material in accordance with the FTP Code after having approved the material by the general judgment on the basis of the results of examination of the submitted documents and the results of the confirmatory survey of manufacturer for approval and approval tests. </li> <li>2 When the Society approves watertightness or gastightness in accordance with 1.3.2-2 and 1.3.3-2, such information may be added to the Certificate of Approval for Fire Protection Material by the Society along with the approved maximum design pressure. In cases where maximum design pressure is different for each installation, each design pressure is to be indicated.</li> </ul>	Terminology alignment  The approval certificate for fire protection materials include the approval number, date of approval, type, model, and other relevant details Terminology alignment
1.7.2 Validity of Certificate of Approval  The valid term of the Certificate of Approval is five years from the date of approval.  1.10 Periodical Test  1.10.1 Interval of Periodical Test	1.7.2 Validity of Certificate of Approval for Fire  Protection Material  The Certificate of Approval for Fire Protection  Material is valid for five years.  1.10 Periodical Test  1.10.1 Interval of Periodical Test	Terminology alignment
Periodical test is carried out before or on the expiry	Periodical test is carried out before or on the expiry	Terminology alignment

Amended	Original Original	Remarks
date of the Certificate of Approval.	date of the Certificate of Approval for Fire Protection Material.	
1.10.2 Periodical Tests for Approved Materials other than Fire Retardant Coatings  1 The appropriate application form (Form 4-3) accompanied with necessary the records of manufacture and the specifications of the products specified in 1.4.3-1(6) is submitted to the Society (Head Office).	1.10.2 Periodical Tests for Approved Materials other than Fire Retardant Coatings  1 The appropriate application form (Form 4-3) accompanied with necessary copies of the records of manufacture and the specifications of the products specified in 1.4.3-1(6) is submitted to the Society (Head Office).	To delete the specification of the number of copies due to digitization
1.10.3 Periodical Test for Fire Retardant Coatings  1 The appropriate application form (Form 4-4) accompanied by necessary the records of manufacture and the list of coating system and the table of chemical composition specified in 1.4.3-3(5) and (6) respectively is submitted to the Society (Head Office).	1.10.3 Periodical Test for Fire Retardant Coatings  1 The appropriate application form (Form 4-4) accompanied by necessary copies of the records of manufacture and the list of coating system and the table of chemical composition specified in 1.4.3-3(5) and (6) respectively is submitted to the Society (Head Office).	To delete the specification of the number of copies due to digitization
1.10.4 Notice of Renewal  1 The Society issues the Certificate of Approval which is valid for five years from the date of completion of the periodical tests when the Society ascertains continuous compliance with the type approval conditions by the review of the test report of the periodical tests specified in 1.10.2 or 1.10.3.	1.10.4 Notice of Renewal  1 The Society issues the Certificate of Approval for Fire Protection Material which is valid for five years from the date of completion of the periodical tests when the Society ascertains continuous compliance with the type approval conditions by the review of the test report of the periodical tests specified in 1.10.2 or 1.10.3.	Terminology alignment

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Amended	Original	Remarks
Chapter 2 TYPE APPROVAL OF INSULATION MATERIALS FOR REFRIGERATED CHAMBERS AND OIL-IMPERVIOUS COVERINGS	Chapter 2 TYPE APPROVAL OF MATERIALS FOR INSULATION AND OIL-IMPERVIOUS COVERINGS	Terminology alignment
2.1 General	2.1 General	
2.1.1 Scope  The requirements in this chapter apply to tests and inspection for the type approval of materials intended to be used for insulating the refrigerated chambers and oil-impervious composition provided for the surface of oil tanks adjacent refrigerated chambers (hereinafter referred to as "oil-impervious covering") in accordance with the requirements of 5.2.1-1 and 5.2.5 of the Rules for Cargo Refrigerating Installations.  (Delete)	2.1.1 Scope  1 The requirements in this chapter apply to tests and inspection for the type approval of materials intended to be used for insulating the refrigerated chambers and oil-impervious composition provided for the surface of oil tanks adjacent refrigerated chambers (hereinafter referred to as "oil-impervious covering") in accordance with the requirements of 5.2.1-1 and 5.2.5 of the Rules for Cargo Refrigerating Installations.  2 Tests and inspections related to the type approval of materials intended to be used for the insulation of ships carrying liquefied gases in bulk requiring Society approval in accordance with the requirements of Chapter 4, Part N of the Rules for the Survey and Construction of Steel Ships are to follow the requirements specified in this chapter.	In order to add "TYPE APPROVAL OF INSULATION MATERIALS USED IN CARGO CONTAINMENT SYSTEMS FOR LIQUEFIED GASES" to Chapter 7, Part 5 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use, the current requirement have been deleted.(Transfer from Annex 1 of Part N and

	proval of Materials and Equipment for Marine Use)	
Amended	Original	Remarks
(Delete)	3 Tests and inspections related to the type approval of materials intended to be used for the insulation of ships using low-flashpoint fuels requiring Society approval in accordance with the requirements of Chapter 6, Part GF of the Rules for the Survey and Construction of Steel Ships are to follow the requirements specified in this chapter.	GF.)
2.2 Application Procedures	2.2 Application Procedures	
2.2.1 Procedures  Application for type approval is to be made to the Society (Head Office) using an application form (Form 4-6) together with each of the documents specified in 2.2.4.	2.2.1 Procedures  Application for type approval is to be made to the Society (Head Office) using an application form (Form 4-6) together with 3 copies each of the documents specified in 2.2.4.	To delete the specification of the number of copies due to digitization
2.2.3 Applicant  Material manufacturer is, in general, to be the applicant for approval except where the applicant other than manufacturer has final responsibility for the quality of products.	2.2.3 Applicant  Material manufacturer is, in general, to be the applicant for type approval except where the applicant other than manufacturer has final responsibility for the quality of products.	Terminology alignment
<ul> <li>2.2.5 Omission of Documents</li> <li>(1) The manufacturers, who have the products already approved according to the requirements of this chapter, may omit submission of the documents which is a duplicate of those examined at previous approval if they so indicate.</li> <li>(2) (Omitted)</li> </ul>	<ul> <li>2.2.5 Omission of Documents</li> <li>(1) The manufacturers, who have the products already approved according to the requirements of this chapter, may omit submission of the documents which is a duplicate of those examined at previous type approval if they so indicate.</li> <li>(2) (Omitted)</li> </ul>	Terminology alignment

Amended	Original	Remarks
2.4 Approval Test	2.4 Approval Test	Terminology alignment
<ul> <li>2.4.1 General</li> <li>((1) to (4) are omitted)</li> <li>(5) The test record are to be submitted to the Society.</li> <li>(6) (Omitted)</li> </ul>	<ul> <li>2.4.1 General <ul> <li>((1) to (4) are omitted)</li> <li>(5) Two copies of the test record are to be submitted to the Society.</li> <li>(6) (Omitted)</li> </ul> </li> </ul>	Terminology alignment
2.4.2 Insulation Materials	2.4.2 Insulation Materials	
<ul> <li>(1) The items represented by mark ○ in Table 4.2-1 are to be tested for the insulation materials. However, materials not given in the table are to be considered in each case.</li> <li>(2) (Omitted)</li> <li>(Delete)</li> <li>(Delete)</li> </ul>	<ol> <li>The items represented by mark in Table 4.2-1 are to be tested for the insulation materials. However, materials not given in the table are to be considered in each case.</li> <li>(Omitted)</li> <li>The test items and testing procedure, etc. for materials intended to be used for the insulation of ships carrying liquefied gases in bulk are to comply with the requirements in the "Guidance for Equipment and Fittings of Ships Carrying Liquefied Gases in Bulk".</li> <li>The test items and testing procedure, etc. for materials intended to be used for the insulation of ships using low-flashpoint fuels are to comply with the requirements in the "Guidance for Equipment and Fittings of Ships Using Low-flashpoint Fuels".</li> </ol>	In order to add "TYPE APPROVAL OF INSULATION MATERIALS USED IN CARGO CONTAINMENT SYSTEMS FOR LIQUEFIED GASES" to Chapter 7, Part 5 of the Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use, the current requirement have been deleted.(Transfer from Annex 1 of Part N and GF.)
Table <u>5</u> .2-1 Approval Test Items of Insulation Materials (Table is omitted)	Table <u>4</u> .2-1 Approval Test Items of Insulation Materials (Table is omitted)	Figure and table numbers have been changed due to

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)		
Amended	Original	Remarks
		reorganization
<ul> <li>2.4.3 Oil-impervious Covering (1) Tank top covering         The test items and testing procedure given in Table</li></ul>	<ul> <li>2.4.3 Oil-impervious Covering <ol> <li>Tank top covering</li> <li>The test items and testing procedure given in Table 4.2-2 are to be carried out for the tank top covering.</li> <li>Tank side covering</li> <li>The tests are to be carried out in accordance with requirements specified in Table 4.2-2. In addition to these tests, the tests given in Table 4.2-3 are to be carried out for the tank side covering.</li> </ol> </li> </ul>	Figure and table numbers have been changed due to reorganization
Table <u>5</u> .2-2 Approval Test Items and Testing Procedure for Tank Top Covering for Oil Tanks  ((Table is omitted)	Table <u>4</u> .2-2 Approval Test Items and Testing Procedure for Tank Top Covering for Oil Tanks (Table is omitted)	Figure and table numbers have been changed due to reorganization
Table <u>5</u> .2-3 Approval Test Items and Testing Procedure for Tank Side Covering ((Table is omitted)	Table 4.2-3 Approval Test Items and Testing Procedure for Tank Side Covering ((Table is omitted)	Figure and table numbers have been changed due to reorganization
2.5 Certificate of Approval	2.5 Certificate of <u>Type</u> Approval	
When the Society is satisfied with the results of the examination of the documents submitted, the survey specified in 2.3 and the approval test specified in 2.4, the Society issue the Certificate of Approval specifying the approval number, date of approval, type, model, and other relevant particulars, for Materials for Refrigerated Chambers. The valid term of the Certificate is remained for 5 years from the date of issue.	When the Society is satisfied with the results of the examination of the documents submitted, the survey specified in 2.3 and the approval test specified in 2.4, the Society issue the Certificate of Type Approval for Materials for Refrigerated Chambers. The valid term of the Certificate is remained for 5 <i>years</i> from the date of issue.	Terminology alignment

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)			
Amended	Original	Remarks	
2.6 Markings	2.6 Markings		
The marking and packaging are to be as shown in the documents attached to the application for the approval and no changes are to be made without agreement by the Society. The approval number is to be indicated to declare the approval by the Society.	The marking and packaging are to be as shown in the documents attached to the application for the <u>type</u> approval and no changes are to be made without agreement by the Society. The approval number is to be indicated to declare the <u>type</u> approval by the Society.	Terminology alignment	
2.8 Periodical Examination	2.8 Periodical Examination		
2.8.3 Renewal of the Certificate of Approval  When the results of the periodical examination are considered are considered acceptable to the Society, the Society reissues the Certificate of Approval for Materials for Refrigerated Chambers specified 2.5.	2.8.3 Renewal of the Certificate of <u>Type</u> Approval  When the results of the periodical examination are considered are considered acceptable to the Society, the Society reissues the Certificate of <u>Type</u> Approval for Materials for Refrigerated Chambers specified 2.5.	Terminology alignment	
2.9 Revocation of Approval	2.9 Revocation of <u>Type</u> Approval		
2.9.1 Revocation of Approval  Approval be revoked if any of the following cases is found relevant.  (1) When doubt occurs on the performance of the	2.9.1 Revocation of Type Approval  Type approval be revoked if any of the following cases is found relevant.  (1) When doubt occurs on the performance of the	Terminology alignment	
approved material as a result of the service record.  (2) When the manufacturer is not subjected to the periodical examination.	approved material as a result of the service record.  (2) When the manufacturer is not subjected to the periodical examination.		
(3) When the material failed to pass the periodical examination.	(3) When the material failed to pass the periodical examination.		
(4) When the manufacturer offers to stop manufacturing the material.	(4) When the manufacturer offers to stop manufacturing the material.		
(5) When the manufacturer requests to withdraw the type	(5) When the manufacturer requests to withdraw the type		

Amended	Original	Remarks
chapter 3 <u>TYPE</u> APPROVAL OF RAW MATERIALS FOR HULL OF SHIPS OF FIBREGLASS REINFORCED PLASTICS	approval.  Chapter 3 APPROVAL OF RAW MATERIALS FOR HULL OF SHIPS OF FIBREGLASS REINFORCED PLASTICS	Terminology alignment
3.1.1 Application  This chapter applies to the Type approval and retention of type approval of the raw materials to be used in the following (1) through (4) for FRP boats conforming to the requirements of 4.2.1 of the Rules for the Survey and Construction of Ships of Fibreglass Reinforced Plastics:  ((1) to (4) are omitted)	3.1.1 Application  This chapter applies to the approval and retention of approval of the raw materials to be used in the following (1) through (4) for FRP boats conforming to the requirements of 4.2.1 of the Rules for the Survey and Construction of Ships of Fibreglass Reinforced Plastics:  ((1) to (4) are omitted)	Terminology alignment
3.2 Approval Application Procedures	3.2 Approval Application Procedures	Terminology alignment
3.2.1 Application for Approval  Manufacturer who intends to obtain approval is to submit the appropriate application form in duplicate, stating the brand name and type of raw materials (Form 4-8) accompanied by the reference materials and data, as shown in 3.2.3 to the Society (Head Office).	3.2.1 Application for Approval  Manufacturer who intends to obtain approval is to submit the appropriate application form in duplicate, stating the brand name and type of raw materials (Form 4-8) accompanied by the reference materials and data, each in duplicate, as shown in 3.2.3 to the Society (Head Office).	To delete the specification of the number of copies due to digitization

Amended	Original	Remarks
3.5 Notification of Approval	3.5 Notification of Approval	Terminology alignment
5.5 Nouncation of Approval	5.5 Notification of Approval	Terminology angliment
3.5.1 Submission of Approval Test Records On completion of tests, the applicant is to submit the approval test records, with the signature of the surveyor who attended the tests obtained thereon, to the Society (Branch Office).	3.5.1 Submission of Approval Test Records On completion of tests, the applicant is to submit the approval test records, in triplicated, with the signature of the surveyor who attended the tests obtained thereon, to the Society (Branch Office).	Terminology alignment To delete the specification of the number of copies due to digitization
3.5.2 Issue of Approval Certificate  The Society approves the items of material on finding the results of approval tests and confirmation survey to be satisfactory after examining them and issues approval certificates specifying the approval number, date of approval, type, model, and other relevant particulars for each brand of products for each manufacturer who has applied for approval.	3.5.2 Issue of Approval Certificate  The Society approves the items of material on finding the results of approval tests and confirmation survey to be satisfactory after examining them and issues approval certificates for each brand of products for each manufacturer who has applied for approval.	Terminology alignment
3.6 Periodical Tests	3.6 Periodical Tests	
3.6.2 Application for Periodical Test  The manufacturer is to submit the appropriate application form (Form 4-9), to the Society (Branch Office) before the date of periodical test.	3.6.2 Application for Periodical Test  The manufacturer is to submit the appropriate application form (Form 4-9), in duplicate, to the Society (Branch Office) before the date of periodical test.	
3.6.5 Submission of Test Records  On successful completion of periodical test, the manufacturer is to submit the test results, with the attending surveyor's signature on them to the Branch Office of the Society concerned.	On successful completion of periodical test, the manufacturer is to submit the test results, in duplicate, with the attending surveyor's signature on them to the Branch Office of the Society concerned.	To delete the specification of the number of copies due to digitization

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3.6.6 Renewal of Validity of Certificate  For the approved materials that passed the periodical test, the Society (Branch Office) makes renewal of the validity of the certificate. The validity is, irrespective of the date of completion of the periodical test, to be one <i>year</i> from the next day of expiry of the previous validity.	3.6.6 Renewal of Validity of Certificate  For the approved materials that passed the periodical test, the Society (Branch Office) makes renewal of the validity of the certificate. The validity is, irrespective of the date of completion of the periodical test, to be <u>full</u> one <i>year</i> counting from the next day of expiry of the previous validity.	Terminology alignment
Chapter 4 TYPE APPROVAL OF COATING SYSTEM	Chapter 4 APPROVAL OF COATING SYSTEM	Terminology alignment
4.1.1 適用  1 The requirements of this chapter apply to tests and inspection for Type approval of coating system specified in (1)(a) or (2)(a), item1, Table B2.10, Part B of the Rules for the Survey and Construction of Steel Ships or 2.1.9-2(1), Part 2, Guidance for the Survey and Construction of Passenger Ships.	4.1.1 Application  1 The requirements of this chapter apply to tests and inspection for approval of coating system specified in (1)(a) or (2)(a), item1, Table B2.10, Part B of the Rules for the Survey and Construction of Steel Ships or 2.1.9-2(1), Part 2, Guidance for the Survey and Construction of Passenger Ships.	Terminology alignment
4.2 Application Procedures	4.2 Application Procedures	Terminology alignment
4.2.1 Application for Approval  Manufacturer who intends to obtain approval is to submit the appropriate application form stating the type and uses of the coating system (Form 4-14), the documents specified in 4.2.2 and the test plan to the Society (one of its	4.2.1 Application for Approval  Manufacturer who intends to obtain approval is to submit the appropriate application form stating the type and uses of the coating system (Form 4-14), three copies of the documents specified in 4.2.2 and three copies of the test plan	To delete the specification of the number of copies due to digitization

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)		
Amended	Original	Remarks
branches).	to the Society (one of its branches).	
4.5 Notice of Approval	4.5 Notice of Approval	Terminology alignment
4.5.3 Renewal of Approval  1 In case of application for renewal of approval, the applicant is to submit a "Certificate of Approval" (copy) and the data showing actual manufacturing records of the coating constituted coating system within the specific period together with the appropriate application from (Form 4-14).	4.5.3 Renewal of Approval  1 In case of application for renewal of approval, the applicant is to submit a "Certificate of Approval" (copy) and three copies of the data showing actual manufacturing records of the coating constituted coating system within the specific period together with the appropriate application from (Form 4-14).	To delete the specification of the number of copies due to digitization
4.5.4 Changes in Approval Content  1 In case of changes to an approved system, the applicant is to submit the "Certificate of Approval" (copy) and the documents specified in 4.2.2 together with the appropriate application form (Form 4-14).	4.5.4 Changes in Approval Content  1 In case of changes to an approved system, the applicant is to submit the "Certificate of Approval" (copy) and three copies of the documents specified in 4.2.2 together with the appropriate application form (Form 4-14).	Terminology alignment To delete the specification of the number of copies due to digitization
Chapter 5 <u>TYPE</u> APPROVAL OF NON- METALLIC BEARING MATERIAL FOR RUDDERS	Chapter 5 APPROVAL OF MANUFACTURING PROCESS OF NON-METALLIC BEARING MATERIAL FOR RUDDERS	Terminology alignment
5.1 General	5.1 General	
5.1.1 Scope  This chapter applies to the testing and inspection for the type approval of non-metallic bearing material for rudders specified in the requirements of 13.2.10, Part 1, Part C and	5.1.1 Scope  This chapter applies to the testing and inspection for the approval of manufacturing process of non-metallic bearing material for rudders specified in the requirements of	Terminology alignment

Amended	Original	Remarks
3.11, Part CS of the Rules for the Survey and Construction	13.2.10, Part 1, Part C and 3.11, Part CS of the Rules for	
of Steel Ships.	the Survey and Construction of Steel Ships.	
5.2 Approval Application	5.2 Approval Application	
5.2.1 Approval Application Form  Manufacturers wishing to obtain the type approval of non-metallic bearing material for rudders are to submit the appropriate application form (Form 4-11).	5.2.1 Approval Application Form  Manufacturers wishing to obtain the approval of manufacturing process of non-metallic bearing material for rudders are to submit a single copy of the appropriate application form (Form 4-11).	Terminology alignment To delete the specification of the number of copies due to digitization
5.2.2 Data to be Submitted  1 Each of the drawings and documents given as follows to be submitted together with the appropriate application form specified in 5.2.1.  ((1) to (8) are omitted)	5.2.2 Data to be Submitted  1 Three copies each of the drawings and documents given as follows to be submitted together with the appropriate application form specified in 5.2.1.  ((1) to (8) are omitted)	To delete the specification of the number of copies due to digitization
5.4 Approval Test	5.4 Approval Test	
5.4.4 Submission of Test Records  After completion of the approval test, the manufacturer is to produce records of approval test, and is to submit them to the Society upon receiving confirmation by the Society's Surveyor.	5.4.4 Submission of Test Records  After completion of the approval test, the manufacturer is to produce records of approval test, and is to submit the three copies to the Society upon receiving confirmation by the Society's Surveyor.	To delete the specification of the number of copies due to digitization
5.5 Approval	5.5 Approval	
5.5.1 Notification of Approval  The Society, when it considers that the result of field Assessment and approval test are appropriate, is to approve	5.5.1 Notification of Approval  The Society, when it considers that the result of field Assessment and approval test are appropriate, is to approve	Terminology alignment

Amended	Original	Remarks
the manufacturing process of bearing materials applied for, give notice specifying the approval number, date of approval, type, model, and other relevant particulars, to the manufacturer and inform the branch office.	the manufacturing process of bearing materials applied for, give notice to the manufacturer and inform the branch office.	
5.5.2 Valid Term  A valid term of the approval certificate is 5 <i>years</i> from the date of the initial or renewal approval. In case where the renewal assessment is carried out within 3 <i>months</i> before the expiry date, a valid term of the certificate is 5 <i>years</i> from the next date of the expiry date of the previous validity.	5.5.2 Valid Term  A valid term of the approval certificate is 5 <i>years</i> from the date of the initial or renewal approval. In case where the renewal assessment is carried out within 3 <i>months</i> before the expiry date, a valid term of the certificate is 5 <i>years</i> from the expiry date.	Terminology alignment
Chapter 6 TYPE APPROVAL OF AIRBORNE SOUND INSULATING MATERIALS USED FOR BULKHEADS AND DECKS	Chapter 6 APPROVAL OF AIRBORNE SOUND INSULATION PROPERTIES OF MATERIALS USED FOR BULKHEADS AND DECKS	Terminology alignment
6.1 General	6.1 General	
The requirements of this chapter apply to the tests and inspections for the type approval of the airborne sound insulating materials used for bulkheads and decks in accordance with the requirements of An5.2, Annex 2.3.1-2 "PROCEDURES FOR ON BOARD NOISE MEASUREMENTS", Part B of the Rules for the Survey and Construction of Steel Ships.	The requirements of this chapter apply to the tests and inspections for the approval of the airborne sound insulation properties of materials used for bulkheads and decks in accordance with the requirements of An5.2, Annex 2.3.1-2 "PROCEDURES FOR ON BOARD NOISE MEASUREMENTS", Part B of the Rules for the Survey and Construction of Steel Ships.	Terminology alignment

#### Amended-Original Requirements Comparison Table

(	(Review of	Guidance 1	for the A	Approval	of Materials	and Equi	pment for N	Marine Use)

(Review of Guidance for the Ap	(Review of Guidance for the Approval of Materials and Equipment for Marine Use)							
Amended	Original	Remarks						
6.2 Application Procedures	6.2 Application Procedures	Terminology alignment						
6.2.1 Procedures  The appropriate application form (Form 4-12) accompanied by each of the documents specified in 6.2.3 is to be submitted to the Society (Head Office).  6.2.2 Applicant  Material manufacturers are to be the applicant for approval except in cases where the applicant, not the manufacturer, is ultimately responsible for the quality of the products.	6.2.1 Procedures  The appropriate application form (Form 4-12) accompanied by 3 copies each of the documents specified in 6.2.3 is to be submitted to the Society (Head Office).  6.2.2 Applicant  Material manufacturers are to be the applicant for type approval except in cases where the applicant, not the manufacturer, is ultimately responsible for the quality of the products.							
6.4 Approval Tests	6.4 Approval Tests							
6.4.1 General  2 The test is to be carried out at a laboratory in accordance with ISO 10140-2:2010, and the test record are to be submitted to the Society.	6.4.1 General  2 The test is to be carried out at a laboratory in accordance with ISO 10140-2:2010, and two copies of the test record are to be submitted to the Society.							
6.5 Notice of Approval	6.5 Notice of Approval							
6.5.1 Notice of Approval  When the Society is satisfied with the results of the examination of the documents submitted, the confirmatory survey specified in 6.3 and the approval test specified in 6.4, a "Certificate for Approval" specifying the approval number, date of approval, type, model, and other relevant particulars, is issued by the Society.	When the Society is satisfied with the results of the examination of the documents submitted, the confirmatory survey specified in 6.3 and the approval test specified in 6.4, a "Certificate for Approval of Airborne Sound Insulation Properties" is issued by the Society.							

Amended	Original	Remarks
		Kemarks
6.7 Periodical Examinations	6.7 Periodical Examinations	
6.7.1 Application for Periodical Examinations  1 Periodical examinations are to be carried out before or on the expiry date of the "Certificate for Approval".	6.7.1 Application for Periodical Examinations 1 Periodical examinations are to be carried out before or on the expiry date of the "Certificate for Approval of Airborne Sound Insulation Properties".	
6.7.3 Renewal of the Certificate of Approval  When the results of the periodical examination are considered acceptable to the Society, the Society issues the "Certificate for Approval" specified 6.5.	When the results of the periodical examination are considered acceptable to the Society, the Society issues the "Certificate for Approval of Airborne Sound Insulation Properties" specified 6.5.	
6.7.4 Notice of Renewal  1 The Society issues the "Certificate for Approval" which is valid for five <i>years</i> from the date of completion of the periodical examination when the Society ascertains continuous compliance with the approval conditions through a review of the test report of the periodical examination specified in 6.7.2.	6.7.4 Notice of Renewal  1 The Society issues the "Certificate for Approval of Airborne Sound Insulation Properties" which is valid for five years from the date of completion of the periodical examination when the Society ascertains continuous compliance with the approval conditions through a review of the test report of the periodical examination specified in 6.7.2.	
Chapter 7 TYPE APPROVAL OF INSULATION MATERIALS USED IN CARGO CONTAINMENT SYSTEMS FOR LIQUEFIED GASES	(Newly added)	Addition of type approval for "INSULATION MATERIALS USED IN CARGO CONTAINMENT SYSTEMS FOR LIQUEFIED GASES" to Chapter 7, Part 5 of the Guidance for the Approval and Type

Amended	Original	Remarks
7.1 General	(Newly added)	Approval of Materials and Equipment for Marine Use. (Transfer from Annex 1 of Part N and GF.)
7.1.1 Scope  1 This chapter applies to the tests and inspections for the type approval of insulation materials used in the cargo containment systems specified in N4.19.3-3(1), Part N of the Guidance for the Survey and Construction of Steel Ships.  Upon applicant request, this chapter is to apply correspondingly when obtaining type approval for insulation	(Newly added) (Newly added)	
materials used in cargo piping systems.  2 This chapter applies to the tests and inspections for the type approval of insulation materials used in the fuel containment systems specified in 1.1.3-1, Part GF of the Rules for the Survey and Construction of Steel Ships and GF6.4.13-1(1), Part GF of the Guidance for the Survey and Construction of Steel Ships. Upon applicant request, this chapter is to apply correspondingly when obtaining type approval for insulation materials used in fuel piping systems.	(Newly added)	
7.2.1 Procedures  Application for type approval is to be made to the Society (Head Office) using the designated application form (Form 4-10) together with each of the documents specified in 7.2.4.	(Newly added) (Newly added) (Newly added)	

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Amended	Original	Remarks
7.2.2 Notice of Alterations  If major alterations made to the manufacturing process, material composition or other approved items, a notice explaining such alterations with respect to approved items is to be submitted to the Society.	(Newly adde) (Newly added)	
7.2.3 Applicants  Material manufacturers are, in principle, to be the applicants for approval except where applicants other than manufacturers are responsible for final product quality.	(Newly added) (Newly added)	
7.2.4 Documents  Documents containing the following information are to be submitted to the Society with the application.  (1) Manufacture history and organisation (2) General description of major manufacturing facilities (3) Product specifications (4) Packaging and marks (labels, etc.) (5) Manufacturing process (6) Product physical properties assured by manufacturer (7) Statistical data showing manufacturing variations in the measured values of principal mechanical properties (such as compressive strength, shear strength, etc.), if any (8) Product storage method (9) Manufacturing records (10) Other Society certificate (if any) (11) Test results of properties specified in 4.19.3-2, Part N of the Rules for the Survey and Construction of Steel Ships and N4.19.3-4, Part N of the Guidance for the Survey and Construction of Steel Ships	(Newly added) (Newly added)	

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)				
Amended	Original	Remarks		
according to tank type, when insulation materials are used in cargo containment systems.  (12) Test results of properties specified in 6.4.13-3(2),  Part GF of the Rules for the Survey and  Construction of Steel Ships and GF6.4.13-6, Part  GF of the Guidance for the Survey and  Construction of Steel Ships according to tank type,  when insulation materials are used in fuel containment systems.				
<ul> <li>7.2.5 Omission of Documents <ul> <li>(1) Manufacturers who have the products already approved according to this chapter may omit the submission of documents which are duplicates of those previously submitted for another type approval if they so indicate.</li> <li>(2) Manufacturing process, manufacturing standards, material composition and other items considered confidential to manufacturers may be omitted from being submitted if they are so declared. However, the Society reserves the right to survey such items at confirmation surveys of manufacturing and quality control procedures if considered necessary.</li> </ul> </li> </ul>	(Newly added) (Newly added)			
7.2.6 Insulation Application Procedures  1 Approval applications for insulation materials, in addition to the general procedures, are to include in information on all precautions at time of application and associated test items.	(Newly added) (Newly added)			
2 Applications for insulation materials including detailed application procedures for each ship are to be	(Newly added)			

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Amended	Original	Remarks
submitted to the Society for approval.		
7.3 Confirmation of Manufacturing and Quality Control Procedures	(Newly added)	
Confirmation surveys for manufacturing and quality control procedures are to be carried out to verify the manufacturer's ability to produce materials of a stable product quality (facilities, technologies, quality control and quality assurance systems, and manufacturer inspection systems).	(Newly added) (Newly added)	
7.3.2 Omission of Confirmation Survey  Confirmation surveys may be omitted when the Society deems such surveys unnecessary as a result of the examination of documents submitted.	(Newly added) (Newly added)	
7.3.3 Survey Items  The following items are to be examined.  (1) Manufacturer inspection system, organisation and claim disposal department  (2) Manufacturing and inspection facilities  (3) Quality control and quality assurance systems (3)  Quality control and quality assurance system	(Newly added) (Newly added)	
7.4 Approval Test	(Newly added)	
<ul> <li>7.4.1 Approval Test</li> <li>1 By using test specimens taken with due regard paid to the actual application procedures, tests to verify the test items</li> </ul>	(Newly added) (Newly added)	

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Amended	Original	Remarks
given in Table 4.7-1 are to be conducted according to test		
procedures as specified in the same table or suitable other		
procedures as approved by the Society, and it is to be verified		
that the specifications and physical properties established by		
the manufacturer are complied with.		
2 Test items and procedures for approval tests for	(Newly added)	
insulation materials used in cargo containment systems are to		
be as specified in 4.19.3, Part N of the Rules for the Survey		
and Construction of Steel Ships and N4.19.3, Part N of the		
<b>Guidance for the Survey and Construction of Steel Ships</b>		
according to tank type.		
3 Test items and procedures for approval tests for	(Newly added)	
insulation materials used in fuel containment systems are to be		
as specified in 6.4.13-3, Part GF of the Rules for the Survey		
and Construction of Steel Ships and N6.4.13-5, Part Gf of		
the Guidance for the Survey and Construction of Steel		
Ships according to tank type.		
4 In cases where it is deemed necessary by the Society,	(Newly added)	
test items are to be carried out in the presence of a Society		
surveyor. Prior to the implementation of a test, a test plan is to		
be submitted to the Society (Head Office). Said test plan is to		
specify the test location and the acceptance criteria for the		
<u>characteristics of the test.</u>		

1       2       3       4       5       6       7       8       9       10       11       12	Table 4.7- Test item Compatibility with the cargo / Fuel Solubility in the cargo / Fuel Absorption of the cargo / Fuel Shrinkage Aging Closed cell content Density	Procedure of test  Tensile, compression, sh  Changes in the size and cargo (DIN 53428)	<del>_</del>	
$ \begin{array}{c} \frac{1}{2} \\ \frac{3}{3} \\ \frac{4}{5} \\ \frac{6}{7} \\ \frac{8}{8} \end{array} $	Compatibility with the cargo / Fuel Solubility in the cargo / Fuel Absorption of the cargo / Fuel Shrinkage Aging Closed cell content Density	Tensile, compression, she Changes in the size and cargo (DIN 53428)  Comparison of weight of and after dipping in the cargo 2796, ASTM D 2120, ASTM D756	weight of test specimen before and after dipping in the  f test specimen or test of water absorbing properties before cargo (DIN 53428)	
$     \begin{array}{c}             \hline             2 \\           $	Solubility in the cargo / Fuel  Absorption of the cargo / Fuel  Shrinkage Aging Closed cell content Density	Changes in the size and cargo (DIN 53428)  Comparison of weight of and after dipping in the cargo 2796, ASTM D 2120  ASTM D756	weight of test specimen before and after dipping in the  f test specimen or test of water absorbing properties before cargo (DIN 53428)	
3 4 5 6 7 8 9 10 11 12	Absorption of the cargo / Fuel  Shrinkage Aging Closed cell content Density	cargo (DIN 53428)  Comparison of weight o and after dipping in the outside ISO 2796, ASTM D 2120 ASTM D756	f test specimen or test of water absorbing properties before cargo (DIN 53428)	
4       5       6       7       8       9       10       11       12	Shrinkage Aging Closed cell content Density	Comparison of weight o and after dipping in the o ISO 2796, ASTM D 2120 ASTM D756	cargo (DIN 53428)	
4       5       6       7       8       9       10       11       12	Shrinkage Aging Closed cell content Density	and after dipping in the of ISO 2796, ASTM D 2120 ASTM D756	cargo (DIN 53428)	
5 6 7 8 8	Aging Closed cell content Density	<u>ISO 2796, ASTM D 2126</u> <u>ASTM D756</u>	<del>_</del>	
5 6 7 8 8	Aging Closed cell content Density	<u>ASTM D756</u>	<u>5</u>	
<u>6</u> 7 8  9 10 <u>11</u> 12	Closed cell content Density			
2 8 9 10 11 12	Density	ISO 4590, ASTM D2856		
9 10 11 12			, <u>ASTM D6226</u>	
9 10 11 12		ISO 845, ISO 2781, AST	<u> M D1622</u>	
10 11 12	Mechanical properties			
10 11 12	• Bending strength	ISO 1209, ASTM C 203,	<u>ASTM D790</u>	
10 11 12	<ul> <li>Compression strength</li> </ul>	<u>ASTM D 695, ASTM D 1</u>	<u>1621</u>	
10 11 12	• Tensile strength	ISO 1926, EN 1607, AST	TM D412, ASTM D638, ASTM D1623	
10 11 12	Shearing strength	<u>ISO 1922, ASTM C 273</u>		
<u>11</u> <u>12</u>	Thermal expansion	<u>ASTM D696, ASTM E22</u>	8, ASTM E831	
12	Abrasion	_		
<del></del>	<u>Cohesion</u>	<u>ASTM D 1623</u>		
13	Thermal conductivity	<u>ISO 8302, JIS A 1412, A</u>	STM C 177, ASTM C 518	
	Resistance to vibration	<u>ISO 10055</u>		
<u>14</u>	Resistance to fire and flame spread	JIS A 9511, DIN 4102		
<u>15</u>	Resistance to fatigue failure and	_		
	crack propagation			
Note:	=			
	<u> </u>		I tested according to the type of insulation system. However,	
	* *		and 14 are to be dealt with for all types of insulation systems.	
			ystems, see N4.19.3-4 to 7, Part N of the Guidance for the	
	*		on materials are used in the fuel containment systems, See	
<u>GF6.4</u>	.4.13-1 to 4, Part GF of the Guidan	ce for the Survey and Co	onstruction of Steel Ships.	

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Amended	Original	Remarks
7.4.2 Test Records  After completion of tests, manufacturers are to create a test report and submit said report to the Society upon receiving confirmation from a Society surveyor.	(Newly added) (Newly added)	
7.5 Approval	(Newly added)	
7.5.1 Certificate  When the results of the tests specified in 7.4.1 are confirmed to be appropriate, the Society approves the equipment (hereinafter referred to as "approved equipment") and issues the relevant approval certificate specifying the approval number, date of approval, type, model, and other relevant particulars.	(Newly added) (Newly added)	
The certificate specified in 7.5.1 is to be valid until a date not exceeding 5 years from its date of issue. However, when the approval is renewed in accordance with 7.5.3, the new certificate is to be valid until a date not exceeding 5 years from the date of expiry of the existing certificate.	(Newly added) (Newly added)	
7.5.3 Renewal of Approval  1 In the case of application for renewal of approval, manufacturers are to submit to the Society the designated application form (Form 4-10) accompanied with the certificate previously issued. Any changes in the specification of the approved equipment are to be described in the application.	(Newly added) (Newly added)	

(Review	of Guidance	e for the Apr	roval of Mate	erials and E	auipment fo	r Marine Use)
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Amended	Original	Remarks
2 When the specifications of the approved equipment remain unchanged, the Society approves the renewal of approval and issues a new certificate. Manufacturers who received a new certificate are to return the existing certificate to the Society as soon as possible.	(Newly added)	
7.6 Markings	(Newly added)	
Markings and packaging are to be as shown in the documents attached to the application for the approval and no changes are to be made without agreement by the Society. Approval numbers are to be marked such a way to clearly indicated the product is approved by the Society.	(Newly added)	
7.7 Quality Control and Quality Assurance	(Newly added)	
7.7.1 General  Manufactures are responsible for ensuring the manufacturing process and product quality are in accordance with the same procedures and systems used when surveyed and examined by the Society.	(Newly added) (Newly added)	
7.7.2 Results of Production Tests  The results of production tests are to be available for review whenever requested by the Society.	(Newly added) (Newly added)	
7.7.3 Changes in Approved Items  Changes in the manufacturing process, material composition and other approved items (including changes of the contents in approved documents) are to be reported to the	(Newly added) (Newly added)	

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Amended	Original	Remarks
Society for review. The Society will subsequently inform		
manufacturers of the results of such reviews.		
7.8 Periodical Examinations	(Newly added)	
<ul> <li>7.8.1 Application for Periodical Examination</li> <li>1 Manufacturers of approved materials are to be</li> </ul>	(Newly added) (Newly added)	
<ul> <li>subjected to periodical examinations at an interval of 5 years.</li> <li>Application for periodical examinations is to be made to the Society using the designated application form (Form</li> </ul>	(Newly added)	
4-10) together with documents describing the Society's approval number, date of issue of the certificate and items		
altered from the original approved conditions, if any.		
7.8.2 Tests of Periodical Examination	(Newly added)	
At each periodical examination, the survey items	(Newly added)	
specified in 7.3 and the tests considered necessary by the		
Society among the test items specified in 7.4 are to be carried out.		
7.8.3 Renewal of Certificates of Approval	(Newly added)	
When the results of the periodical examination are considered are considered acceptable to the Society, the	(Newly added)	
Society reissues the Certificate of Approval for Materials for		
Refrigerated Chambers specified 7.5.		

Amended	Original	Remarks
7.9 Revocation of Approval	(Newly added)	
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7.9.1 Revocation of Approval	(Newly added)	
Approval may be revoked if any of the following cases	(Newly added)	
is found relevant.	•	
(1) When doubt occurs on the performance of the		
approved material as the result of an examination of		
its service record.		
(2) When the manufacturer is not subjected to the		
periodical examination.		
(3) When the material failed to pass the periodical		
examination.		
(4) When the manufacturer offers to stop manufacturing		
the material.		
(5) When the manufacturer requests the withdrawal of		
<u>approval.</u>		

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Amended	Original	Remarks
Part 6 MACHINERY	Part 6 MACHINERY	
Chapter 1 TYPE APPROVAL OF PMS/CBM  MANAGEMENT SOFTWARE	(Newly added)	Addition of type approval for " PMS/CBM MANAGEMENT SOFTWARE" to Chapter 1, Part 6 (Transfer from
11.6		Annex of Part B.)
1.1 General	(Newly added)	
1.1.1 Scope  1 These procedures apply to the tests, examinations, etc. of the computer software required by ships adopting the Planned Machinery Maintenance Scheme (hereinafter referred to as "PMS") or the Condition Based Maintenance Scheme (hereinafter referred to as "CBM") in accordance with the requirements given in 9.1.3-3, Part B of the Rules or B9.1.4-2, Part B of the Guidance.  2 The approval of system software developed to manage all internal ship operations is to follow these procedures.	(Newly added)  (Newly added)	
3 The software used on ships which is not subject to	(Newly added)	
CBM need not comply with 1.3.3.  1.2 Application for Approval	(Newly added)	
<u>1.2.1 Application Form</u> Applicants for software approval are to submit an	(Newly added) (Newly added)	
application form (Form-PMSsoftware) to the Society.	(INCWIY addicts)	

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The documents listed below are to be submitted together with the application form specified in 1.2.1:  (1) Software: (demonstrational software may be submitted. In cases where a dedicated installer is necessary to install such software, the installer is to be submitted together with the software)  (2) Operation manual which indicates the following contents in detail:  (a) System requirements (central processing unit, operating system, required capacity of the hard disc and memory, etc.)  (b) Procedure to install and uninstall the software  (c) Function of the software  (d) Operating method  (3) Information on the manufacturing and quality control standards of said software  (4) Manufacturing and delivery records of said software (if any)  (5) Other documents deemed necessary by the Society	(Newly added) (Newly added)	
1.3 Function	(Newly added)	
1.3.1 Planned Maintenance Function  Software is to have the following planned maintenance functions:  (1) It is to be capable of registering the maintenance plans for those survey items required by the machinery maintenance scheme (PMS).	(Newly added) (Newly added)	

	proval of Materials and Equipment for Marine Use)	
Amended	Original	Remarks
(2) It is to be capable of specifying the time schedule of	Ongme	Remarks
maintenance or running hours for each item of		
machinery and equipment including their parts.		
(3) It is to be capable of displaying a list of at least the		
following items. The list is to classify the registered		
machinery, equipment and their parts and to be		
displayed in a tree structure format, etc.		
(a) Names of machinery, equipment and their parts		
(b) Maintenance items		
(c) Maintenance interval (next inspection date or		
running hour)		
(d) Maintenance schedule (It is to be able to directly		
input the inspection date or calculate from the		
maintenance interval)		
(e) Person in charge of maintenance		
(4) Maintenance intervals are not, in principle, to exceed		
five years. Maintenance intervals are to be capable of being displayed on the list of maintenance within a		
term which is arbitrarily designated.		
(5) In cases where there are maintenance items which		
expire after the maintenance period, such items are to		
be easily identified.		
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1.3.2 Maintenance Records Function	(Newly added)	
The software is to have the following maintenance	(Newly added)	
record functions:		
(1) It is to be capable of managing and recording the		
results of the maintenance conducted by the planned		
maintenance specified in 1.3.1. The items regarding		
management and record are to be included the		

following:

Amended	Original Original	Remarks
(a) Names of machinery, equipment and their parts	·	
(b) Maintenance items and results (including an		
exchange of parts)		
(c) Maintenance completion date		
(d) Total running hour		
(e) Next inspection date		
(f) Measurement data (including original design		
dimensions and allowable tolerance) However,		
such data is only required in cases where		
measurements are taken.		
(g) The condition of damage and the repair method		
in cases where damage was found.		
(2) List of the maintenance items within the designated		
term is to be displayed. Such lists are to include the		
name of machinery, equipment and their parts		
together with the maintenance items and the		
maintenance completion date.		
(3) Past maintenance records are to be displayed in cases		
where machinery, equipment and their parts are		
arbitrarily selected.		
1.3.3 Condition Monitoring Function	(Novely added)	
	(Newly added)	
1 The software is to have a function for the condition	(Newly added)	
monitoring of machinery, equipment and their parts as		
necessary. Such condition monitoring is to be capable of analysis such as trend analysis if necessary. In cases where		
trend analysis is adopted, the following requirements are to be		
satisfied:		
(1) In cases where measurement data is affected by		
temperature, running speed, load, etc., the data is to		
be standardized and trend analysis is to be conducted		

(Review of Guidance for the Approval of Materials and Equipment for Marine Use) Amended Original Remarks against the index except in those cases where trend analysis is conducted against measurement data obtained during steady operating conditions. The limiting parameters of measurement data are to be determined in accordance with the recommended values of the manufacturer or through statistical processing based on baseline data. In cases where such values are determined by the manufacturer through statistical processing, limiting parameters are to be automatically calculated based on accumulated data. However, these values may be determined by other methods deemed appropriate by the Society. (3) Trends of measurement data together with relevant limiting values are to be able to be displayed by a simple operation. (See Fig. 1.3.3) Fig. 1.3.3 Trend Display (Newly added) Limiting value Regression line Status value Prediction Time Software may use diagnostic technology such as (Newly added) complex algorithms, machine learning and statistical knowledge obtained from data from machinery, etc. installed

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)					
Amended	Original	Remarks			
on other ships in order to identify the acceptability of					
continued service for machinery, equipment and components,					
or whether maintenance is required. The software need not					
follow machinery manufacturer recommended maintenance					
instructions or use manufacturer specified limiting					
parameters; in such cases, however, the software is to be					
approved in accordance with machinery manufacturer					
recommendations, industry standards and its usage history on					
other ships registered by the Society.					
3 Maintenance management based on the condition	(Newly added)				
monitoring specified in -1 above is to satisfy the following:					
(1) Planned maintenance					
(a) Machinery, equipment and their parts are to be					
capable of being registered apart from those					
which are periodically during open up					
examination.					
(b) The registration of the machinery, equipment and					
their parts which apply to condition monitoring					
are to include the following items:					
i) Names of machinery, equipment and their					
<u>parts</u>					
ii) Kind of measured signal					
iii) Measurement interval					
iv) Limiting value (This value is to be set up for					
each kind of measured signal)					
(2) Measuring process and recording					
(a) Measurement date and measurement value are to					
be recorded.					
(b) In cases where open up examinations are					
conducted, it is to be capable of recording the					
same results of the maintenance specified in					

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(Review of Guidance for	r the Approva	Lof Materials and	d Equipment for Ma	rine Use)

Amended	Original	Remarks
1.3.2.  1.4 Administration of Software	(Newly added)	
1.4.1 Administration of Revision	(Newly added)	
System manufacturers and administers are to handle any software revisions caused by changes in the system. Specific information related to software revisions are to be verified on main displays or menus.	(Newly added)	
1.4.2 Administration of Backup  System manufacturers and administers are to specify proper procedures for backing up administrated maintenance data.	(Newly added) (Newly added)	
1.5 Verification Test In principle, the Society will conduct verification tests of those functions specified in 1.3 after examining the documents specified in 1.2. Verification tests may be conducted under the conditions that the systems are actually used at either the ship management company or onboard the ship. However, in cases where the relevant functions can be verified by the software which has been submitted, verification tests may be omitted.	(Newly added) (Newly added)	

(	Review	of Guidance	e for the Appr	roval of Mat	erials and Ed	guipment for	Marine Use)
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Amended	Original	Remarks
1.6 Approval	(Newly added)	
1.6.1 Notification of Approval	(Newly added)	
In cases where the documents specified in 1.2 and verification test records specified in 1.5 are considered appropriate, the Society will approve the issue of a new certificate. In cases where the software has a function specified in 1.3.3 or other optional functions, these functions are stated on the certificate.	(Newly added)	
1.6.2 Term of Validity	(Newly added)	
The term of validity of the "Certificate of Approval" will be 5 <i>years</i> from the date of approval. In cases where renewal of approval is carried out in accordance with 1.6.3, the term of validity will be 5 <i>years</i> from the next day after the expiration date of the previous period of validity.	(Newly added)	
1.6.3 Renewal of Validity	(Newly added)	
In the case of renewing validity, manufacturers are to	(Newly added)	
submit the Society an application Form along with the previously issued certificate. Changes of specification, if any,		
are to be described on the application form.		
1.6.4 Changes in the Contents of Approval	(Newly added)	
1 In the case of specification changes of approved	(Newly added)	
software, applicants are to submit a "Certificate of Approval"		
(original) and those documents specified in 1.2.2 according to the content of changes together with an application form.		
2 The Society requires the verification test specified in 1.5 as necessary.	(Newly added)	

(Review	of Guidance	e for the Apr	roval of Mate	erials and E	auipment fo	r Marine Use)
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Amended	Original	Remarks
3 In cases where the documents specified in -1 and verification test records specified in -2 are considered appropriate, the Society will issue a new certificate.  4 In cases where approval is given for a design with a partial modification, the expiration date will not be renewed in principle.	(Newly added)  (Newly added)	Remarks
<ul> <li>1.6.5 Revocation of Approval In cases where any of the following is relevant, the Society may revoke its approval and give notice of such revocation to manufacturers. <ol> <li>In cases where the approval renewal procedures given in 1.6.3 were not followed.</li> <li>In cases where requests for revocation are made by applicants or manufacturers.</li> <li>In cases where the approved condition was changed without the permission of the Society.</li> <li>In cases where applicants or manufacturers do not pay approval fees.</li> </ol> </li></ul>	(Newly added) (Newly added)	
(Delete)	Chapter 1 APPROVAL OF STANDARDIZED DESIGN FOR MACHINERY AND EQUIPMENT  1.1 General	Delete (Transfer from Annex of Part B)
(Delete) (Delete) (Delete)	1.1.1 Scope  The requirements of this chapter deal with the approval of the drawings and documents which are submitted in advance to the Society as the standardized design	

(	Review	of Guidance	for the A	Approval o	of Material	s and Equ	ipment for	Marine Use)
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Am	ended	Original Original	Remarks
		designating the construction, dimensions, materials, specifications, etc. on machinery and equipment required to obtain approval by submitting drawings to the Society in accordance with the requirements of 2.1.3, Part B of the Rules for the Survey and Construction of Steel Ships, 2.1.2, Part 2 of the Rules for High Speed Craft, 2.1.2, Part 2 of the Rules for the Survey and Construction of Inland Waterway Ships, 2.3.1-2 of the Rules for Cargo Handling Appliances and 2.1.1 of the Rules for Cargo Refrigerating Installations.	
(Delete)		1.2 Application	
(Delete) (Delete)		1.2.1 Application Form  The manufacturer, who intends to obtain the approval of standardized design, is to submit the appropriate application form (Form 6-1) filled in with necessary data and information to the Society (Head Office).	
(Delete) (Delete)		1.2.2 Drawings and Documents  In accordance with the requirements of the rules applicable to the machinery and equipment, drawings and documents, in triplicate, are to be submitted together with the application form specified in 1.2.1.	
(Delete)		1.3 Approval	
(Delete) (Delete)		1.3.1 Notification of Approval The Society, when satisfied upon examination that the drawings and documents fulfill the requirement concerned,	

	Amended	Original	Remarks
		will agree on handling these drawings and documents as the standardized design. Then one copy each of the drawings and documents will be returned to the applicant with approval stamp of the Society, approval date, approval number and term	
(Delete) (Delete)		of validity indicated on them.  1.3.2 Term of Validity  The term of validity of the approval of standardized design will be five <i>years</i> from the date of approval.	
(Delete) (Delete)		1.3.3 Renewal of Approval  1 The manufacturer, who intends to have a continuation of the approval of standardized design already expired or to make partial modification on the design, is to submit an	
(Delete)		application in accordance with the requirements of 1.2 newly.  2 In case where approval is given for a design with partial modification, expiration date will not be renewed in principle.	
(Delete) (Delete)		In case where either of the following (1) or (2) applies, the Society will revoke the approval of standardized design, and give a notice to the manufacturer.  (1) In association with the implementation or revision of international conventions, laws and regulations, the machinery and equipment for which the standardized design were approved do not deserve the approval any longer.	
		(2) Serious shortcomings are found in the machinery and equipment manufactured according to the approved standardized design after being installed in ships.	

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)					
Amended	Original	Remarks			
(Delete)	1.4 Handling after Approval				
(Delete)	1.4.1 Allocation of Machinery and Equipment to Ships				
(Delete)	In case where the machinery and equipment for which the standardized design have been approved are allocated to				
	NK-classed ships, the appropriate application form is to be submitted to the Society (Head Office), in triplicate, in place				
	of the drawings and documents required by the rules.				
Chapter 2 TYPE APPROVAL OF MACHINERY AND EQUIPMENT	Chapter 2 TYPE APPROVAL OF <u>USE OF</u> MACHINERY AND EQUIPMENT	Terminology alignment			
2.2 Application	2.2 Application				
2.2.2 Documents  1 The drawings and data required by the relevant provisions of the Rules applicable to the machinery and equipment and the data listed (1) through (7) below, are to be submitted together with the application form specified in 2.2.1.  ((1) to (7) are omitted)	2.2.2 Documents  1 The drawings and data required by the relevant provisions of the Rules applicable to the machinery and equipment and the data listed (1) through (7) below, each in triplicate, are to be submitted together with the application form specified in 2.2.1.  ((1) to (7) are omitted)	To delete the specification of the number of copies due to digitization			
2.4 Approval Tests	2.4 Approval Tests				
<ul> <li>2.4.4 Test Records</li> <li>1 The manufacturer is to prepare records of the approval</li> </ul>	<ul> <li>2.4.4 Test Records</li> <li>1 The manufacturer is to prepare records of the approval</li> </ul>	To delete the specification of the number of copies			

Amended	Original	Remarks
	8	
test after completion of the test, to obtain verification by the	test after completion of the test, to obtain verification by the	due to digitization
Society's attending surveyor and to submit them, to the	Society's attending surveyor and to submit them, in triplicate,	
Society.	to the Society.	
2.5 Approval	2.5 Approval	
	••	
2.5.2 Term of Validity	2.5.2 Term of Validity	
The term of validity of the type approval of	The term of validity of the type approval of	Terminology alignment
machinery and equipment will be five <i>years</i> from the date of	machinery and equipment will be five <i>years</i> from the date of	
approval. In case when the renewal of approval is carried out	approval.	
in accordance with the requirements in 2.5.3, valid term will	upprovui.	
be 5 years from the next day after the expiry date of the		
previous validity.		
previous variatry.		
Chapter 3 APPROVAL OF COEFFICIENT	Chapter 3 APPROVAL OF COEFFICIENT	
FOR DISCHARGE OF SAFETY VALVES, ETC.	FOR DISCHARGE OF SAFETY VALVES, ETC.	
3.2 Application	3.2 Application	
3.2 Application	3.2 Application	
3.2.2 Documents	3.2.2 Documents	
The sectional assembly drawing of the safety valves,	The sectional assembly drawing of the safety valves,	To delete the specification
etc. and the plan for the tests, are to be submitted to the Society	etc. and the plan for the tests, each in triplicate, are to be	of the number of copies
together with the application form specified in 3.2.1 above.	submitted to the Society together with the application form	due to digitization
	specified in 3.2.1 above.	
	1	

Amended	Original	Remarks
3.3.2 Test Records  The manufacturer is to submit the test records, after completion of the test to the Society (Head Office).	3.3. Approval Tests  3.3.2 Test Records  The manufacturer is to submit the test records, in triplicate, after completion of the test to the Society (Head Office).	To delete the specification of the number of copies due to digitization
3.4 Approval  3.4.1 Announcement of Approval	3.4 Approval  3.4.1 Announcement of Approval	
The Society, when satisfied upon examination of the drawings and test records submitted in accordance with 3.2.2 and 3.3.2, will issue a certificate of approval specifying the approved <i>K</i> value, put approval stamps on the drawings and test records and return them back to the applicant.	The Society, when satisfied upon examination of the drawings and test records submitted in accordance with 3.2.2 and 3.3.2, will issue a certificate of approval specifying the approved <i>K</i> value, put approval stamps on the drawings and test records and return one set of them back to the applicant.	To delete the specification of the number of copies due to digitization
3.4.2 Term of Validity  The term of validity of the approval will be five <i>years</i> from the date of the approval. In case when the renewal of approval is carried out in accordance with the requirements in 3.4.3, valid term will be 5 <i>years</i> from the next day after the expiry date of the previous validity.	3.4.2 Term of Validity  The term of validity of the approval will be five <i>years</i> from the date of the approval.	Terminology alignment

(	Revi	iew o	f C	duic	lance	for	the A	Appro	val c	of N	/laterial	ls and	. Equ	iipment	for	Mari	ne	Use`	)

Amended	Original	Remarks
4.1.1 Scope  In accordance with the requirements in D12.6.1  1(1)(e)ii), Part D of the Guidance for the Survey and Construction of Steel Ships, the requirements of this chapter apply to tests and inspections for the type approval of pipe joints of a butt welded type and pipe joints of a slip-on sleeve welded type (such as elbows, reducers, tees, bends and sockets, etc.). In cases where this approval is obtained, surveyor attendance at shop tests may be omitted in accordance with the requirements of D12.6.1-1(1)(e)ii), Part D of the Guidance for the Survey and Construction of Steel Ships (hereinafter referred to as "the Rules").	4.1.1 Scope  In accordance with the requirements in D12.6.1(1)(e)ii), Part D of the Guidance for the Survey and Construction of Steel Ships, the requirements of this chapter apply to tests and inspections for the approval of the omission of surveyor attendance at tests for pipe joints of a butt welded type and pipe joints of a slip-on sleeve welded type (such as elbows, reducers, tees, bends and sockets, etc.) regardless of the requirements of 12.6.1-1, Part D of the Rules for the Survey and Construction of Steel Ships (hereinafter referred to as "the Rules").	Change in description
4.2 Application Procedures  Manufacturers who intend to obtain approval of use for welded type pipe joints are to submit an application to the Society (branch office concerned) accompanied by the following data.  ((1) and (2) are omitted)	4.2 Application Procedures  Manufacturers who intend to obtain approval of use for welded type pipe joints are to submit an application to the Society (branch office concerned) accompanied by three sets of the following data.  ((1) and (2) are omitted)	To delete the specification of the number of copies due to digitization

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)						
Amended	Original	Remarks				
4.3 Approval Tests	4.3 Approval Tests					
4.3.2 Approval Tests	4.3.2 <u>Manufacturing Process</u> Approval Tests	Terminology alignment				
4.4 Test Records	4.4 Test Records					
In cases where the approval tests specified in	In cases where the approval tests specified in	To delete the specification				
preceding 4.3 are carried out, the manufacturer is to prepare	preceding 4.3 are carried out, the manufacturer is to prepare	of the number of copies				
records of the approval test upon completion of the test, obtain	records of the approval test upon completion of the test, obtain	due to digitization				
verification by the Society's attending surveyor and submit	verification by the Society's attending surveyor and submit					
them, to the Society (branch office concerned).	them, in triplicate, to the Society (branch office concerned).					
dienis, to the society (oranen orinee concerned).	them, in tripitedte, to the society (stanen office concerned).					
4.5 Notification of Approval and Terms of Validity	4.5 Notification of Approval and Terms of Validity					
4.5 Profileation of Approvar and Terms of Validity	4.5 Indiffication of Approval and Terms of variancy					
4.5.1 Notification of Approval and Terms of Validity	4.5.1 Notification of Approval and Terms of Validity					
1 The Society (branch office concerned) is to consider	1 The Society (branch office concerned) is to grant	Change in description				
the results of confirmation and approval tests for pipe joints of	manufacturers permission to carry out tests for pipe joints of a					
a butt welded type and pipe joints of a slip-on sleeve welded	butt welded type and pipe joints of a slip-on sleeve welded					
type, and if deemed appropriate, issue the corresponding	type without a Society surveyor being present in cases where					
certificate of approval specifying the approval number, date of	it considers the results of confirmation and approval tests					
** * * * *						
approval, type, model, and other relevant particulars, to the	appropriate, and to send the manufacturer the corresponding					
manufacturer.	certificate of approval.	Chamas in Association				
2 The valid term of approval in the preceding -1 is 5	2 The valid term of approval in the preceding -1 is 5	Change in description				
years from the date of the approval. In case when the renewal	years.					
of approval is carried out in accordance with the requirements						
in -3 and -5, valid term will be 5 years from the next day after						
the expiry date of the previous validity.						

(Review of Guidance for the Ap		
Amended	Original	Remarks
4.6 Revocation of Approval	4.6 Revocation of Approval	
<ul> <li>4.6.1 Revocation of Approval Where either of the following (1) or (2) is relevant, the Society may revoke the approval and notify the manufacturer accordingly <ol> <li>In cases where the valid term of approval expires and no application for the renewal of the approval is submitted.</li> <li>In cases where doubts arise regarding the service records of products.</li> </ol> </li> <li>When a requests for revocation is made by the manufacturer.</li> </ul>	<ul> <li>4.6.1 Revocation of Approval Where either of the following (1) or (2) is relevant, the Society may revoke the approval and notify the manufacturer accordingly <ol> <li>In cases where the valid term of approval expires and no application for the renewal of the approval is submitted.</li> <li>In cases where doubts arise regarding the service records of products manufactured by the approved manufacturing process.</li> </ol> </li> <li>(Newly added)</li> </ul>	Change in description
Chapter 5 APPROVAL OF MANUFACTURING PROCESS OF BOILERS AND GROUP 1 PRESSURE VESSELS	Chapter 5 APPROVAL OF MANUFACTURING BOILERS AND GROUP 1 PRESSURE VESSELS	
5.1 General	5.1 General	
The requirements of this chapter apply to the tests and inspection concerning to the approval of manufacturing process of boilers or Group 1 pressure vessels for the first time to be installed in ships classed with the Society, in accordance with the requirements of 11.2.1-3, Part D of the Rules for the Survey and Construction of Steel Ships.	The requirements of this chapter apply to the tests and inspection concerning to the approval manufacturing boilers or Group 1 pressure vessels for the first time to be installed in ships classed with the Society, in accordance with the requirements of 11.2.1-3, Part D of the Rules for the Survey and Construction of Steel Ships.	Terminology alignment

Amended	Original	Remarks
5.2 Approval	5.2 Approval	
The manufacturer intending to obtain the approval of the manufacturing process of boilers or Group 1 pressure vessels is to submit the appropriate application form (Form 6-11) together with following documents to the Society:  ((1) to (5) are omitted)	5.2.1 Approval  The manufacturer intending to obtain the approval of the manufacturing boilers or Group 1 pressure vessels is to submit the appropriate application form (Form 6-11) together with following documents to the Society:  ((1) to (5) are omitted)	Terminology alignment
5.2.2 Confirmation of Manufacturing and Quality Control Procedures  For the approval of manufacturing process of boilers and Group 1 pressure vessels, the confirmation survey is to be carried out on the following items:  ((1) to (3) are omitted)	5.2.2 Confirmation of Manufacturing and Quality Control Procedures  For the approval of manufacturing boilers and Group 1 pressure vessels, the confirmation survey is to be carried out on the following items:  ((1) to (3) are omitted)	Terminology alignment
Where the results of the survey are considered appropriate for manufacturing the products, the Society will issue a certificate of approval specifying the approval number, date of approval, type, model, and other relevant particulars, to the manufacturer.	5.3 Certificate  Where the results of the survey are considered appropriate for manufacturing the products, the Society will issue a certificate for approval of manufacturing the products.	Change in description
5.4 Validity of Approval	5.4 Validity of Approval	
5.4.1 Validity of Approval  1 The valid term of approval in the preceding 5.3 will be five years from the date of the approval. In case when the renewal of approval is carried out in accordance with the	<ul> <li>5.4.1 Validity of Approval</li> <li>1 The valid term of approval in the preceding 5.3 will be five <i>years</i>.</li> </ul>	Change in description

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Amended	Original	Remarks
requirements in -2 and -3, valid term will be 5 years from the next day after the expiry date of the previous validity.  Chapter 6  TYPE APPROVAL OF PLASTIC PIPES	Chapter 6 APPROVAL OF <u>USE OF PLASTIC</u> PIPES	
6.4 Approval Tests	6.4 Approval Tests for Process of Manufacture	Terminology alignment
The approval tests are to be carried out in the presence of the Society's surveyor by the method under the testing standard specified in 6.9 or the method considered to be equivalent by the Society. However, when tests are carried out by the authorized organization or any organization considered appropriate by the Society, those on testing items other than strength test, electric conductivity test, heat dependence test of material, flame spread test and surface flammability test and fire endurance test as well as smoke generation and toxicity test may be carried out in the absence of the Society's surveyor.	The approval tests for process of manufacture are to be carried out in the presence of the Society's surveyor by the method under the testing standard specified in 6.9 or the method considered to be equivalent by the Society. However, when tests are carried out by the authorized organization or any organization considered appropriate by the Society, those on testing items other than strength test, electric conductivity test, heat dependence test of material, flame spread test and surface flammability test and fire endurance test as well as smoke generation and toxicity test may be carried out in the absence of the Society's surveyor.	
6.5 Notification of Approval	6.5 Notification of Approval	
When the Society considers the product on which the approval is requested has sufficient property for piping system for ships by the results of examination of documents and factory inspection, the Certificate of Approval specifying the approval number, date of approval, type, model, and other relevant particulars, is issued by the Society. The Certificate is valid for five <i>years</i> from the date of the approval. In case when the renewal of	When the Society considers the product on which the approval is requested has sufficient property for piping system for ships by the results of examination of documents and factory inspection, the Certificate of Approval is issued by the Society. The Certificate is valid for five <i>years</i> .	Change in description

Amended	Original	Remarks
	Original	Kemarks
<ul> <li>approval is carried out in accordance with the requirements in 6.8.1, valid term will be 5 years from the next day after the expiry date of the previous validity.</li> <li>6.8 Continuance or Retraction of Approval</li> <li>6.8.1 Procedures for Continuance of Approval</li> </ul>	6.8 Continuance or Retraction of Approval  6.8.1 Procedures for Continuance of Approval  The applicant when he intends to continue the	To delete the specification
The applicant, when he intends to continue the approval of plastic pipes, is to submit the appropriate application form (Form 6-5) (in case where omission of periodical test is desired, the Application for Omission of Periodical Test describing the reasons) to the Society (Head Office). In either case, these documents are to be accompanied by the past records on the product and records of shop tests, (if manufacturing plants are located in two or more Survey Offices, additional copies for such extra offices are to be provided).	The applicant, when he intends to continue the approval of plastic pipes, is to submit the appropriate application form (Form 6-5) (in case where omission of periodical test is desired, the Application for Omission of Periodical Test describing the reasons) to the Society (Head Office). In either case, these documents are to be accompanied by the past records on the product and records of shop tests, each in duplicate (one each for the Head Office and Survey Office, however, if manufacturing plants are located in two or more Survey Offices, additional copies for such extra offices are to be provided).	of the number of copies due to digitization
6.9 Testing Procedures and Criteria	6.9 Testing Procedures and Criteria	
6.9.1 Criteria for Approval Test	6.9.1 Criteria for Approval Test <u>for Process of Manufacture</u>	Terminology alignment
Table 6.6 Requirements and Criteria of Approval Test of Plastic Pipes	Table 6.6 Requirements and Criteria of Approval Test <u>for</u> <u>Process of Manufacture</u> of Plastic Pipes	
(Table is omitted.)	(Table is omitted.)	

(	Review of	Guidance 1	for the Approva	al of Materia	als and Eq	juipment f	for Marine	e Use)

Amended	Original	Remarks
Chapter 7 TYPE APPROVAL OF VENTING SYSTEMS AND RELATED EQUIPMENT FOR OIL TANKERS	Chapter 7 APPROVAL OF VENTING SYSTEMS AND RELATED EQUIPMENT FOR OIL TANKERS	Terminology alignment
7.2 Application Procedure	7.2 Application Procedure	
7.2.1 Application Form for Approval  Those desiring approval for venting systems and related equipment for oil tankers are requested to submit the appropriate application form (Form 6-6) filled in with necessary data and information to the Society.	7.2.1 Application Form for Approval  Those desiring approval for venting systems and related equipment for oil tankers are requested to submit a single copy of the appropriate application form (Form 6-6) filled in with necessary data and information to the Society.	To delete the specification of the number of copies due to digitization
7.2.3 Data to be Submitted  The data given in the following (1) through (9) are to be submitted together with the Application Form referred to in 7.2.1.  ((1) to (9) are omitted)	7.2.3 Data to be Submitted  Three copies of the data given in the following (1) through (9) are to be submitted together with the Application Form referred to in 7.2.1.  ((1) to (9) are omitted)	To delete the specification of the number of copies due to digitization
7.4 Approval Test	7.4 Approval Test	
7.4.4 Record of Test  1 After completion of the approval test, the manufacturer is to produce a record of the approval test and is to submit to the Society upon receiving confirmation by the surveyor of the Society.	7.4.4 Record of Test  1 After completion of the approval test, the manufacturer is to produce a record of the approval test and is to submit three copies to the Society upon receiving confirmation by the surveyor of the Society.	To delete the specification of the number of copies due to digitization

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)					
Amended	Original	Remarks			
7.5 Approval	7.5 Approval				
7.5.1 Notification of Approval  The Society grants approval for eliminating a part of the test specified in 7.4 against venting systems and related equipment for oil tankers as deemed appropriate in accordance with data submitted according to the requirement in 7.2 through 7.4 and on reports of the surveyor. In this case, the "Certificate of Approval" is published including the approval number, approval date, approval items, approval conditions etc. and, at the same time, among those drawings and documents submitted in accordance with the requirements in 7.2.3 and 7.4.4, which the Society deems necessary, a seal of approval is stamped and returned to the applicant.	7.5.1 Notification of Approval  The Society grants approval for eliminating a part of the test specified in 7.4 against venting systems and related equipment for oil tankers as deemed appropriate in accordance with data submitted according to the requirement in 7.2 through 7.4 and on reports of the surveyor. In this case, the "Notice of Approval" is published including the approval number, approval date, approval items, approval conditions etc. and, at the same time, among those drawings and documents submitted in accordance with the requirements in 7.2.3 and 7.4.4, which the Society deems necessary, a seal of approval is stamped and returned to the applicant.	Terminology alignment			
7.5.2 Period of Validity  1 The valid term of approval in accordance with the requirements in this chapter will be 5 years from the date of the approval. In case when the renewal of approval is carried out in accordance with the requirements in 7.5.3, valid term will be 5 years from the next day after the expiry date of the previous validity.	7.5.2 Period of Validity  The period of validity of approval in accordance with the requirements in this chapter is not to exceed 5 years from the date of approval.	Change in description			
7.5.3 Changes in the Contents of Approval  1 Manufacturers desiring continued application of the requirements in this chapter against equipment which have exceeded the period of validity or have undergone changes in the content of approval are to submit the appropriate application form (Form 6-7) and are to proceed with the application process by the following requirements in 7.2.	7.5.3 Changes in the Contents of Approval  1 Manufacturers desiring continued application of the requirements in this chapter against equipment which have exceeded the period of validity or have undergone changes in the content of approval are to submit a copy of the appropriate application form (Form 6-7) and are to proceed with the application process by the following requirements in 7.2.	Terminology alignment			

,	proval of Materials and Equipment for Marine Use)	T
Amended	Original	Remarks
7.7 Additional Requirements for Equipment Manufactured Outside Japan	7.7 Additional Requirements for Equipment Manufactured Overseas	
7.7.1 General  As a rule, even though given equipment are manufactured <u>outside Japan</u> , they are still to be in accordance with the requirements in 7.2 through 7.6. However, where this is acknowledged as being difficult by the Society, the equipment may be in accordance with the requirements in 7.7 of this section.	7.7.1 General  As a rule, even though given equipment are manufactured overseas, they are still to be in accordance with the requirements in 7.2 through 7.6. However, where this is acknowledged as being difficult by the Society, the equipment may be in accordance with the requirements in 7.7 of this section.	
7.7.2 Approval Application  2 Certificates of approval and performance records published by government organizations and ship classification societies outside Japan that are recognized by the Society are to be submitted for the equipment.	7.7.2 Approval Application  2 Certificates and performance records published by foreign government organizations and foreign ship classification societies recognized by the Society are to be submitted for the equipment.	Change in description
Chapter 8 <u>TYPE</u> APPROVAL OF RECIPROCATING INTERNAL COMBUSTION ENGINES	Chapter 8 APPROVAL OF <u>USE OF</u> RECIPROCATING INTERNAL COMBUSTION ENGINES	Terminology alignment
8.1 General	8.1 General	
<ul> <li>8.1.1 General</li> <li>1 The requirements in this chapter apply to the type approval for the following (1) and (2).</li> <li>(1) Type approval of reciprocating internal combustion engines required by 2.1.1-3 and 2.6.1-3, Part D of the</li> </ul>	<ul> <li>8.1.1 General</li> <li>1 The requirements in this chapter apply to the approval of use for the following (1) and (2).</li> <li>(1) Approval of use of reciprocating internal combustion engines required by 2.1.1-3 and 2.6.1-3, Part D of the</li> </ul>	Terminology alignment

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)						
Amended	Original	Remarks				
Rules for the Survey and Construction of Steel Ships, 2.1.1-2, Part 9 of the Rules for High Speed Craft as well as 2.1.1-2 and 2.6.1-3, Part 7 of the Rules for the Survey and Construction of Inland Waterway Ships; and  (2) Type approval of gas-fuelled engines required by 4.1, Annex 1.1.3-3, Part GF or 5.1, Annex 16.1.1-3, Part N of the Rules for the Survey and Construction of Steel Ships.  7 In applying the procedures for type approval specified in this Chapter, reference is to be made to Fig. 6.8-2.	Rules for the Survey and Construction of Steel Ships, 2.1.1-2, Part 9 of the Rules for High Speed Craft as well as 2.1.1-2 and 2.6.1-3, Part 7 of the Rules for the Survey and Construction of Inland Waterway Ships; and  (2) Approval of use of gas-fuelled engines required by 4.1, Annex 1.1.3-3, Part GF or 5.1, Annex 16.1.1-3, Part N of the Rules for the Survey and Construction of Steel Ships.  7 In applying the procedures for approval of use specified in this Chapter, reference is to be made to Fig. 6.8-2.	Terminology alignment				
8.2 Application and Approval of Submitted Documents	8.2 Application and Approval of Submitted Documents					
8.2.2 Drawings and Data 3 In addition to the drawings and data required by -1, where considered necessary, the Society may request further drawings and data to be submitted. This may include details or evidence of existing type approval or proposals for a testing programme carried out in accordance with this Chapter.	8.2.2 Drawings and Data 3 In addition to the drawings and data required by -1, where considered necessary, the Society may request further drawings and data to be submitted. This may include details or evidence of existing approval of use or proposals for a testing programme carried out in accordance with this Chapter.	Terminology alignment				
4 In addition to those required by -1 to -3 above, those listed in the following (1) to (6) below, are to be submitted for the purpose of confirming whether the manufacturing facility (including production and assembly lines, machining units, special tools and devices, assembly and testing rigs as well as all lifting and transportation devices) is equipped in a way which allows it to consistently produce engines and relevant engine components of a stable quality in accordance	4 In addition to those required by -1 to -3 above, those listed in the following (1) to (6) below, each in triplicate, are to be submitted for the purpose of confirming whether the manufacturing facility (including production and assembly lines, machining units, special tools and devices, assembly and testing rigs as well as all lifting and transportation devices) is equipped in a way which allows it to consistently produce engines and relevant engine components of a stable	To delete the specification of the number of copies due to digitization				

Amended	Original	Remarks
with required standards.  ((1) to (7) are omitted)  8.6 Handling after Approval  8.6.2 Term of Validity  The term of validity of the type approval will be five years from the date of approval. In case when the renewal of approval is carried out in accordance with the requirements in 8.6.4, valid term will be 5 years from the next day after the expiry date of the previous validity.	quality in accordance with required standards. ((1) to (7) are omitted)  8.6 Handling after Approval  8.6.2 Term of Validity The term of validity of the approval will be five years from the date of approval.	Change in description
<ul> <li>8.6.4 Renewal of Approval  1 The manufacturer, who intends to have a continuation of the type approval already expired or to make partial technical modifications of the engine, is to submit an application in accordance with the requirements of 8.2.1 newly. In this case, in lieu of the data required by 8.2.2, the drawings and data for reference specified in the following (1) or (2) are to be submitted.  (1) The submission of modified documents or new documents with substantive modifications replacing former documents compared to the previous submission(s) for type approval; or  (2) A declaration that no substantive modifications have been applied since the last type approval issued.  Fig. 6.8-2 Documents Flow for Type Approval of Reciprocating Internal Combustion Engines (Figure is omitted)</li> </ul>	<ul> <li>8.6.4 Renewal of Approval <ol> <li>The manufacturer, who intends to have a continuation of the approval already expired or to make partial technical modifications of the engine, is to submit an application in accordance with the requirements of 8.2.1 newly. In this case, in lieu of the data required by 8.2.2, the drawings and data for reference specified in the following (1) or (2) are to be submitted.</li> <li>The submission of modified documents or new documents with substantive modifications replacing former documents compared to the previous submission(s) for design approval; or</li> <li>A declaration that no substantive modifications have been applied since the last design approval issued.</li> </ol> </li> <li>Fig. 6.8-2 Documents Flow for Approval of Use of Reciprocating Internal Combustion Engines <ol> <li>(Figure is omitted)</li> </ol> </li> </ul>	Terminology alignment  Terminology alignment

(Review of Guidance for the Approval of Materials and Equipment for Marine Us
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Amended	Original	Remarks
Chapter 9 <u>TYPE APPROVAL OF</u> MECHANICAL JOINTS	Chapter 9 APPROVAL OF <u>USE OF</u> MECHANICAL JOINTS	Terminology alignment
9.1 General	9.1 General	
9.1.1 Scope  The requirements of this chapter apply to testing and inspection for type approval of mechanical joints in accordance with the requirements of 12.3.3-2, Part D of Rules for the Survey and Construction of Steel Ships.  9.2 Application	9.1.1 Scope  The requirements of this chapter apply to testing and inspection for approval of <u>use of mechanical joints in accordance with the requirements of 12.3.3-2, Part D of Rules for the Survey and Construction of Steel Ships.</u> 9.2 Application	Terminology alignment
9.2.1 Application Form  The manufacturer, who intends to obtain the type approval, is to submit the appropriate application form (Form 6-9) filled in with necessary data and information to the Society (Head Office).	9.2.1 Application Form  The manufacturer, who intends to obtain the approval of use, is to submit the appropriate application form (Form 6-9) filled in with necessary data and information to the Society (Head Office).	To delete the specification of the number of copies due to digitization
9.2.2 Documents  1 The documents listed (1) through (9) below, are to be submitted together with the application form specified in 9.2.1.  ((1) to (9) are omitted)  2 Notwithstanding the requirements in -1 above, submission of part or all of the reference may be omitted if the	9.2.2 Documents  1 The documents listed (1) through (9) below, each in triplicate, are to be submitted together with the application form specified in 9.2.1.  ((1) to (9) are omitted)  2 Notwithstanding the requirements in -1 above, submission of part or all of the reference may be omitted if the	To delete the specification of the number of copies due to digitization  Terminology alignment
manufacturer had previous record of obtaining the type approval of the Society in the past, and the duplicated data are included therein.	manufacturer had previous record of obtaining the approval of the Society in the past, and the duplicated data are included therein.	

#### Amended-Original Requirements Comparison Table

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)		
Amended	Original	Remarks
9.3 Approval Tests	9.3 Approval Tests	
9.3.2 Details of Tests	9.3.2 Details of Tests	
In the approval tests of mechanical joints, the	In the approval tests of mechanical joints, the	
following items (1) through (9) as deemed necessary by the	following items (1) through (9) as deemed necessary by the	
Society are to be included according to <b>Table 6.9-1</b> :	Society are to be included according to <b>Table 6.9-1</b> :	
((1) to (5) are omitted)	((1)  to  (5)  are omitted)	
(6) Fire endurance test	(6) Fire endurance test	
((a) to (h) are omitted)	((a) to (h) are omitted)	
(i) Where thermal insulation is acceptable as a	(i) Where thermal insulation is acceptable as a	
means of providing fire resistance, following	means of providing fire resistance, following	
requirements apply:	requirements apply:	
(i) to iii) are omitted)	(i) to iii) are omitted)	
iv) A service restriction is to be stated on the	iv) A service restriction is to be stated on the	
<u>Certificate of approval</u> that the mechanical		Terminology alignment
joints are to be fitted with thermal insulation	joints are to be fitted with thermal insulation	
during the installation in cases where the	during the installation in cases where the	
mechanical joints are used where fire	mechanical joints are used where fire	
resistance is required, unless mechanical	resistance is required, unless mechanical	
joints are delivered already fitted with	joints are delivered already fitted with	
thermal insulation before installation.	thermal insulation before installation.	
((7) to (9) are omitted)	((7) to (9) are omitted)	
9.4 Approval	9.4 Approval	
9.4.1 Test Records	9.4.1 Test Records	
The manufacturer is to prepare records of the approval	The manufacturer is to prepare records of the approval	To delete the specification
test after completion of the test, to obtain verification by the	test after completion of the test, to obtain verification by the	of the number of copies
Society's attending surveyor and to submit them, to the	Society's attending surveyor and to submit them, in triplicate,	due to digitization
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to the Society.

Society.

Amended	Original	Remarks
7 interiord	O 115 mus	Remarks
9.4.3 Renewal of Approval  1 The valid term of approval in the preceding 9.4.2 will be 5 years from the date of approval. In case when the renewal of approval is carried out in accordance with the requirements in 2 and 4, valid term will be 5 years from the next day after the expiry date of the previous validity.  2 In case where renewal of validity is intended, the manufacturer is to submit a copy of the existing certificate of approval in accordance with the requirements of 9.2 newly. In this case, the data required per 9.2 may be limited to the	<ul> <li>9.4.3 Renewal of Approval <ol> <li>The valid term of approval in the preceding 9.4.2 will be 5 years.</li> </ol> </li> <li>In case where renewal of validity is intended, the manufacturer is to submit a copy of the existing certificate in accordance with the requirements of 9.2 newly. In this case, the data required per 9.2 may be limited to the portion</li> </ul>	Change in description  Terminology alignment
<ul> <li>9.4.4 Revocation of Approval In case where either of the following (1) through (4) applies, the Society will revoke the type approval of machinery and equipment, and give notice to the manufacturer. (1) In association with the implementation or revision of international conventions, laws, and regulations, the equipment for which the approval was granted do not deserve the approval any longer. (2) In case where the validity of approval is overdue and no application for the renewal of the approval is submitted. (3) When serious shortcomings are found in structure or quality of the equipment already type approved after being installed ships. (4) When an applications for revocation is made by the manufacturer.</li></ul>	<ul> <li>9.4.4 Revocation of Approval In case where either of the following (1) through (4) applies, the Society will revoke the type approval of machinery and equipment, and give notice to the manufacturer. (1) In association with the implementation or revision of international conventions, laws, and regulations, the equipment for which the approval was granted do not deserve the approval any longer. (2) In case where the validity of approval is overdue and no application for the renewal of the approval is submitted. (3) When serious shortcomings are found in structure or quality of the equipment already approved after being installed ships. (4) When an applications for revocation is made by the manufacturer.</li> </ul>	Terminology alignment

Amended	Original	Remarks
Chapter 10 TYPE APPROVAL OF CRANKCASE EXPLOSION RELIEF VALVES FOR RECIPROCATING INTERNAL COMBUSTION ENGINES	Chapter 10 APPROVAL OF <u>USE OF</u> CRANKCASE EXPLOSION RELIEF VALVES FOR RECIPROCATING INTERNAL COMBUSTION ENGINES	Terminology alignment
10.1 General	10.1 General	
10.1.1 Scope 1 The requirements in this Chapter apply to testing and inspection for type approval of crankcase explosion relief valves for reciprocating internal combustion engines in accordance with the requirements of 2.4.3 Part D of the Rules for the Survey and Construction of Steel Ships.  10.2 Application	1 The requirements in this Chapter apply to testing and inspection for approval of use of crankcase explosion relief valves for reciprocating internal combustion engines in accordance with the requirements of 2.4.3 Part D of the Rules for the Survey and Construction of Steel Ships.  10.2 Application	Terminology alignment
10.2.1 Application Form  The manufacturer, who intends to obtain the type approval, is to submit the appropriate application form (Form 6-10) filled in with necessary data and information to the Society (Head office).	10.2.1 Application Form  The manufacturer, who intends to obtain the approval of use, is to submit the appropriate application form (Form 6-10) filled in with necessary data and information to the Society (Head office).	To delete the specification of the number of copies due to digitization
10.2.2 Documents  The documents listed (1) through (7) below, are to be submitted together with the application form specified in 10.2.1.  ((1) to (7) are omitted)	10.2.2 Documents  The documents listed (1) through (7) below, each in triplicate, are to be submitted together with the application form specified in 10.2.1.  ((1) to (7) are omitted)	To delete the specification of the number of copies due to digitization

Amended	Original Original	Remarks
10.3 Approval Tests  10.3.5 Test Records  The manufacturer is to prepare records of the approval	10.3 Approval Tests  10.3.5 Test Records  The manufacturer is to prepare records of the approval	To delete the specification
test including the following information and documents after completion of the test, to obtain verification by the Society's attending surveyor and to submit them, to the Society.  ((1) to (7) are omitted)	test including the following information and documents after completion of the test, to obtain verification by the Society's attending surveyor and to submit them, in triplicate, to the Society.  ((1) to (7) are omitted)	of the number of copies due to digitization
10.4 Approval  10.4.2 Renewal of Approval	10.4 Approval  10.4.2 Renewal of Approval	
1 The valid term of approval in the preceding 10.4.1 will be 5 years from the date of approval. In case when the renewal of approval is carried out in accordance with the requirements in 2 and 4, valid term will be 5 years from the next day after the expiry date of the previous validity.	1 The valid term of approval in the preceding 10.4.1 will be 5 years.	Change in description
2 In case where renewal of validity is intended, the manufacturer is to submit a copy of the existing certificate of approval in accordance with the requirements of 10.2 newly. In this case, the data required per 10.2 may be limited to the portion subjected to modification only.	2 In case where renewal of validity is intended, the manufacturer is to submit a copy of the existing certificate in accordance with the requirements of 10.2 newly. In this case, the data required per 10.2 may be limited to the portion subjected to modification only.	Terminology alignment

#### Amended-Original Requirements Comparison Table

(Review of Guidance for the Approval of Materials and Equipment for Marine Us
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Amended	Original	Remarks
Chapter 11 <u>TYPE APPROVAL FOR EXHAUST</u> DRIVEN TURBOCHARGERS	Chapter 11 APPROVAL <u>OF USE</u> FOR EXHAUST DRIVEN TURBOCHARGERS	Terminology alignment
11.2 Application	11.2 Application	
The drawings and data required by 2.1.3-1(1) and (2),  Part D of the Rules for the Survey and Construction of  Steel Ships applicable to the turbocharger which is intended for type approval as well as the data listed in (1) through (6) below, are to be submitted together with the application form specified in 11.2.1.  ((1) to (6) are omitted)	11.2.2 Documents  The drawings and data required by 2.1.3-1(1) and (2), Part D of the Rules for the Survey and Construction of Steel Ships applicable to the turbocharger which is intended for approval as well as the data listed in (1) through (6) below, each in triplicate, are to be submitted together with the application form specified in 11.2.1.  ((1) to (6) are omitted)	To delete the specification of the number of copies due to digitization
11.4 Approval Tests	11.4 Approval Tests	
11.4.2 Details of Tests  1 Turbochargers for any speed engines are to be subjected to at least 500 load cycles (idle - full load - idle) at the limits of their operation. However, this test may be waived if the turbocharger together with the engine is subjected to this kind of low cycle testing under the type approval of reciprocating internal combustion engines in Chapter 8, Part 6. The suitability of the turbocharger for such kind of operation is to be stated in advance by the manufacturer.	11.4.2 Details of Tests  1 Turbochargers for any speed engines are to be subjected to at least 500 load cycles (idle - full load - idle) at the limits of their operation. However, this test may be waived if the turbocharger together with the engine is subjected to this kind of low cycle testing under the approval of use of reciprocating internal combustion engines in Chapter 8, Part 6. The suitability of the turbocharger for such kind of operation is to be stated in advance by the manufacturer.	Terminology alignment

Amended	Original	Remarks
11.5 Approval	11.5 Approval	
11.5.2 Term of Validity  The term of validity of the approval will be five years from the date of approval. In case when the renewal of approval is carried out in accordance with the requirements in 2 and 4, valid term will be 5 years from the next day after the expiry date of the previous validity.	11.5.2 Term of Validity  The term of validity of the approval will be five <i>years</i> from the date of approval.	Change in description
Chapter 12 <u>TYPE APPROVAL OF WELDED</u> TYPE PIPE JOINTS UNDER SPECIAL REQUIREMENTS	Chapter 12 APPROVAL OF <u>USE OF</u> WELDED TYPE PIPE JOINTS UNDER SPECIAL REQUIREMENTS	Terminology alignment
12.1 General	12.1 General	
In accordance with the requirements in D12.6.1-1(1)(a), Part D of the Guidance for the Survey and Construction of Steel Ships (hereinafter referred to as "the Guidance"), N5.12.1-1(5), Part N of the Guidance, Table S5.4.1-2, Part S of the Guidance, the requirements of this chapter apply to the tests and inspections, etc. for the type approval for pipe joints of a butt welded type and pipe joints of a slip-on sleeve welded type (such as elbows, reducers, tees, bends and sockets, etc.). In cases where this approval is obtained, materials complying with international or national standards such as ISO, JIS, etc. can be used, and surveyor attendance at shop tests may be omitted in accordance with	In accordance with the requirements in D12.6.1-1(1)(a), Part D of the Guidance for the Survey and Construction of Steel Ships (hereinafter referred to as "the Guidance"), N5.12.1-1(5), Part N of the Guidance, Table S5.4.1-2, Part S of the Guidance, the requirements of this chapter apply to the tests and inspections, etc. for the approval of use for pipe joints of a butt welded type and pipe joints of a slip-on sleeve welded type (hereinafter referred to as "pipe joints") made of materials complying with international or national standards such as ISO, JIS, etc.	Change in description

#### Amended-Original Requirements Comparison Table

(	Review of Guidance f	or the Approval	of Materials and	Equipmen	nt for Marine Use)

Amended	Original	Remarks
the requirements of D12.6.1-1(1)(e)ii), Part D of the		
Guidance for the Survey and Construction of Steel Ships.		
12.2 Approval Application	12.2 Approval Application	
12.2.1 Approval Application Form  Manufacturers who apply for approval are to submit an application form filled in with the required items to the Society (Head Office).	12.2.1 Approval Application Form  Manufacturers who apply for approval are to submit a single copy of an application form filled in with the required items to the Society (Head Office).	To delete the specification of the number of copies due to digitization
12.2.2 Data to be Submitted  1 The reference data listed in (1) through (9) below, are to be submitted together with the application form specified in 12.2.1.  ((1) to (9) are omitted)	12.2.2 Data to be Submitted  1 The reference data listed in (1) through (9) below, three copies each, are to be submitted together with the application form specified in 12.2.1.  ((1) to (9) are omitted)	To delete the specification of the number of copies due to digitization
12.4 Approval Tests	12.4 Approval Tests	
12.4.5 Test Reports  1 Manufacturers are to prepare test reports upon completion of tests, obtain the surveyor's signature thereon, and submit them, to the Society (Head Office).  12.5 Approval Tests	12.4.5 Test Reports  1 Manufacturers are to prepare test reports upon completion of tests, obtain the surveyor's signature thereon, and submit them, in triplicate, to the Society (Head Office).  12.5 Approval Tests	To delete the specification of the number of copies due to digitization
12.5.3 Renewal of Approval  1 In the case of an application for renewal of approval, the applicant is to submit an application form as well as the "Certificate of Approval" and actual manufacturing record	12.5.3 Renewal of Approval  1 In the case of an application for renewal of approval, the applicant is to submit an application form as well as a copy of the "Certificate of Approval" and three copies of actual	To delete the specification of the number of copies due to digitization

Amended	Original	Remarks
data (for example, chemical composition, mechanical properties and outer diameter and thickness expressed in the form of histograms or statistics for each heat treatment) for the pipe joint within a specific period of time.	manufacturing record data (for example, chemical composition, mechanical properties and outer diameter and thickness expressed in the form of histograms or statistics for each heat treatment) for the pipe joint within a specific period of time.	
12.5.4 Changes in Approved Content  1 In cases where any of the changes in approved content given in the following (1) through (5) occur, documents corresponding to the requirements in 12.2.2 are to be submitted to the Society (Head Office), in addition to the "Certificate of Approval". However, the data to be submitted may be limited to reference data for the changes made.  ((1) to (5) are omitted)	12.5.4 Changes in Approved Content  1 In cases where any of the changes in approved content given in the following (1) through (5) occur, three copies of documents corresponding to the requirements in 12.2.2 are to be submitted to the Society (Head Office), in addition to a copy of the "Certificate of Approval". However, the data to be submitted may be limited to reference data for the changes made.  ((1) to (5) are omitted)	To delete the specification of the number of copies due to digitization
Chapter 13 TYPE APPROVAL OF EXPLOSION RELIEF DEVICES PROVIDED FOR COMBUSTION AIR INLET MANIFOLDS AND FOR EXHAUST GAS MANIFOLDS COMPOSING EXHAUST SYSTEMS FOR RECIPROCATING INTERNAL COMBUSTION ENGINES USING GAS AS FUEL	Chapter 13 APPROVAL OF <u>USE OF</u> EXPLOSION RELIEF DEVICES PROVIDED FOR COMBUSTION AIR INLET MANIFOLDS AND FOR EXHAUST GAS MANIFOLDS COMPOSING EXHAUST SYSTEMS FOR RECIPROCATING INTERNAL COMBUSTION ENGINES USING GAS AS FUEL	Terminology alignment
13.1 General	13.1 General	
13.1.1 Scope This chapter applies to the tests and inspections required for	13.1.1 Scope This chapter applies to the tests and inspections required for	Terminology alignment

Amended	Original	Remarks
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the type approval of explosion relief devices provided for air	the approval of use of explosion relief devices provided for air	
inlet manifolds, scavenge spaces (hereinafter referred to	inlet manifolds, scavenge spaces (hereinafter referred to	
collectively in this chapter as "combustion air inlet	collectively in this chapter as "combustion air inlet	
manifolds") and for exhaust gas manifolds composing exhaust	manifolds") and for exhaust gas manifolds composing exhaust	
systems for reciprocating internal combustion engines using	systems for reciprocating internal combustion engines using	
gas as fuel in accordance with 10.2.2-2 or 10.3.1-1, Part GF	gas as fuel in accordance with 10.2.2-2 or 10.3.1-1, Part GF	
or 16.7.1-4, Part N of the Rules for the Survey and	or 16.7.1-4, Part N of the Rules for the Survey and	
Construction of Steel Ships.	Construction of Steel Ships.	
13.2 Application	13.2 Application	
1221 4 11 11 15		
13.2.1 Application Forms	13.2.1 Application Forms	T ' 1 1' '
Manufacturers who intend to obtain type approval are	Manufacturers who intend to obtain approval of use	Terminology alignment
to submit a completed appropriate application form (Form 6-	are to submit a completed appropriate application form	
13) to the Society's Head Office.	(Form 6-13) to the Society's Head Office.	
13.2.2 Documents	13.2.2 Documents	
The following documents listed in (1) through (9) below, are	The following documents listed in (1) through (9) below,	To delete the specification
to be submitted together with the application forms specified	each in triplicate, are to be submitted together with the	of the number of copies
in 13.2.1.	application forms specified in 13.2.1.	due to digitization
((1) to (9) are omitted)	((1)  to  (9)  are omitted)	
13.3 Approval Tests	13.3 Approval Tests	
13.3.3 Explosion Tests	13.3.3 Explosion Tests	
Explosion testing is to be performed in two stages according	Explosion testing is to be performed in two stages according	Terminology alignment
to following (1) and (2) for ERD that requires type approval.	to following (1) and (2) for <i>ERD</i> that requires approval of use.	
Explosion testing is to be witnessed by the Society's surveyor.	Explosion testing is to be witnessed by the Society's surveyor.	
Calibration records for instrumentation used to collect data are	Calibration records for instrumentation used to collect data are	
to be presented to attending surveyor for review.	to be presented to attending surveyor for review.	

Amended	Original	Remarks
((1) and (2) are omitted)	((1) and (2) are omitted)	
13.3.5 Test Reports  Manufacturers are to prepare test reports for the demonstration tests specified in 13.3.2 and the explosion tests specified in 13.3.3. Such reports are to include the following information and relevant documents are to be verified by attending surveyors and then submitted, to the Society after completion of the tests.  ((1) to (5) are omitted)	13.3.5 Test Reports  Manufacturers are to prepare test reports for the demonstration tests specified in 13.3.2 and the explosion tests specified in 13.3.3. Such reports are to include the following information and relevant documents are to be verified by attending surveyors and then submitted, in triplicate, to the Society after completion of the tests.  ((1) to (5) are omitted)	To delete the specification of the number of copies due to digitization
13.4 Approval	13.4 Approval	
13.4.2 Renewal of Approval  1 The valid term of the approval referred to in 13.4.1 is  5 years from the date of approval. In case when the renewal of approval is carried out in accordance with the requirements in 2 and 4, valid term will be 5 years from the next day after the expiry date of the previous validity.	13.4.2 Renewal of Approval  1 The valid term of the approval referred to in 13.4.1 is 5 years.	Change in description

#### Amended-Original Requirements Comparison Table

(Review of Guidance for the Approval of Materials and Equipment for Marine Us
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Amended	Original	Remarks
Part 7 CONTROL AND INSTRUMENTATION	Part 7 CONTROL AND INSTRUMENTATION	
EQUIPMENT AND ELECTRICAL	EQUIPMENT AND ELECTRICAL	
INSTALLATIONS	INSTALLATIONS	
Chapter 1 TYPE APPROVAL OF AUTOMATIC DEVICES AND EQUIPMENT	Chapter 1 APPROVAL OF <u>USE OF</u> AUTOMATIC DEVICES AND EQUIPMENT	
1.1 General	1.1 General	
1.1.1 Scope  The requirements in this chapter apply to tests and inspection for type approval of automatic devices and equipment (hereinafter referred to as "the equipment" in this chapter) in accordance with 18.7.2, Part D of the Rules for the Survey and Construction of Steel Ships. In this case, part or all of the tests at the manufacturer may be omitted in accordance with 18.7.2-2, Part D of the Rules for the Survey and Construction of Steel Ships.	1.1.1 Scope  The requirements in this chapter apply to tests and inspection for the approval to exempt the shop tests partially or entirely for automatic devices and equipment (hereinafter referred to as "the equipment" in this chapter) intended to be installed in ship in accordance with 18.7.2, Part D of the Rules for the Survey and Construction of Steel Ships.	Terminology alignment Change in description
1.2 Application Procedures	1.2 Application Procedures	
1.2.1 Application Procedures  The manufacturer (applicant) of the equipment intended to be applied the requirements in this chapter is to submit the appropriate application form (Form 7-1) accompanied with the following drawings and documents to the Society.	1.2.1 Application Procedures  The manufacturer (applicant) of the equipment intended to be applied the requirements in this chapter is to submit the appropriate application form (Form 7-1) accompanied with three copies each of the following drawings and documents to the Society.	

	proval of Materials and Equipment for Marine Use)	
Amended	Original	Remarks
<ul> <li>((1) to (7) are omitted)</li> <li>(8) Information on the manufacturing and quality control standards of the said devices and equipment</li> <li>(9) Past records of products of the said devices and equipment (if any)</li> <li>(10) and (11) are omitted</li> </ul>	((1) to (7) are omitted) (8) Inspection and test specification for quality control (including test data) (9) Past records of products (if any) (10) and (11) are omitted	To delete the specification of the number of copies due to digitization
<ul> <li>1.3.2 Test Records After completion of the test, the manufacturer is to produce a report of the test and is to submit to the Society upon receiving confirmation from the Society's surveyor. </li> <li>1.4 Approval</li> </ul>	<ul> <li>1.3.2 Test Records After completion of the test, the manufacturer is to produce a report of the test and is to submit three copies to the Society upon receiving confirmation from the Society's surveyor. 1.4 Approval</li> </ul>	To delete the specification of the number of copies due to digitization
1.4.1 Certificate  When the results of the tests specified in 1.3.1 are confirmed appropriate, the Society approves the equipment (hereinafter referred to as "approved equipment") and issues the relevant approval certificate, which specifies the approval number, date of approval, type, and model.	1.4.1 Certificate  When the results of the tests specified in 1.3.1 are confirmed appropriate, the Society approves the equipment (hereinafter referred to as "approved equipment") and issues the relevant approval certificate.	Change in description
1.4.3 Renewal of Approval  2 When the specifications of the approved equipment remain unchanged, the Society approves the renewal of approval and issues a new approval certificate. The manufacturer who received the new approval certificate is to return the existing certificate to the Society as soon as possible.	1.4.3 Renewal of Approval  2 When the specifications of the approved equipment remain unchanged, the Society approves the renewal of approval and issues a new certificate. The manufacturer who received the new certificate is to return the existing certificate to the Society as soon as possible.	Terminology alignment

Amended	Original	Remarks
1.5 Changes in Particulars, etc. of Approved Equipment	1.5 Changes in Particulars, etc. of Approved Equipment	
1.5.1 Changes in Particulars, etc. of Approved Equipment  1 In cases where the particulars of the approved equipment or materials, construction, dimensions, etc. of major components of the approved equipment are intended to be changed, the manufacturer is to submit to the Society the appropriate application form for changes (Form 7-1) accompanied with the following drawings and documents.  (1) Explanatory notes for changes (2) Necessary drawings and documents (3) A copy of the certificate previously issued	1.5.1 Changes in Particulars, etc. of Approved Equipment  1 In cases where the particulars of the approved equipment or materials, construction, dimensions, etc. of major components of the approved equipment are intended to be changed, the manufacturer is to submit to the Society the appropriate application form for changes (Form 7-1) accompanied with the following drawings and documents.  (1) Explanatory notes for changes (three copies)  (2) Necessary drawings and documents (three copies each)	To delete the specification of the number of copies due to digitization
<ul> <li>3 When confirmation tests are carried out, the manufacturer is to produce a report of the test and is to submit to the Society upon receiving confirmation from the Society's surveyor.</li> <li>4 When the results of the examination for the drawings and documents and the confirmation test specified in -1 to -3 are confirmed to be satisfactory, the Society reissues the approval certificate with contents duly revised. The manufacturer who received the new approval certificate is to</li> </ul>	<ul> <li>(3) A copy of the certificate previously issued</li> <li>3 When confirmation tests are carried out, the manufacturer is to produce a report of the test and is to submit three copies to the Society upon receiving confirmation from the Society's surveyor.</li> <li>4 When the results of the examination for the drawings and documents and the confirmation test specified in -1 to -3 are confirmed to be satisfactory, the Society reissues the certificate with contents duly revised. The manufacturer who received the new certificate is to return the existing certificate</li> </ul>	To delete the specification of the number of copies due to digitization  Terminology alignment
return the existing <u>approval</u> certificate to the Society as soon as possible.  5 In the case specified in -4, the validity of the <u>approval</u> certificate is not changed in principle.	<ul><li>to the Society as soon as possible.</li><li>5 In the case specified in -4, the validity of the certificate is not changed in principle.</li></ul>	Terminology alignment

	proval of Materials and Equipment for Marine Use)	D 1
Amended	Original	Remarks
<ul> <li>1.6.1 Revocation of Approval</li> <li>1 In cases where any of the following (1) to (5) is applicable, the Society may revoke approval based on the requirements in this chapter. In such cases, the Society is to notify the manufacturer of this revocation. <ol> <li>(1) (omitted)</li> <li>(2) Where the valid term of the approval certificate has expired.</li> <li>((3) to (5) are omitted)</li> <li>2 The manufacturer who received a notice of revocation of approval is to return the approval certificate of the relevant equipment to the Society immediately.</li> </ol> </li></ul>	1.6.1 Revocation of Approval  1 In cases where any of the following (1) to (5) is applicable, the Society may revoke approval based on the requirements in this chapter. In such cases, the Society is to notify the manufacturer of this revocation.  (1) (omitted) (2) Where the valid term of the certificate has expired.  ((3) to (5) are omitted)  2 The manufacturer who received a notice of revocation of approval is to return the certificate of the relevant equipment to the Society immediately.	Terminology alignment  Terminology alignment
Chapter 2 TYPE APPROVAL OF LOADING COMPUTER	Chapter 2 APPROVAL OF <u>USE OF</u> LOADING COMPUTER	
2.2 Application Procedure	2.2 Application Procedure	
Any manufacturer (applicant) of the loading computers and stability computers, intended to be applied the requirements in this chapter, is to submit the appropriate application form (Form7-2) accompanied with the following drawings and documents to the Society:  ((1) and (2) are omitted)  (3) Information on the manufacturing and quality control standards of the said computer  (4) Records of manufacture and delivery said computer	Any manufacturer (applicant) of the loading computers and stability computers, intended to be applied the requirements in this chapter, is to submit the appropriate application form (Form7-2) accompanied with three copies each of the following drawings and documents to the Society:  ((1) and (2) are omitted)  (3) Inspection and test specification for quality control (including past data)  (4) Records of manufacture and delivery (if any)	Change in description

Amended	Original	Remarks
(if any) ((5) and (6) are omitted)	((5) and (6) are omitted)	
2.4 Tests and Inspection	2.4 Tests and Inspection	
2.4.2 Certificates  When the results of tests specified in 2.4.1 are confirmed appropriate, the Society approves the equipment and issues approval certificate which specifies the approval number, date of approval, type, and model.	2.4.2 Certificates  When the results of tests specified in 2.4.1 are confirmed appropriate, the Society approves the equipment and issues certificate specifically provided for.	Change in description
2.4.3 Terms of Validity  The above certificate is valid for 5 years from the date of approval. In case when the renewal of approval is carried out in accordance with the requirements in 2.4.4, valid term will be 5 years from the next day after the expiry date of the previous validity.	2.4.3 Terms of Validity  The above certificate is valid for 5 years.	Change in description
2.4.4 Renewal of Validity  In case of application for renewal of approval, the manufacturer is to submit to the Society the appropriate application form (Specimen Form 7-2) accompanied with a copy of the approval certificate previously issued. The change of the specification, if any, is to be described in the application. Where the specifications of the approved equipment remain unchanged, the approval certificate will be issued with another 5 years valid term by the Society. Manufacturers whose renewal is approved are to return the existing approval certificate to the Society as soon as possible after receiving the new approval certificate and the term of validity of the existing approval certificate expires.	For renewal of Validity, the manufacturer is to submit to the Society the appropriate application form (Specimen Form 7-2) accompanied with a copy of the certificate previously issued. The change of the specification, if any, is to be described in the application. Where the specifications of the approved equipment remain unchanged, the certificate will be issued with another 5 years valid term by the Society. Manufacturers whose renewal is approved are to return the existing certificate to the Society as soon as possible after receiving the new certificate and the term of validity of the existing certificate expires.	Change in description

(Review of Guidance for the Ap	proval of Materials and Equipment for Marine Use)	
Amended	Original	Remarks
2.5 Changes in Particulars, Material, Construction, etc. of Approved Equipment	2.5 Changes in Particulars, Material, Construction, etc. of Approved Equipment	
<ul> <li>2.5.1 Changes in Particulars, Material, Construction, etc. of Approved Equipment</li> <li>1 In case where the particulars, materials, construction, dimensions, etc. of major components of the approved equipment are intended to be changed, the manufacturer is to be submit to the Society each three copies of the appropriate application form for changes (Form 7-2), explanatory notes for changes and necessary drawings, accompanied with a copy of the approval certificate previously issued.</li> <li>3 In case the results of confirmation tests specified in -2 are deemed appropriate, a new approval certificate will be issued by the Society. In this case, the previously issued</li> </ul>	<ul> <li>2.5.1 Changes in Particulars, Material, Construction, etc. of Approved Equipment</li> <li>1 In case where the particulars, materials, construction, dimensions, etc. of major components of the approved equipment are intended to be changed, the manufacturer is to be submit to the Society each three copies of the appropriate application form for changes (Form 7-2), explanatory notes for changes and necessary drawings, accompanied with a copy of the certificate previously issued.</li> <li>3 In case the results of confirmation tests specified in 2 are deemed appropriate, a new certificate will be issued by the Society. In this case, the previously issued certificate is to</li> </ul>	To delete the specification of the number of copies due to digitization  Terminology alignment
<ul> <li>approval certificate is to be returned to the Society as soon as possible after receiving the new approval certificate.</li> <li>2.6 Invalidation of Approved Products</li> </ul>	be returned to the Society as soon as possible after receiving the new certificate.  2.6 Invalidation of Approved Products	
<ul> <li>2.6.1 Invalidation of Approved Products</li> <li>1 In case either of the following is relevant, approval of the product will be invalidated: <ol> <li>(1) (Omitted)</li> <li>(2) Where the valid term of the approval certificate has expired.</li> <li>(3) and (4) are omitted</li> </ol> </li> </ul>	<ul> <li>2.6.1 Invalidation of Approved Products</li> <li>1 In case either of the following is relevant, approval of the product will be invalidated: <ol> <li>(1) (Omitted)</li> <li>(2) Where the valid term of the certificate has expired.</li> <li>(3) and (4) are omitted</li> </ol> </li> </ul>	Terminology alignment
2 Any manufacturer who has received notice of revocation of approval should return the <u>approval</u> certificate of the relevant equipment to the Society.	2 Any manufacturer who has received notice of revocation of approval should return the certificate of the relevant equipment to the Society.	Terminology alignment

Amended	Original	Remarks
Chapter 3 APPROVAL OF CABLE LAYING	Chapter 3 APPROVAL OF CABLE LAYING	remarks
3.2 Application Procedures	3.2 Application Procedures	
3.2.2 Documents for Submission  The manufacturer or constructor intended to obtain the approval of the fire stop methods is to submit drawings and documents specified in (1) for the approval of the fire stop methods, and similarly those specified in (2) for the approval of non-metallic cable supports, together with the appropriate application form specified in 3.2.1.  (1) For fire stop methods  (a) Specification (including detailed construction	3.2.2 Documents for Submission  The manufacturer or constructor intended to obtain the approval of the fire stop methods is to submit three copies each of drawings and documents specified in (1) for the approval of the fire stop methods, and similarly those specified in (2) for the approval of non-metallic cable supports, together with the appropriate application form specified in 3.2.1.  (1) For fire stop methods	To delete the specification of the number of copies due to digitization
(a) Specification (including detailed construction plan)  (b) Characteristic of materials  (c) Instructions for work procedures (in case of paints being used, the painting method and procedure including painting condition and the thickness of dry paint film are to be specified)  (d) Approval test plan (see 3.4.1)  (e) Copies of certificates or test records issued by official organizations (if any)  (f) Information on the quality control standards of the said fire stop methods  (g) Past records of said fire stop methods (if any)  (h) Other documents as deemed necessary by the Society.  (2) For non-metallic cable supports  (a) Type name	<ul> <li>(a) Specification (including detailed construction plan)</li> <li>(b) Characteristic of materials</li> <li>(c) Instructions for work procedures (in case of paints being used, the painting method and procedure including painting condition and the thickness of dry paint film are to be specified)</li> <li>(d) Approval test plan (see 3.4.1)</li> <li>(e) Copies of certificates or test records issued by official organizations (if any)</li> <li>(Newly added)</li> <li>(f) Other documents as deemed necessary by the Society.</li> <li>(2) For non-metallic cable supports</li> <li>(a) Type name</li> </ul>	Addition of requirements related to quality control

	proval of Materials and Equipment for Marine Use)	
Amended	Original	Remarks
<ul> <li>(b) Construction plan (including principal dimensions)</li> <li>(c) Characteristic of materials</li> <li>(d) Approval test plan (see 3.4.2)</li> <li>(e) Copies of certificates or test records issued by official organizations (if any)</li> <li>(f) Information on the quality control standards of the said non-metallic cable supports</li> <li>(g) Past records of said non-metallic cable supports</li> </ul>	<ul> <li>(b) Construction plan (including principal dimensions)</li> <li>(c) Characteristic of materials</li> <li>(d) Approval test plan (see 3.4.2)</li> <li>(e) Copies of certificates or test records issued by official organizations (if any)</li> <li>(Newly added)</li> </ul>	Addition of requirements related to quality control
<ul> <li>(if any)</li> <li>(h) Other documents as deemed necessary by the Society.</li> <li>3.4.4 Test Records</li> <li>1 After the approval test has been completed, the manufacturer or constructor is to prepare the approval test records and to submit them to the Society after being verified by the Society's surveyor.</li> </ul>	<ul> <li>(f) Other documents as deemed necessary by the Society.</li> <li>3.4.4 Test Records         <ol></ol></li></ul>	To delete the specification of the number of copies due to digitization
3.5.2 Term of Validity  The term of validity of the approval is to be 5 years from the day of approval. In case when the renewal of approval is carried out in accordance with the requirements in 3.5.3, valid term will be 5 years from the next day after the expiry date of the previous validity.	3.5.2 Term of Validity  The term of validity of the approval is to be 5 years counting from the day of approval.	Change in description

#### Amended-Original Requirements Comparison Table

(Review of Guidance for the Approval of Materials and Equipment for Marin	<u>e Use)</u>	)
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Amended	Original Original	Remarks
Chapter 4 TYPE APPROVAL OF LEVEL INDICATORS	Chapter 4 APPROVAL <u>OF USE</u> OF LEVEL INDICATORS	Terminology alignment
4.2 Application	4.2 Application	
4.2.1 Application Form  The company, who intends to obtain type approval for level indicators are to submit the appropriate application form (Form 7-4) filled in with necessary data and information to the Society (Head Office).	4.2.1 Application Form  The company, who intends to obtain approval for the use of level indicators are to submit the appropriate application form (Form 7-4) filled in with necessary data and information to the Society (Head Office).	To delete the specification of the number of copies due to digitization
<ul> <li>4.2.2 Applicant</li> <li>2 Manufacturers of parts of the said devices may be considered as approval applicants in case type approvals for the parts are desired.</li> </ul>	4.2.2 Applicant  2 Manufacturers of parts of the said devices may be considered as approval applicants in case approvals for the use of the parts are desired.	Terminology alignment
4.2.3 Documents  The drawings and data in the following (1) through (9) are to be submitted together with the application form specified in 4.2.1.  ((1) to (9) are omitted)	4.2.3 Documents  Three copies each of the drawings and data in the following (1) through (9) are to be submitted together with the application form specified in 4.2.1.  ((1) to (9) are omitted)	To delete the specification of the number of copies due to digitization
4.4 Approval Test	4.4 Approval Test	
4.4.4 Test Records  1 After completion of the approval test, the manufacturer is to prepare a record of the approval test and is to submit to the Society after getting verification by the surveyor of the Society.	4.4.4 Test Records  1 After completion of the approval test, the manufacturer is to prepare a record of the approval test and is to submit three copies to the Society after getting verification by the surveyor of the Society.	To delete the specification of the number of copies due to digitization

Amended	original Of Materials and Equipment for Marine Use)	Remarks
		Remarks
4.5.2 Term of Validity  The term of validity of the approval of level indicator is not to exceed 5 years from the date of approval. In case when the renewal of approval is carried out in accordance with the requirements in 4.5.3, valid term will be 5 years from the next day after the expiry date of the previous validity.	<ul> <li>4.5.2 Term of Validity The term of validity of the approval of level indicator is not to exceed 5 years from the date of approval.</li> </ul>	Change in description
4.5.3 Renewal of Approval  1 The manufacturer, who intends to have a continuation of the type approval already expired or to make partial technical modifications of the level indicator, is to submit the appropriate application form (Form 7-4E) in accordance with the requirements of 4.2 newly. In this case, the data required per 4.2.3 may be limited to the portion subjected to modification only.	4.5.3 Renewal of Approval  1 The manufacturer, who intends to have a continuation of the approval already expired or to make partial technical modifications of the level indicator, is to submit the appropriate application form (Form 7-4E) in accordance with the requirements of 4.2 newly. In this case, the data required per 4.2.3 may be limited to the portion subjected to modification only.	Terminology alignment To delete the specification of the number of copies due to digitization
<ul> <li>4.5.4 Revocation of Approval In case where either of the following (1) to (4) applies, the Society will revoke the type approval of level indicators, and give notice to the manufacturer. (1) When renewal procedures were not undertaken without any special reason. (2) In association with the implementation or revision of international conventions, laws and regulations, the machinery and equipment for which the type approval was granted do not deserve the approval any longer. (3) When serious shortcomings are found in structure or quality of the level indicator already type approved</li> </ul>	<ul> <li>4.5.4 Revocation of Approval In case where either of the following (1) to (4) applies, the Society will revoke the approval for use of level indicators, and give notice to the manufacturer. (1) When renewal procedures were not undertaken without any special reason. (2) In association with the implementation or revision of international conventions, laws and regulations, the machinery and equipment for which the approval was granted do not deserve the approval any longer. (3) When serious shortcomings are found in structure or quality of the level indicator already approved after</li> </ul>	Terminology alignment

Amended	Original	Remarks
(4) When an application for revocation is made by the manufacturer.	(4) When an application for revocation is made by the manufacturer.	
4.6 Handling after Approval	4.6 Handling after Approval	
4.6.1 Tests and Inspection on the Individual Product  Tests and inspection at the manufacturing plant of liquid level indicators which have been obtained the type approval may be limited to those specified in the approved certificate mentioned in 4.5.1-1 notwithstanding the relevant requirement of the Rules and their Guidance.	4.6.1 Tests and Inspection on the Individual Product  Tests and inspection at the manufacturing plant of liquid level indicators which have been obtained the approval for use may be limited to those specified in the approved certificate mentioned in 4.5.1-1 notwithstanding the relevant requirement of the Rules and their Guidance	Terminology alignment
Chapter 5 TYPE APPROVAL OF WATER LEVEL DETECTION AND ALARM SYSTEMS	Chapter 5 APPROVAL <u>OF USE</u> OF WATER LEVEL DETECTION AND ALARM SYSTEMS	
5.2 Application	5.2 Application	
5.2.1 Application Form  The company, who intends to obtain the <u>type</u> approval of water level detection and alarm systems are to submit the appropriate application form (Form 7-5) filled in with necessary data and information to the Society (Head Office).	5.2.1 Application Form  The company, who intends to obtain the approval of use of water level detection and alarm systems are to submit the appropriate application form (Form 7-5) filled in with necessary data and information to the Society (Head Office).	To delete the specification of the number of copies due to digitization
<ul> <li>5.2.2 Applicant</li> <li>2 Manufacturers of parts of the said systems may be allowed as an applicant for the type approval regarding the parts.</li> </ul>	<ul> <li>5.2.2 Applicant</li> <li>2 Manufacturers of parts of the said systems may be allowed as an applicant for the approval of use regarding the parts.</li> </ul>	Terminology alignment

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)			
Amended	Original	Remarks	
5.2.3 Documents  The drawings and data in the following (1) through (9) are to be submitted together with the application form specified in 5.2.1.  ((1) to (9) are omitted)	5.2.3 Documents  Three copies each of the drawings and data in the following (1) through (9) are to be submitted together with the application form specified in 5.2.1.  ((1) to (9) are omitted)	To delete the specification of the number of copies due to digitization	
5.4 Approval Test	5.4 Approval Test		
5.4.4 Test Records  1 After completion of the approval test, the manufacturer is to prepare a record of the approval test and is to submit to the Society after verification by the attending surveyor.	5.4.4 Test Records  1 After completion of the approval test, the manufacturer is to prepare a record of the approval test and is to submit three copies to the Society after verification by the attending surveyor.	To delete the specification of the number of copies due to digitization	
5.5 Approval	5.5 Approval		
5.5.1 Notice of Approval  The Society, when satisfied upon examination of the submitted documents as required per 5.2 to 5.4 and the attending surveyor's report, will type approve of the water level detection and alarm system. In this case, the Society will issue a certificate of approval specifying the approval number, approval date, items of approval and approval conditions, and put approval stamps on the documents as deemed necessary by the Society out of those submitted in accordance with 5.2.3 and 5.4.4, and return them back to the applicant.	5.5.1 Notice of Approval  The Society, when satisfied upon examination of the submitted documents as required per 5.2 to 5.4 and the attending surveyor's report, will approve the use of the water level detection and alarm system. In this case, the Society will issue a certificate of approval specifying the approval number, approval date, items of approval and approval conditions, and put approval stamps on the documents as deemed necessary by the Society out of those submitted in accordance with 5.2.3 and 5.4.4, and return them back to the applicant.	Terminology alignment	

Amended	Original	Remarks
5.5.2 Term of Validity  The term of validity of the type approval is not to exceed five years from the date of approval. In case when the renewal of approval is carried out in accordance with the requirements in 5.5.3, valid term will be 5 years from the next day after the expiry date of the previous validity.	5.5.2 Term of Validity  The term of validity of the approval is not to exceed five <i>years</i> from the date of approval.	Change in description
5.5.3 Renewal of Approval  1 The manufacturer, who intends to have a continuation of the type approval to be expired or to make partial technical modifications of the system, is to submit the appropriate application form (Form 7-5E) in accordance with the requirements of 5.2 newly. In this case, the data required per 5.2.3 may be limited to the portion subjected to modification only.	5.5.3 Renewal of Approval  1 The manufacturer, who intends to have a continuation of the approval to be expired or to make partial technical modifications of the system, is to submit the appropriate application form (Form 7-5E) in accordance with the requirements of 5.2 newly. In this case, the data required per 5.2.3 may be limited to the portion subjected to modification only.	Terminology alignment To delete the specification of the number of copies due to digitization
5.5.4 Revocation of Approval  In case where either of the following (1) to (4) applies, the Society will revoke the type approval of the water level detection and alarm system, and give a notice to the manufacturer.	5.5.4 Revocation of Approval  In case where either of the following (1) to (4) applies, the Society will revoke the approval of use of the water level detection and alarm system, and give a notice to the manufacturer.	Terminology alignment
<ol> <li>When renewal procedures were not undertaken without any special reason.</li> <li>In association with the implementation or revision of international conventions, laws and regulations, the system for which the type approval was granted do not deserve the approval any longer.</li> </ol>	<ol> <li>When renewal procedures were not undertaken without any special reason.</li> <li>In association with the implementation or revision of international conventions, laws and regulations, the system for which the approval was granted do not deserve the approval any longer.</li> </ol>	
<ul> <li>(3) When serious shortcomings are found in structure or quality of the water level detection and alarm system already type approved after being installed in ships.</li> <li>(4) When an application for revocation is made by the</li> </ul>	<ul> <li>(3) When serious shortcomings are found in structure or quality of the water level detection and alarm system already approved after being installed in ships.</li> <li>(4) When an application for revocation is made by the</li> </ul>	

Amended	Original	Remarks
manufacturer.	manufacturer.	
5.6 Handling after Approval	5.6 Handling after Approval	
Tests and Inspection on the Individual Product Tests and inspection at the manufacturer of the water level detection and alarm systems which has been obtained the type approval may be limited to those specified in the approved certificate mentioned in 5.5.1-1 notwithstanding the relevant requirement of the Rules and their Guidance	5.6.1 Tests and Inspection on the Individual Product  Tests and inspection at the manufacturer of the water level detection and alarm systems which has been obtained the approval of use may be limited to those specified in the approved certificate mentioned in 5.5.1-1 notwithstanding the relevant requirement of the Rules and their Guidance	Terminology alignment
Chapter 6 TYPE APPROVAL OF CRANKCASE OIL MIST DETECTION ARRANGEMENTS	Chapter 6 APPROVAL <u>OF USE</u> OF CRANKCASE OIL MIST DETECTION ARRANGEMENTS	Terminology alignment
6.1 General	6.1 General	
The requirements in this Chapter apply to testing and inspection for type approval of crankcase oil mist detection arrangements in accordance with the requirements of 2.4.5  Part D of the Rules for the Survey and Construction of Steel Ships.	6.1.1 Scope  The requirements in this Chapter apply to testing and inspection for <u>use</u> of crankcase oil mist detection arrangements in accordance with the requirements of 2.4.5 Part D of the Rules for the Survey and Construction of Steel Ships.	Terminology alignment

#### Amended-Original Requirements Comparison Table

(	Review of Guidance for	or the Approval	of Materials and Ed	quipment for Marine Use)

Amended	Original Original	Remarks
6.2 Application	6.2 Application	
6.2.1 Application Form  The manufacturer, who intends to obtain the type approval, is to submit the appropriate application form (Form 7-6) filled in with necessary data and information to the Society (Head office).	6.2.1 Application Form  The manufacturer, who intends to obtain the approval of use, is to submit the appropriate application form (Form 7-6) filled in with necessary data and information to the Society (Head office).	To delete the specification of the number of copies due to digitization
6.2.2 Documents  The documents listed (1) through (10) below, are to be submitted together with the application form specified in 6.2.1.  ((1) to (10) are omitted)	6.2.2 Documents  The documents listed (1) through (10) below, each in triplicate, are to be submitted together with the application form specified in 6.2.1.  ((1) to (10) are omitted)	To delete the specification of the number of copies due to digitization
6.3 Approval Tests	6.3 Approval Tests	
6.3.5 Test Records  The manufacturer is to prepare records of the approval test including the following information and documents after completion of the test, to obtain verification by the Society's attending surveyor and to submit them, to the Society.  ((1) to (3) are omitted)  6.4 Approval	6.3.5 Test Records  The manufacturer is to prepare records of the approval test including the following information and documents after completion of the test, to obtain verification by the Society's attending surveyor and to submit them, in triplicate, to the Society.  ((1) to (3) are omitted)  6.4 Approval	To delete the specification of the number of copies due to digitization
6.4.2 Renewal of Approval  1 The valid term of approval in the preceding 6.4.1 will be 5 years from the date of approval. In case when the renewal	6.4.2 Renewal of Approval  1 The valid term of approval in the preceding 6.4.1 will be 5 <i>years</i> .	Change in description

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)			
Amended	Original	Remarks	
of approval is carried out in accordance with the requirements in 2 and 4, valid term will be 5 years from the next day after the expiry date of the previous validity.			
6.5 Handling after Approval	6.5 Handling after Approval		
6.5.1 Tests and Inspection on the Individual Product  Test and inspection at the manufacturer and on board of the oil mist detection arrangements which has been obtained the type approval may be limited to those specified in the approved certificate mentioned in 6.4.1 notwithstanding the relevant requirement of the Rules and their Guidance.  Chapter 7 TYPE APPROVAL OF GAS  DETECTION EQUIPMENT	6.5.1 Tests and Inspection on the Individual Product  Test and inspection at the manufacturer and on board of the oil mist detection arrangements which has been obtained the approval of use may be limited to those specified in the approved certificate mentioned in 6.4.1 notwithstanding the relevant requirement of the Rules and their Guidance.  Chapter 7 APPROVAL OF USE OF GAS DETECTION EQUIPMENT	Terminology alignment  Terminology alignment	
7.2 Application	7.2 Application		
7.2.1 Application Form  The manufacturer, who intends to obtain the type approval, is to submit the appropriate application form (Form 7-7) filled in with necessary data and information to the Society (Head office).	7.2.1 Application Form  The manufacturer, who intends to obtain the approval of use, is to submit the appropriate application form (Form 7-7) filled in with necessary data and information to the Society (Head office).	Terminology alignment	
7.2.2 Documents  The documents listed (1) through (11) below, each in triplicate, are to be submitted together with the application form specified in 7.2.1.  ((1) to (11) are omitted)	7.2.2 Documents  The documents listed (1) through (11) below, each in triplicate, are to be submitted together with the application form specified in 7.2.1.  ((1) to (11) are omitted)	To delete the specification of the number of copies due to digitization	

Amended	Original	Remarks
7.4 Approval Test	7.4 Approval Test	
7.4.9 Test Records  1 After completion of the approval test, the manufacturer is to prepare a record of the approval test and is to submit to the Society after verification by the attending surveyor.	7.4.9 Test Records  1 After completion of the approval test, the manufacturer is to prepare a record of the approval test and is to submit three copies to the Society after verification by the attending surveyor.	To delete the specification of the number of copies due to digitization
7.5 Approval	7.5 Approval	
7.5.1 Notice of Approval  The Society, when satisfied upon examination of the submitted documents as required per 7.2 to 7.4 and the attending surveyor's report, will type approve of the gas detection equipment. In this case, the Society will issue a certificate of approval specifying the approval number, approval date, items of approval and approval conditions, and put approval stamps on the documents as deemed necessary by the Society out of those submitted in accordance with 7.2.2 and 7.4.9, and return them back to the applicant.	7.5.1 Notice of Approval  The Society, when satisfied upon examination of the submitted documents as required per 7.2 to 7.4 and the attending surveyor's report, will approve the use of the gas detection equipment. In this case, the Society will issue a certificate of approval specifying the approval number, approval date, items of approval and approval conditions, and put approval stamps on the documents as deemed necessary by the Society out of those submitted in accordance with 7.2.2 and 7.4.9, and return them back to the applicant.	Terminology alignment
7.5.2 Term of Validity  The term of validity of the approval of gas detection equipment is not to exceed five years from the date of approval. In case when the renewal of approval is carried out in accordance with the requirements in 7.5,3, valid term will be 5 years from the next day after the expiry date of the previous validity.	7.5.2 Term of Validity  The term of validity of the approval of gas detection equipment is not to exceed five years from the date of approval.	Change in description

Amended	Original	Remarks
7.6 Handling after Approval	7.6 Handling after Approval	remarks
7.6.1 Tests and Inspection on the Individual Product  Tests and inspection at the manufacturing plant of gas detection equipment which have been obtained the type approval may be limited to those specified in the approved certificate mentioned in 7.5.1-1 notwithstanding the relevant requirement of the Rules and their Guidance.	7.6.1 Tests and Inspection on the Individual Product  Tests and inspection at the manufacturing plant of gas detection equipment which have been obtained the approval for use may be limited to those specified in the approved certificate mentioned in 7.5.1-1 notwithstanding the relevant requirement of the Rules and their Guidance.	Terminology alignment
Chapter 8 TYPE APPROVAL OF COMPUTER BASED SYSTEMS	Chapter 8 APPROVAL OF USE OF COMPUTER BASED SYSTEMS	Terminology alignment
8.1 General	8.1 General	
8.1.1 Scope 1 The requirements in this chapter apply to tests and inspection for "Type approval" of computer based systems belong to category II or III specified in 3.3.1, Part X of the Rules for the Survey and Construction of Steel Ships in accordance with 18.1.3, Part D and 3.2.2, Part X of the Rules for the Survey and Construction of Steel Ships, 2.2.1-2 of the Guidance for Automatic and Remote Control Systems, 12.1.3, Part 9 of the Rules for High Speed Craft and 14.1.3, Part 7 of the Rules for the Survey and Construction of Inland Waterway Ships.	8.1.1 Scope 1 The requirements in this chapter apply to tests and inspection for "approval of use" of computer based systems belong to category II or III specified in 3.3.1, Part X of the Rules for the Survey and Construction of Steel Ships in accordance with 18.1.3, Part D and 3.2.2, Part X of the Rules for the Survey and Construction of Steel Ships, 2.2.1-2 of the Guidance for Automatic and Remote Control Systems, 12.1.3, Part 9 of the Rules for High Speed Craft and 14.1.3, Part 7 of the Rules for the Survey and Construction of Inland Waterway Ships.	Terminology alignment
2 Programmable devices installed into a computer based system which receives type approval in accordance with requirements of this chapter are to be subject to the	2 Programmable devices installed into a computer based system which receives approval of use in accordance with requirements of this chapter are to be subject to the	Terminology alignment

Amended	Original	Remarks
environmental tests specified in Table 7.1-1. However, for	environmental tests specified in Table 7.1-1. However, for	Tronium.
programmable devices which have already received approval	programmable devices which have already received approval	
of use from the Society, a part of or all environmental tests	of use from the Society, a part of or all environmental tests	
may be omitted.	may be omitted.	
may be offitted.	may be offitted.	
8.2 Application	8.2 Application	
8.2.1 Application Forms	8.2.1 Application Forms	
The manufacturer who makes an application for type	The manufacturer who makes an application for	To delete the specification
approval of the computer based system is to submit the	approval of use of the computer based system is to submit the	of the number of copies
appropriate application form (Form 7-8) filled in with	appropriate application form (Form 7-8) filled in with	due to digitization
necessary data and information to the Society.	necessary data and information to the Society.	
8.2.2 Documents to be submitted	8.2.2 Documents to be submitted	
1 <u>The following documents are to be submitted to the</u>	1 Three copies each of the following documents are to	To delete the specification
Society with the application form specified in 8.2.1.	be submitted to the Society with the application form	of the number of copies
Summaries of said drawings and data are shown in Table	specified in 8.2.1. Summaries of said drawings and data are	due to digitization Terminology alignment
7.8-1.	shown in Table 7.8-1.	Terminology anglinient
(1) (Omitted)	(1) (Omitted)	
(2) Drawings and data for reference:	(2) Drawings and data for reference:	
(a) An approval certificate issued in accordance with	(a) A certificate issued in accordance with Chapter	
Chapter 1, Part 7 or documents proving	1, Part 7 or documents proving satisfaction with	
satisfaction with environmental tests specified in	environmental tests specified in 7.1-1.	
7.1-1.	4 2 2	
(b) Software test report	(b) Software test report	
(c) System test report	(c) System test report	
(d) FAT report	(d) FAT report	
(e) Additional FAT documentation (e.g. user	(e) Additional FAT documentation (e.g. user	
manuals)	manuals)	
(f) Other drawings and data deemed necessary by the	(f) Other drawings and data deemed necessary by	
Society	the Society	

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)			
Amended	Original	Remarks	
8.4 Approval Test	8.4 Approval Test		
8.4.3 Test Records  After completion of the test specified in 8.4.1, the manufacturer is to produce a report of the test and is to submit to the Society upon receiving confirmation from the Society's surveyor.	8.4.3 Test Records  After completion of the test specified in 8.4.1, the manufacturer is to produce a report of the test and is to submit three copies to the Society upon receiving confirmation from the Society's surveyor.	To delete the specification of the number of copies due to digitization	
8.5 Approval	8.5 Approval		
8.5.1 Certificate  When the results of the examinations of submitted drawings and data and the tests specified in 8.2 to 8.4 are confirmed appropriate, the Society approves the computer based system (hereinafter referred to as "approved computer based system") and issues the relevant approval certificate. which specifies the approval number, date of approval, type, and model.	8.5.1 Certificate  When the results of the examinations of submitted drawings and data and the tests specified in 8.2 to 8.4 are confirmed appropriate, the Society approves the computer based system (hereinafter referred to as "approved computer based system") and issues the relevant approval certificate.	Change in description	
8.5.2 Validity of Approval  The certificate specified in 8.5.1 is to be valid <u>for</u> 5 years from its date of issue. However, when the approval is renewed in accordance with 8.5.3, the new certificate is to be valid <u>for</u> 5 years from the date of expiry of the existing certificate.	8.5.2 Validity of Approval  The certificate specified in 8.5.1 is to be valid until a date not exceeding 5 years from its date of issue. However, when the approval is renewed in accordance with 8.5.3, the new certificate is to be valid until a date not exceeding 5 years from the date of expiry of the existing certificate.	Change in description	
8.5.3 Renewal of Approval  1 In the case of application for renewal of approval, the manufacturer is to submit to the Society the appropriate application form (Form 7-8) accompanied with a copy of the	8.5.3 Renewal of Approval  1 In the case of application for renewal of approval, the manufacturer is to submit to the Society the appropriate application form (Form 7-8) accompanied with a copy of the	Terminology alignment	

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)			
Amended	Original	Remarks	
<ul> <li>approval certificate previously issued. The changes in particulars of the approved computer based system, quality system of manufacturer, etc., if any, are to be described in the application.</li> <li>When the particulars of the approved computer based system, quality system of manufacturer, etc. remain unchanged, the Society approves the renewal of approval and issues a new approval certificate. The manufacturer who received the new approval certificate is to return the existing approval certificate to the Society as soon as possible.</li> </ul>	certificate previously issued. The changes in particulars of the approved computer based system, quality system of manufacturer, etc., if any, are to be described in the application.  2 When the particulars of the approved computer based system, quality system of manufacturer, etc. remain unchanged, the Society approves the renewal of approval and issues a new certificate. The manufacturer who received the new certificate is to return the existing certificate to the Society as soon as possible.		
8.6 Changes in Particulars of Approved Computer Based System, Quality System of Manufacturer, etc.	8.6 Changes in Particulars of Approved Computer Based System, Quality System of Manufacturer, etc.		
<ul> <li>8.6.1 Changes in Particulars of Approved Computer Based System, Quality System of Manufacturer, etc.</li> <li>1 In cases where the particulars of the approved computer based system, quality system of manufacturer, etc. are intended to be changed, the manufacturer is to submit to the Society the appropriate application form for changes (Form 7-8) accompanied with the following documents. <ol> <li>explanatory notes for changes_,</li> <li>necessary drawings and data , and</li> <li>a copy of the approval certificate previously issued.</li> </ol> </li> </ul>	8.6.1 Changes in Particulars of Approved Computer Based System, Quality System of Manufacturer, etc.  1 In cases where the particulars of the approved computer based system, quality system of manufacturer, etc. are intended to be changed, the manufacturer is to submit to the Society the appropriate application form for changes (Form 7-8) accompanied with the following documents.  (1) explanatory notes for changes (three copies), (2) necessary drawings and data (three copies each), and (3) a copy of the certificate previously issued.	To delete the specification of the number of copies due to digitization	
3 When confirmation tests are carried out, the manufacturer is to produce a report of the test and is to submit to the Society upon receiving confirmation from the Society's surveyor.  4 When the results of the examination for documents and	3 When confirmation tests are carried out, the manufacturer is to produce a report of the test and is to submit three copies to the Society upon receiving confirmation from the Society's surveyor.  4 When the results of the examination for documents	To delete the specification of the number of copies due to digitization Terminology alignment Terminology alignment	

#### Amended-Original Requirements Comparison Table

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)			
Amended	Original	Remarks	
the confirmation test specified in -1 to -3 are confirmed to be satisfactory, the Society reissues the certificate with contents duly revised. The manufacturer who received the new certificate is to return the existing certificate to the Society as soon as possible.  5 In the case specified in -4, the validity of the approval certificate is not changed in principle.	and the confirmation test specified in -1 to -3 are confirmed to be satisfactory, the Society reissues the <u>approval</u> certificate with contents duly revised. The manufacturer who received the new <u>approval</u> certificate is to return the existing <u>approval</u> certificate to the Society as soon as possible.  5 In the case specified in -4, the validity of the certificate is not changed in principle.	Terminology alignment	
8.7 Revocation of Approval	8.7 Revocation of Approval		
<ul> <li>8.7.1 Revocation of Approval <ol> <li>In cases where any of the following (1) to (5) is applicable, the Society may revoke approval based on the requirements in this chapter. In such cases, the Society is to notify the manufacturer of the revocation.</li> <li>Where the result of the confirmation tests were found unsatisfactory.</li> <li>Where the valid term of the approval certificate has expired.</li> <li>Where the confirmation test was not carried out without any unavoidable reason.</li> <li>Where withdrawal of the approval has been offered by the manufacturer.</li> <li>Where the Society judged the approved computer based system to be unsuitable in the light of the service records of the shipboard automation equipment.</li> <li>The manufacturer who received a notice of revocation of approval is to return the approval certificate of the relevant computer based system to the Society immediately.</li> </ol> </li> </ul>	<ol> <li>8.7.1 Revocation of Approval         <ol> <li>In cases where any of the following (1) to (5) is applicable, the Society may revoke approval based on the requirements in this chapter. In such cases, the Society is to notify the manufacturer of the revocation.</li> <li>Where the result of the confirmation tests were found unsatisfactory.</li> <li>Where the valid term of the certificate has expired.</li> </ol> </li> <li>Where the confirmation test was not carried out without any unavoidable reason.</li> <li>Where withdrawal of the approval has been offered by the manufacturer.</li> <li>Where the Society judged the approved computer based system to be unsuitable in the light of the service records of the shipboard automation equipment.</li> <li>The manufacturer who received a notice of revocation of approval is to return the certificate of the relevant computer based system to the Society immediately.</li> </ol>	Terminology alignment	

Amended	Original Original	Remarks
8.8 Markings	8.8 Markings	
8.8.1 Markings  Manufacturers of the type approved computer based systems are, in principle, to mark their products before shipment for identification of approved equipment; in addition, at least the following items to be marked at a suitable place:  ((1) to (5) are omitted)	8.8.1 Markings  Manufacturers of the approved computer based systems are, in principle, to mark their products before shipment for identification of approved equipment; in addition, at least the following items to be marked at a suitable place:  ((1) to (5) are omitted)	Terminology alignment
Chapter 9 <u>TYPE</u> APPROVAL FOR ACCUMULATOR BATTERY SYSTEMS	Chapter 9 APPROVAL <u>OF USE</u> FOR ACCUMULATOR BATTERY SYSTEMS	
9.2 Application Procedures	9.2 Application Procedures	
9.2.1 Application Procedures  1 Manufacturers (applicants) of accumulator battery systems intending to apply the requirements in this chapter are to submit an appropriate application form (Form 7-9) accompanied with the drawings and documents referred to in 1.1.3-2, Annex 2.11.1-2, Part H of the Rules for the Survey and Construction of Steel Ships to the Society.	9.2.1 Application Procedures  1 Manufacturers (applicants) of accumulator battery systems intending to apply the requirements in this chapter are to submit an appropriate application form (Form 7-9) accompanied with three copies each of the drawings and documents referred to in 1.1.3-2, Annex 2.11.1-2, Part H of the Rules for the Survey and Construction of Steel Ships	To delete the specification of the number of copies due to digitization
2 In addition to -1 above, the following are to be submitted.  ((1) to (4) are omitted)	to the Society.  2 In addition to -1 above, three copies of each of the following  ((1) to (4) are omitted)	To delete the specification of the number of copies due to digitization

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)			
Amended	Original	Remarks	
9.3 Tests	9.3 Tests		
9.3.4 Test Records  After completion of tests, manufacturers are to prepare test reports, have such reports confirmed by Society surveyors, and then submit the confirmed reports to the Society for approval.	9.3.4 Test Records  After completion of tests, manufacturers are to prepare test reports, have such reports confirmed by Society surveyors, and then submit three copies of the confirmed reports to the Society for approval.	To delete the specification of the number of copies due to digitization	
9.4 Type Approval as Automatic Devices and	9.4 Use of Approval as Automatic Devices and	Terminology alignment	
9.4.1 Type Approval as Automatic Devices and Equipment  Accumulator battery systems are to receive type approval based on Chapter 1. However, in tests according to 1.3.1, it is acceptable to use only those components (e.g. battery packs) of accumulator battery systems installed on board that have the minimum functions required for verification of tests.	9.4.1 <u>Use of Approval as Automatic Devices and Equipment</u> Accumulator battery systems are to receive <u>use of approval based on Chapter 1</u> . However, in tests according to 1.3.1, it is acceptable to use only those components (e.g. battery packs) of accumulator battery systems installed on board that have the minimum functions required for verification of tests	Terminology alignment	
9.5 Approval	9.5 Approval		
9.5.1 Certificates  When the results of the tests specified in 9.3.1 and	9.5.1 Certificates  When the results of the tests specified in 9.3.1 and	Change in description	
9.3.2 are confirmed to be appropriate and accumulator battery	<b>9.3.2</b> are confirmed to be appropriate and accumulator battery	8	
systems comply with 9.4, the Society is to approve the accumulator battery system (hereinafter referred to as	systems comply with 9.4, the Society is to approve the accumulator battery system (hereinafter referred to as		
"approved equipment") and issue the relevant approval	"approved equipment") and issue the relevant approval		
certificate which specifies the approval number, date of	certificate.		

	proval of Materials and Equipment for Marine Use)	
Amended	Original	Remarks
<ul><li>approval, type, and model.</li><li>9.5.2 Validity</li></ul>	9.5.2 Validity	
The certificates specified in 9.5.1 are valid <u>for</u> 5 years from their date of <u>approval</u> . However, when approval is renewed in accordance with 9.5.3, the new certificate is to be valid <u>for</u> 5 years from the <u>next day after the expiry date of the</u>	The certificates specified in 9.5.1 are valid <u>until a date</u> not exceeding 5 years from their date of <u>issue</u> . However, when approval is renewed in accordance with 9.5.3, the new certificate is to be valid <u>until a date not exceeding</u> 5 years from	Change in description
9.5.3 Renewal  Manufacturary applying for renewal of approval to	the date of expiry of the previously issued certificate.  9.5.3 Renewal  1. Manufacturers applying for renewal of approval to	Terminology alignment
1 Manufacturers applying for renewal of approval to submit the appropriate application form (Form 7-9) accompanied with copies of previously issued approval certificates to the Society review. Furthermore, changes in accumulator battery system specifications, if any, are to be described on the application forms.	1 Manufacturers applying for renewal of approval to submit the appropriate application form (Form 7-9) accompanied with copies of previously issued certificates to the Society review. Furthermore, changes in accumulator battery system specifications, if any, are to be described on the application forms.	
2 In cases where approved equipment specifications remain unchanged, the Society is to grant the renewal of approval and issue a new <u>approval</u> certificate. Manufacturers who receive new <u>approval</u> certificates are to return previously issued <u>approval</u> certificates to the Society as soon as possible.	2 In cases where approved equipment specifications remain unchanged, the Society is to grant the renewal of approval and issue a new certificate. Manufacturers who receive new certificates are to return previously issued certificates to the Society as soon as possible.	Terminology alignment
9.6 Changes in Particulars, etc. of Approved Equipment	9.6 Changes in Particulars, etc. of Approved Equipment	
9.6.1 Changes in Particulars, etc. of Approved Equipment	9.6.1 Changes in Particulars, etc. of Approved Equipment	
1 In cases where the particulars of approved equipment, or the materials, construction, dimensions, etc. of major components of such approved equipment are intended to be changed, manufacturers are to submit the appropriate	1 In cases where the particulars of approved equipment, or the materials, construction, dimensions, etc. of major components of such approved equipment are intended to be changed, manufacturers are to submit the appropriate	To delete the specification of the number of copies due to digitization

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)		
Amended	Original	Remarks
application form for changes (Form 7-9) accompanied with the following drawings and documents to the Society for approval.  (1) Explanatory notes for changes (2) Necessary drawings and documents (3) Copies of previously issued certificates  3 When confirmation tests are carried out, manufacturers are to prepare test reports, have such reports confirmed by Society surveyors, and then to submit the confirmed reports to the Society for approval.  4 When the results of examinations of submitted drawings and documents, and the confirmation tests specified in -1 to -3 above are determined to be satisfactory, the Society is to reissue approval certificates with their contents duly revised. Manufacturers who receive revised approval certificates are to return previously issued approval certificates to the Society as soon as possible.  5 In the case of -4 above, the validity of approval certificates does not change in principle.	application form for changes (Form 7-9) accompanied with the following drawings and documents to the Society for approval.  (1) Explanatory notes for changes (three copies) (2) Necessary drawings and documents (three copies each) (3) Copies of previously issued certificates 3 When confirmation tests are carried out, manufacturers are to prepare test reports, have such reports confirmed by Society surveyors, and then to submit three copies of the confirmed reports to the Society for approval.  4 When the results of examinations of submitted drawings and documents, and the confirmation tests specified in -1 to -3 above are determined to be satisfactory, the Society is to reissue certificates with their contents duly revised. Manufacturers who receive revised certificates are to return previously issued certificates to the Society as soon as possible.  5 In the case of -4 above, the validity of certificates does not change in principle.	To delete the specification of the number of copies due to digitization  Terminology alignment
9.7 Revocation of Approval	9.7 Revocation of Approval	
<ul> <li>9.7.1 Revocation of Approval</li> <li>1 In cases where any of the following (1) to (5) is applicable, the Society may revoke approval based on this chapter. In such cases, the Society is to notify manufacturers of such revocation.</li> <li>(1) In cases where the results of confirmation tests were found unsatisfactory.</li> <li>(2) In cases where the valid terms of approval certificates</li> </ul>	<ul> <li>9.7.1 Revocation of Approval</li> <li>1 In cases where any of the following (1) to (5) is applicable, the Society may revoke approval based on this chapter. In such cases, the Society is to notify manufacturers of such revocation.</li> <li>(1) In cases where the results of confirmation tests were found unsatisfactory.</li> <li>(2) In cases where the valid terms of certificates have</li> </ul>	Terminology alignment

	proval of Materials and Equipment for Marine Use)	
Amended	Original	Remarks
have expired.  (3) In cases where confirmation tests were not carried out without a valid reason.  (4) In cases where withdrawal of approval has been requested by manufacturers.  (5) In cases where the Society judges approved equipment to be unsuitable based on the equipment service records.	expired.  (3) In cases where confirmation tests were not carried out without a valid reason.  (4) In cases where withdrawal of approval has been requested by manufacturers.  (5) In cases where the Society judges approved equipment to be unsuitable based on the equipment service records.	
Chapter 10 <u>TYPE</u> APPROVAL OF SYSTEMS AND EQUIPMENT WITH IMPROVED CYBER RESILIENCE	Chapter 10 APPROVAL <u>OF USE</u> OF SYSTEMS AND EQUIPMENT WITH IMPROVED CYBER RESILIENCE	
10.1 General	10.1 General	
10.1.1 Scope  2 Computer-based systems subjected to Chapter 4, Part X of the Rules for the Survey and Construction of Steel Ships are to be subjected to the factory acceptance test specified in 10.3. However, for computer-based systems which have already received type approval from the Society, plans and documents which obtained at the time of the type approval may be acceptable.	10.1.1 Scope  2 Computer-based systems subjected to Chapter 4, Part X of the Rules for the Survey and Construction of Steel Ships are to be subjected to the factory acceptance test specified in 10.3. However, for computer-based systems which have already received approval of use from the Society, plans and documents which obtained at the time of the approval of use may be acceptable.	Terminology alignment
10.2 Application	10.2 Application	
10.2.1 Application Forms  The manufacturer who makes application for type	10.2.1 Application Forms  The manufacturer who makes <u>an</u> application for	Terminology alignment

## Amended-Original Requirements Comparison Table

(Re	eview of Guidance	e for the App	roval of Mate	rials and Equi	pment for Marine Use)	į
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approval of the computer based system is to submit the appropriate application form (*Form 7-10*) filled in with necessary data and information to the Society.

Amended

#### **10.2.2** Documents to be Submitted

1 The following documents are to be submitted to the Society with the application form specified in 10.2.1.

((1) and (2) are omitted.)

### **10.3 Factory Acceptance Test**

The objective of factory acceptance test is to demonstrate by testing and/or analytic evaluation that the computer-based system complies with applicable requirements in Chapter 4, Part X of the Rules for the Survey and Construction of Steel Ships. The survey and factory acceptance test is to be carried out at the supplier's premises or at other works having the adequate apparatus for testing and inspection. After completed plan approval and survey/factory acceptance test, the Society will issue a System approval certificate that is to accompany the computer-based system upon delivery to the system integrator.

## 10.4 Approval

### 10.4.1 Certificate

When the results of the examinations of submitted drawings and data and the tests specified in 10.2 and 10.3 are confirmed appropriate, the Society approves the computer based system (hereinafter referred to as "approved computer"

approval <u>of use</u> of the computer based system is to submit the appropriate application form (*Form 7-10*) filled in with necessary data and information to the Society.

Original

#### 10.2.2 Documents to be Submitted

1 Three copies each of the following documents are to be submitted to the Society with the application form specified in 10.2.1.

((1) and (2) are omitted.)

## **10.3 Factory Acceptance Test**

The objective of factory acceptance test is to demonstrate by testing and/or analytic evaluation that the computer-based system complies with applicable requirements in Chapter 4, Part X of the Rules for the Survey and Construction of Steel Ships. The survey and factory acceptance test is to be carried out at the supplier's premises or at other works having the adequate apparatus for testing and inspection. After completed plan approval and survey/factory acceptance test, the Society will issue a System certificate that is to accompany the computer-based system upon delivery to the system integrator.

### 10.4 Approval

### 10.4.1 Certificate

When the results of the examinations of submitted drawings and data and the tests specified in 10.2 and 10.3 are confirmed appropriate, the Society approves the computer based system (hereinafter referred to as "approved computer")

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Remarks

To delete the specification of the number of copies due to digitization

Terminology alignment

Change in description

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)				
Amended	Original	Remarks		
based system") and issues the relevant approval certificate specifying the approval number, date and conditions, etc.	based system") and issues the relevant approval certificate.			
The <u>approval</u> certificate specified in 10.4.1 is to be valid until a date not exceeding 5 <i>years</i> from its date of issue. However, when the approval is renewed in accordance with 10.4.3, the new <u>approval</u> certificate is to be valid until a date not exceeding 5 <i>years</i> from the date of expiry of the existing <u>approval</u> certificate.	The certificate specified in 10.4.1 is to be valid until a date not exceeding 5 <i>years</i> from its date of issue. However, when the approval is renewed in accordance with 10.4.3, the new certificate is to be valid until a date not exceeding 5 <i>years</i> from the date of expiry of the existing certificate.	Change in description		
<ol> <li>10.4.3 Renewal of Approval</li> <li>1 In the case of application for renewal of approval, the manufacturer is to submit to the Society the appropriate application form (Form 7-10) accompanied with a copy of the approval certificate previously issued. The changes in particulars of the approved computer based system, quality system of manufacturer, etc., if any, are to be described in the application.</li> <li>2 When the particulars of the approved computer based system, quality system of manufacturer, etc. remain unchanged, the Society approves the renewal of approval and issues a new approval certificate. The manufacturer who received the new approval certificate is to return the existing approval certificate to the Society as soon as possible.</li> </ol>	1 In the case of application for renewal of approval, the manufacturer is to submit to the Society the appropriate application form (Form 7-10) accompanied with a copy of the certificate previously issued. The changes in particulars of the approved computer based system, quality system of manufacturer, etc., if any, are to be described in the application.  2 When the particulars of the approved computer based system, quality system of manufacturer, etc. remain unchanged, the Society approves the renewal of approval and issues a new certificate. The manufacturer who received the new certificate is to return the existing certificate to the Society as soon as possible.	Change in description		

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)			
Amended	Original	Remarks	
10.5 Changes in Particulars of Approved Computer Based System, Quality System of Manufacturer, etc.  10.5.1 Changes in Particulars of Approved Computer Based System, Quality System of Manufacturer,	10.5 Changes in Particulars of Approved Computer Based System, Quality System of Manufacturer, etc.  10.5.1 Changes in Particulars of Approved Computer Based System, Quality System of Manufacturer,		
etc.  1 In cases where the particulars of the approved computer based system, quality system of manufacturer, etc. are intended to be changed, the manufacturer is to submit to the Society the appropriate application form for changes (Form 7-10) accompanied with the following documents.  (1) explanatory notes for changes, (2) necessary drawings and data, and (3) copy of the approval certificate previously issued.  3 When confirmation tests are carried out, the manufacturer is to produce a report of the test and is to submit it to the Society upon receiving confirmation from the Society's surveyor.	etc.  1 In cases where the particulars of the approved computer based system, quality system of manufacturer, etc. are intended to be changed, the manufacturer is to submit to the Society the appropriate application form for changes (Form 7-10) accompanied with the following documents.  (1) explanatory notes for changes (three copies),  (2) necessary drawings and data (three copies each), and  (3) a copy of the certificate previously issued.  3 When confirmation tests are carried out, the manufacturer is to produce a report of the test and is to submit three copies to the Society upon receiving confirmation from the Society's surveyor.	To delete the specification of the number of copies due to digitization  To delete the specification of the number of copies due to digitization	
4 When the results of the examination for documents and the confirmation test specified in -1 to -3 are confirmed to be satisfactory, the Society reissues the certificate with contents duly revised. The manufacturer who received the new approval certificate is to return the existing certificate to the Society as soon as possible.  5 In the case specified in -4, the validity of the approval certificate is not changed in principle.	4 When the results of the examination for documents and the confirmation test specified in -1 to -3 are confirmed to be satisfactory, the Society reissues the certificate with contents duly revised. The manufacturer who received the new certificate is to return the existing certificate to the Society as soon as possible.  5 In the case specified in -4, the validity of the certificate is not changed in principle.	To delete the specification of the number of copies due to digitization  Terminology alignment	

	proval of Materials and Equipment for Marine Use)	D1
Amended	Original	Remarks
<ul> <li>10.6.1 Revocation of Approval</li> <li>1 In cases where any of the following (1) to (5) is applicable, the Society may revoke approval based on the requirements in this chapter. In such cases, the Society is to notify the manufacturer of the revocation.</li> <li>(1) Where the result of the confirmation tests were found unsatisfactory.</li> <li>(2) Where the valid term of the approval certificate has expired.</li> <li>(3) Where the confirmation test was not carried out without any unavoidable reason.</li> <li>(4) Where withdrawal of the approval has been offered by the manufacturer.</li> <li>(5) Where the Society judged the approved computer based system to be unsuitable in the light of the service records of the shipboard automation equipment.</li> </ul>	<ul> <li>10.6.1 Revocation of Approval</li> <li>1 In cases where any of the following (1) to (5) is applicable, the Society may revoke approval based on the requirements in this chapter. In such cases, the Society is to notify the manufacturer of the revocation.</li> <li>(1) Where the result of the confirmation tests were found unsatisfactory.</li> <li>(2) Where the valid term of the certificate has expired.</li> <li>(3) Where the confirmation test was not carried out without any unavoidable reason.</li> <li>(4) Where withdrawal of the approval has been offered by the manufacturer.</li> <li>(5) Where the Society judged the approved computer based system to be unsuitable in the light of the service records of the shipboard automation equipment.</li> </ul>	Terminology alignment
2 The manufacturer who received a notice of revocation of approval is to return the <u>approval</u> certificate of the relevant computer based system to the Society immediately.	2 The manufacturer who received a notice of revocation of approval is to return the certificate of the relevant computer based system to the Society immediately.	Terminology alignment
10.7 Markings	10.7 Markings	
10.7.1 Markings  Manufacturers of the <u>type</u> approved computer based systems are, in principle, to mark their products before shipment for identification of approved equipment; in addition, at least the following items to be marked at a suitable	10.7.1 Markings  Manufacturers of the approved computer based systems are, in principle, to mark their products before shipment for identification of approved equipment; in addition, at least the following items to be marked at a suitable	Terminology alignment

Amended	Original	Remarks
place:  (1) Manufacturer name or equivalent (2) Type No. or symbol (3) Serial No. and date of manufacture (4) Particulars or ratings (5) Approval number	place: (1) Manufacturer name or equivalent (2) Type No. or symbol (3) Serial No. and date of manufacture (4) Particulars or ratings (5) Approval number	Terminology alignment
Part 8 TYPE APPROVAL OF ELECTRICAL	Part 8 TYPE TESTS OF ELECTRICAL	Terminology angilinent
EQUIPMENT AND CABLES  Chapter 1 GENERAL	EQUIPMENT AND CABLES  Chapter 1 GENERAL	
1.1 General	1.1 General	
1.1.1 Scope  The requirements in this part apply to tests and inspection for the type approval of electrical equipment and cables specified in 1.1.3 in accordance with the requirements of 1.2.1-4, Part H of the Rules for the Survey and Construction of Steel Ships (hereinafter referred to as "the Rules").	1.1.1 Scope  The requirements in this part apply to tests and inspection for the type test of electrical equipment and cables specified in 1.1.3 in accordance with the requirements of 1.2.1-4, Part H of the Rules for the Survey and Construction of Steel Ships (hereinafter referred to as "the Rules").	Terminology alignment
1.1.2 <b>Definitions</b> The type <u>approved</u> products are those certified that they have passed through the type <u>approval</u> tests specified in <b>Chapter 2</b> to 7.	1.1.2 <b>Definitions</b> The type <u>tested</u> products are those certified that they have passed through the type tests specified in <b>Chapter 2</b> to 7.	Terminology alignment

	(Review of Guidance for the Approval of Materials and Equipment for Marine Use)				
	Amended		Original	Remarks	
1.1.3	3 Articles	1.1.3	3 Articles		
	Electrical equipment cables subject to the type		Electrical equipment cables subject to the type <u>test</u> are	Terminology alignment	
approv	al are to be as follows.	to be as	s follows.		
(1)	Fuses	(1)	Fuses		
	Cartridge type fuses (renewable and non-renewable)		Cartridge type fuses (renewable and non-renewable)		
	and plug type fuses.		and plug type fuses.		
(2)	Circuit breakers	(2)	Circuit breakers		
	Low-voltage breakers, air circuit breakers and molded		Low-voltage breakers, air circuit breakers and molded		
	case circuit breakers (including molded case circuit		case circuit breakers (including molded case circuit		
	breakers with fuses and molded case circuit breakers		breakers with fuses and molded case circuit breakers		
	used for the protection of induction motors		used for the protection of induction motors		
	simultaneously. Hereinafter, these are referred to as		simultaneously. Hereinafter, these are referred to as		
	"molded case circuit breakers" unless otherwise		"molded case circuit breakers" unless otherwise		
	specified.).		specified.).		
(3)	Electromagnetic contactors	(3)	Electromagnetic contactors		
	Electromagnetic contactors used for motors and other		Electromagnetic contactors used for motors and other		
	loads.		loads.		
(4)	Explosion protected electrical equipment	(4)	Explosion protected electrical equipment		
	Electrical equipment specified in 2.16.2, Part H of		Electrical equipment specified in 2.16.2, Part H of		
	the Rules for the Survey and Construction of Steel		the Rules for the Survey and Construction of Steel		
	Ships used in the spaces on board flammable or		Ships used in the spaces on board flammable or		
	explosive gas or vapour (hereinafter referred to as		explosive gas or vapour (hereinafter referred to as		
	explosive gas) exists or may exist in the atmosphere.		explosive gas) exists or may exist in the atmosphere.		
(5)	Cables	(5)	Cables		
	(a) Cables used power circuits, lighting circuits,		(a) Cables used power circuits, lighting circuits,		
	supply and distribution circuits of interior-		supply and distribution circuits of interior-		
	communication, control circuits, etc.		communication, control circuits, etc.		
	(b) Flexible cords used for power supply and		(b) Flexible cords used for power supply and		
	distribution circuits.		distribution circuits.		
	(c) 150 V multicore PVC insulated cables for		(c) 150 V multicore PVC insulated cables for		

(Review of Guidance for the Approval of Materials and Equipment for Marine Use)				
Amended	Original	Remarks		
electronic equipment.  (6) Semiconductor converters for power Semiconductor converters for power for which type approval are required by relevant requirements	electronic equipment.  (6) Semiconductor converters for power Semiconductor converters for power for which type tests are required by relevant requirements			
1.2 Approval Application	1.2 Application Procedures	Change in description		
1.2.1 <u>Approval Application Form</u>	The application procedures are to be as follows:	Change in description  Terminology alignment		
<ul> <li>The manufacturer who intends to obtain the type approval by the Society is to submit the appropriate application form (Form 8-1) stating names, types, ratings, specifications, service applications, applicable standards, etc. of the products concerned together with drawings and documents necessary for examinations and test plans.</li> <li>In case where items of the approval tests are intended to be partially of fully omitted appropriate certificate or technical records concerned are to be submitted to the Society as well. In addition, the application is, in principle, to be prepared for each type.</li> </ul>	(1) The manufacturer who intends to obtain the type tests by the Society is to submit the appropriate application form (Form 8-1) stating names, types, ratings, specifications, service applications, applicable standards, etc. of the products concerned together with three copies each of drawings and documents necessary for examinations and three copies of test plans. In case where items of the type tests are intended to be partially of fully omitted appropriate certificate or technical records concerned are to be submitted to the Society as well. In addition, the application is, in principle, to be prepared for each	To delete the specification of the number of copies due to digitization		
1.2.2 Documents  1 The drawings and documents necessary for examinations listed in the following (1) to (7) are to be submitted together with the application form specified in 1.2.1.  (1) Specifications (2) Drawings and documents necessary for examinations (3) Approval test plan (the place of test and scheduled date of test are to be entered)	type. (Newly added) (Newly added)	Relocation of the documents specified in 1.2.1-1 Addition of requirements related to quality control		

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Amended	Original	Remarks
<ul> <li>(4) Data on the summary of test facilities</li> <li>(5) Data on outline of manufacturing plant</li> <li>(6) Information on the manufacturing and quality control standards</li> <li>(7) Records of manufacture and delivery (if any)</li> <li>2 As for explosion protected electrical equipment, drawings and documents required to be submitted are as follows. Items (4), (5) and (6) are, however, required for intrinsically safe type electrical equipment only.</li> <li>(1) Drawings of detailed sectional assembly and arrangement of components</li> <li>(2) List of electrical parts and materials</li> <li>(3) Functional descriptions of explosion-protected constructions</li> <li>(4) Electric circuit diagrams</li> <li>(5) Sectional assembly drawings of transformers with earthed screens and component parts (relays, photo-couplers, etc.) used for maintenance of intrinsic safety</li> <li>(6) Construction drawings and circuit diagrams of safety barriers.</li> </ul>	<ul> <li>(2) As for explosion protected electrical equipment, drawings and documents required to be submitted are as follows. Items (d), (e) and (f) are, however, required for intrinsically safe type electrical equipment only.</li> <li>(a) Drawings of detailed sectional assembly and arrangement of components</li> <li>(b) List of electrical parts and materials</li> <li>(c) Functional descriptions of explosion-protected constructions</li> <li>(d) Electric circuit diagrams</li> <li>(e) Sectional assembly drawings of transformers with earthed screens and component parts (relays, photo-couplers, etc.) used for maintenance of intrinsic safety</li> <li>(f) Construction drawings and circuit diagrams of safety barriers.</li> </ul>	
1.3 Preliminary Examination	(Newly added)	
1.3.1 Test Plan Approval  The Society examines the test plan for approval submitted in accordance with 1.2.2(3), and where deemed appropriate, the plan is approved and returned to the manufacturer. In cases where deemed appropriate after reviewing the documents submitted according to 1.2.2, a part	207/200	

	proval of Materials and Equipment for Marine Use)	
Amended	Original	Remarks
of the approval test may be exempted.  1.3.2 Confirmation of Manufacturing and Quality  Control Procedures  The Society may carry out surveys of the actual situation of manufacturing plants on the basis of the data submitted according to 1.2.2-1(4) to (7) as deemed necessary. In such cases, manufacturers are to provide the necessary information related to this survey.		Addition of requirements related to quality control
1.4 Approval Tests  1.4.1 Test Place	1.3 Type Tests  1.3.1 Test Place	
(Omitted)  1.4.2 Approval Tests  Detailed requirements of tests are to be in accordance with Chapters 2 to 7 according to the types of equipment. In case where the Society deems necessary, however, additional tests may be requested.  1.5 Approval Certificate	(Omitted)  1.3.2 Type Tests  Detailed requirements of type tests are to be in accordance with Chapters 2 to 7 according to the types of equipment. In case where the Society deems necessary, however, additional tests may be requested.  1.4 Certificate	Terminology alignment
<ul> <li>1.5.1 Submission of Test Records The manufacturer (applicant) is to submit the test records to the Society (Branch Office) immediately after completion of tests.</li> <li>1.5.2 Issuance of <u>Approval</u> Certificate</li> </ul>	1.4.1 Submission of Test Records  The manufacturer (applicant) is to submit three copies each of the test records to the Society (Branch Office) immediately after completion of tests.  1.4.2 Issuance of Certificate	To delete the specification of the number of copies due to digitization
The Society issues certificates which include the	The Society issues certificates for the type tested	Terminology alignment

	provar of Materials and Equipment for Marine Osej	
Amended	Original	Remarks
approval number, approval date, approval items etc. for the tested products, where the results of the tests are deemed satisfactory. In this case the test records submitted in accordance with 1.5.1 is returned to the applicant (through the related local office) after putting the Society's stamp.	products, where the results of the type tests are deemed satisfactory. In this case, <u>one copy of</u> the test records submitted in accordance with 1.4.1 is returned to the applicant (through the related local office) after putting the Society's stamp.	
1.5.3 Term of Validity  The term of validity is five <i>years</i> from the date of approval. In cases when the renewal of approval is carried out in accordance with 1.4.4, the valid term will be 5 <i>years</i> from the next day after the expiry date of the previous validity.	1.4.3 Term of Validity  The term of validity is five years from the date of approval.	Change in description
1.5.4 Renewal of <u>Approval</u> 1 Where the renewal of a certificate is intended for each approved product, the manufacturer is to undergo the periodical investigation (see 1.6) after submitting the appropriate application form (Form 8-1) to the Society (Branch Office).	1.4.4 Renewal of Validity  1 Where the validity of the certificate is intended to be renewed, the manufacturer is to undergo the periodical investigation (see 1.5) after submitting the appropriate application form (Form 8-1) to the Society (Branch Office).	Change in description
2 Where the periodical investigation is postponed due to unavoidable reasons, the manufacturer is to submit the appropriate application form (Form 8-1P) to the Society and is to take the steps required by the Society.	2 Where the periodical investigation is postponed due to unavoidable reasons, the manufacturer is to submit the appropriate application form (Form 8-1P) to the Society and is to take the steps required by the Society.	To delete the specification of the number of copies due to digitization
3 Where the periodical investigation has been passed, the Society will re-issue the new <u>approval</u> certificate. Manufacturers are to return the old <u>approval certificate</u> to the Society as soon as possible after receiving the new <u>approval</u> certificate and the term of validity of the old one expires.	3 Where the periodical investigation has been passed, the Society will re-issue the new certificate, the term of validity of which is five years from the date of expiration for the existing certificate. Manufacturers are to return the old "Certificate of Approval" to the Society as soon as possible after receiving the new certificate and the term of validity of	Change in description

the old one expires.

When the validity of the certificate is not intended to

be renewed, the manufacturer is to notify the Society (Branch

Office) in writing and immediately return the certificates of

Change in description

When the validity of the approval certificate is not

intended to be renewed, the manufacturer is to notify the

Society (Branch Office) in writing and immediately return the

Amended	Original	Remarks
approval certificates of the products concerned.	the products concerned.	
1.6 Periodical Investigation	1.5 Periodical Investigation	
1.6.1 Place of Investigation (Omitted)	1.5.1 Place of Investigation (Omitted)	
1.6.2 Tests  The periodical investigation is to be in accordance with the requirements specified in 1.3 and 1.4. The following test items, however, may be omitted.  ((1) to (5) are omitted)	1.5.2 Tests  Test items and the number of test samples for the periodical investigation are to be in accordance with the requirements specified in 1.3. The following test items, however, may be omitted.  ((1) to (5) are omitted)	Change in description
1.7 Change of Materials and Constructions, etc.	1.6 Change of Materials and Constructions, etc.	Terminology alignment
1.7.1 Application for Change  Where the particulars, materials of essential parts, construction, dimensions, etc. of the type approved products are intended to change, the manufacturer is to submit the appropriate application form for the change (Form 8-1) and explanatory notes of the change (writing in contrasted form of new and old ones as far as possible) and necessary drawings to the Society. Verification tests may be carried out where deemed necessary in connection with the changes.	1.6.1 Application for Change  Where the particulars, materials of essential parts, construction, dimensions, etc. of the type tested products are intended to change, the manufacturer is to submit the appropriate application form for the change (Form 8-1) and three copies each of explanatory notes of the change (writing in contrasted form of new and old ones as far as possible) and necessary drawings to the Society. Verification tests may be carried out where deemed necessary in connection with the changes.	Terminology alignment To delete the specification of the number of copies due to digitization

Amended	Original	Remarks
1.8 Verification Test  1.8.1 Execution of Test  1 In case of applying to any of the followings, the verification tests are to be carried out. The tests are, in principle, to be carried out at the manufacturer's works.	1.7.1 Execution of Test  1 In case of applying to any of the followings, the verification tests are to be carried out. The tests are, in principle, to be carried out at the manufacturer's works.	
<ol> <li>Where tests are carried out in accordance with 1.7.1.</li> <li>Where doubts occur in the construction, performance, etc. of the type approved products.</li> <li>Where deemed necessary by the Society.</li> <li>(Omitted)</li> <li>Submission of Approval Certificate and Test Record</li> </ol>	<ol> <li>Where tests are carried out in accordance with 1.6.1.</li> <li>Where doubts occur in the construction, performance, etc. of the type tested products.</li> <li>Where deemed necessary by the Society.</li> <li>(Omitted)</li> <li>Submission of Certificate and Test Record</li> </ol>	Terminology alignment
The manufacturer is to submit a copy of the existing approval certificates and the test records to the Society (Branch Office) immediately after completion of the verification test.	The manufacturer is to submit a copy of the existing certificates and three copies each of the test records to the Society (Branch Office) immediately after completion of the verification test.	Terminology alignment
1.8.3 Renewal of Approval Certificate  Where verification test records are considered appropriate the Society will issue the new approval certificates. In this case, the existing approval certificate is to be returned to the Society as soon as possible after receiving the new approval certificate.	1.7.3 Renewal of Certificate  Where verification test records are considered appropriate the Society will issue the new certificates. In this case, the existing certificate is to be returned to the Society as soon as possible after receiving the new certificate.	Terminology alignment

Amended	Original	Remarks
1.9 Revocation of Approval Certificate	1.8 Revocation of Certificate	Terminology alignment
1.9.1 Notice of Revocation  Where the results of the periodical investigation or verification tests are found unsatisfactory or where the application for the periodical investigation is not made, the Society will notify the manufacturer of the revocation of the approval through the Branch Office.	1.8.1 Notice of Revocation  Where the results of the periodical investigation or verification tests are found unsatisfactory or where the application for the periodical investigation is not made, the Society will notify the manufacturer of the revocation of the approval through the Branch Office.	Terminology alignment
1.9.2 Return of <u>Approval</u> Certificate  The manufacturer who received the revocation specified in 1.9.1 is to immediately return the <u>approval</u> certificates concerned to the Society.	1.8.2 Return of Certificate  The manufacturer who received the revocation specified in 1.8.1 is to immediately return the certificates concerned to the Society.	Terminology alignment
1.10 Treatment of Product after Success in Approval Test	1.9 Treatment of Product after Success in <u>Type</u> Test	Terminology alignment
1.10.1 Tests and Inspection of Individual Product (omitted)	1.2.1 Tests and Inspection of Individual Product (Omitted)	
1. <u>11</u> Markings	1. <u>10</u> Markings	
1.11.1 Markings  The marking of the type approved products are to be	1.10.1 Markings  The marking of the type tested products are to be in	Terminology alignment
The marking of the type <u>approved</u> products are to be in accordance with the Rules and Application Standard	The marking of the type <u>tested</u> products are to be in accordance with the Rules and Application Standard	Terminology alignment
(including the manufacturer's name or equivalent, type No. or	(including the manufacturer's name or equivalent, type No. or	
code, manufacturing No., year, main particulars and ratings)	code, manufacturing No., year, main particulars and ratings)	
and in addition, the manufacturer is to mark appropriately to indicate the type approved product.	and in addition, the manufacturer is to mark appropriately to indicate the type tested product.	

Amended	Original	Remarks
Chapter 2 FUSES	Chapter 2 FUSES	
2.1 General	2.1 General	
2.1.1 Scope 1 The requirements in this chapter apply to the approval tests of fuses in accordance with the requirements in Chapter 1.	2.1.1 Scope 1 The requirements in this chapter apply to the type tests of fuses in accordance with the requirements in Chapter 1.	
2.2 Approval Tests	2.2 <u>Type</u> Tests	Terminology alignment
2.2.1 <u>Approval</u> Tests  Detailed requirements of the <u>approval</u> test are to be in accordance with IEC 60269 (Low-voltage fuses) or a standard which is deemed appropriate by the Society, amended when necessary for ambient temperature.	2.2.1 <u>Type</u> Tests  Detailed requirements of the <u>type</u> test are to be in accordance with IEC 60269 (Low-voltage fuses) or a standard which is deemed appropriate by the Society, amended when necessary for ambient temperature.	Terminology alignment
Chapter 3 CIRCUIT-BREAKERS	Chapter 3 CIRCUIT-BREAKERS	
3.1 General	3.1 General	
3.1.1 Scope 1 The requirements in this chapter apply to the approval tests of circuit-breakers in accordance with the requirements in Chapter 1.	3.1.1 Scope  1 The requirements in this chapter apply to the type tests of circuit-breakers in accordance with the requirements in Chapter 1.	

Amended	Original Original	Remarks
3.2 Approval Tests	3.2 <u>Type</u> Tests	Terminology alignment
3.2.1 Approval Tests (Omitted)	3.2.1 Type Tests (Omitted)	Terminology alignment
Chapter 4 ELECTROMAGNETIC CONTACTORS	Chapter 4 ELECTROMAGNETIC CONTACTORS	
4.1 General	4.1 General	
4.1.1 Scope 1 The requirements in this chapter apply to the approval tests of electromagnetic contactors in accordance with the requirements in Chapter 1.	4.1.1 Scope 1 The requirements in this chapter apply to the type tests of electromagnetic contactors in accordance with the requirements in Chapter 1.	Terminology alignment
4.2 Approval Tests	4.2 <u>Type</u> Tests	Terminology alignment
4.2.1 Approval Tests (Omitted)	4.2.1 Type Tests (Omitted)	

Amended	Original	Remarks
Chapter 5 EXPLOSION-PROTECTED	Chapter 5 EXPLOSION-PROTECTED	
ELECTRICAL EQUIPMENT	ELECTRICAL EQUIPMENT	
5.1 General	5.1 General	
5.1.1 Scope 1 The requirements in this chapter apply to the approval tests of explosion-protected electrical equipment in accordance with the requirements in Chapter 1.	5.1.1 Scope 1 The requirements in this chapter apply to the type tests of explosion-protected electrical equipment in accordance with the requirements in Chapter 1.	Terminology alignment
5.2 Approval Tests	5.2 <u>Type</u> Tests	Terminology alignment
5.2.1 Approval Tests (Omitted)	5.2.1 Type Tests (Omitted)	Terminology alignment
Chapter 6 CABLES	Chapter 6 CABLES	
6.1 General	6.1 General	
6.1.1 Scope  1 The requirements in this chapter apply to the approval tests of cables in accordance with the requirements in Chapter 1.	6.1.1 Scope 1 The requirements in this chapter apply to the type tests of cables in accordance with the requirements in Chapter 1.	Terminology alignment

Amended	Original Original	Remarks
6.2 Approval Tests	6.2 <u>Type</u> Tests	Terminology alignment
6.2.1 Approval Tests (Omitted)	6.2.1 Type Tests (Omitted)	Terminology alignment
Chapter 7 SEMICONDUCTOR CONVERTERS FOR POWER	Chapter 7 SEMICONDUCTOR CONVERTERS FOR POWER	
7.1 General	7.1 General	
7.1.1 Scope 1 The requirements in this chapter apply to the approval tests of semiconductor converters for power in accordance with the requirements in Chapter 1.	7.1.1 Scope 1 The requirements in this chapter apply to the type tests of semiconductor converters for power in accordance with the requirements in Chapter 1.	Terminology alignment
7.2 Approval Tests	7.2 <u>Type</u> Tests	
7.2.1 Approval Tests (Omitted)	7.2.1 Type Tests (Omitted)	Terminology alignment

## Amended-Original Requirements Comparison Table

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١,	1.0	1011	01	3 414	alle	101	ULIC	4 <b>-</b> P		ui.	O I 1	···	Olimi	D WIII	<b>ч</b> –	9 44	PIIIOI	10 10		1411110	000	,

Amended			Original	Remarks
Annex 1.3 Schemes for A	pproval of Anne	ex 1.3	Manufacturing Approval Schemes for	Terminology alignment
Manufacturing Process for High	Manganese	Hig	th Manganese Austenitic Steels	
Austenitic Steels				
1.1 General	1.1	Genera	al	
1.1 General	1,1	Genera		
1.1.1 Scope	1.1	.1 Sco	pe	
1 In accordance 1.1.2, Part 1, this ar			rdance 1.1.2, Part 1, this annex applies to tests	Terminology alignment
and inspections for the approval of manuf	acturing process for and i	nspection	s for the manufacturing process approval for	
high manganese austenitic steels.	high 1	manganes	se austenitic steels.	
2 Scheme of the approval of the ma	nufacturing orocess 2	The ma	anufacturing approval scheme specified in this	Terminology alignment
specified in this annex is for verifying man		$\underline{\mathbf{x}}$ is for	verifying manufacturer capability to provide	
to provide satisfactory products stably und	ler effective process satisf	actory p	roducts stably under effective process and	
and production controls.	produ	iction cor	itrols.	

	Amended				Original	Remarks
Annex 4.1 Tests on Simulated Ballast Tank		ulated Ballast Tank	Anr	nex 4.1	Tests on Simulated Ballast Tank	
	Condition	ı			Condition	
1.4	Test Report		1 /	Test Repor	• <del>•</del>	
1.7	rest Report		1.7	rest repu		
	The test report is to include t	he following information:		The test rep	port is to include the following information:	
(1)	Name of the manufacturer;		(1)	Name of the	ne manufacturer;	
(2)	Date of tests;		(2)	Date of tes	ets;	
(3)	Product name/identification	of both paint and primer	(3)	Product na	me/identification of both paint and primer	
	(if 4.1.1-2(2), Part <u>5</u> , include	ling kind of shop primer);			(2), Part 4, including kind of shop primer);	
(4)	Batch number;		(4)	Batch num		
(5)	Data of surface preparation	on steel panels, including	(5)		rface preparation on steel panels, including	
	the following:			the follow		
	(a) Surface treatment;				ee treatment;	
	(b) Water soluble salts limit	t;			soluble salts limit;	
	(c) Dust; and			(c) Dust;		
4 -5	(d) Abrasive inclusions;			· /	ive inclusions;	
(6)	Application data of coating	ig system, including the	(6)	* *	n data of coating system, including the	
	following:			following:		
	(a) Shop primed;			(a) Shop	•	
	(b) Number of coats;			` /	er of coats;	
	(c) Recoat interval*;	*		· /	t interval*;	
	(d) Dry film thickness (DF	1) prior to testing;			lm thickness (DFT) prior to testing*;	
	(e) Thinner*;			(e) Thinn		
	(f) Humidity*;			(f) Humi		
	(g) Air temperature*; and				mperature*; and	
	(h) Steel temperature;			(Remark)	emperature;	
	(Remark) * Both of actual specimen	data and manufacturar's		` '	actual specimen data and manufacturer's	
	requirement/recommendation				nt/recommendation.	
(7)	Test results according to 1.2		(7)	1	s according to 1.2; and	
	103t 103tills according to 1.2	, and		09/200	s according to 1.2, and	

## Amended-Original Requirements Comparison Table

(	(Review of	f Guidance	for the Approx	val of Materials a	nd Equipmen	t for Marine Use)
	(					

	Amended	Original	Remarks				
(8)	Judgment according to 1.3.	(8) Judgment according to 1.3.					
	EFFECTIVE DATE AND APPLICATION						
1.	1. The effective date of the amendments is 1 July 2026.						
2.	2. Notwithstanding the amendments, the current requirements apply to Materials and Equipment for Marine Use for which						

