CCS Rule Change Notice For:

RULES FOR CLASSIFICATION OF SEA-GOING STEEL SHIPS

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CHINA CLASSIFICATION SOCIETY

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PART ONE

Brief Introduction

1、Make an explanation for the note of the plans or documents.
2、New class notation “Cyber Security” and “CBM” are added.
3、Requirement for ship construction files is revised.
4、Editorial revision.

CONTENTS

CHAPTER 2 SCOPE AND CONDITIONS OF CLASSIFICATION

Section 5 SUBMISSION AND EXAMINATION OF PLANS

2.5.2 Examination of plans and documents

2.5.2.6 The term "Not Subject to approval" or "Used for information" means that the plans or documents have not been examined and only used as supporting information to the approval of other plans and documents.

Appendix 1 LIST OF CLASS NOTATIONS FOR SEA-GOING SHIPS

Special Survey Notations **Table H**

Class notation	Description		Technical requirements to be complied with
PMS	Planned maintenance scheme (PMS) for machinery	This notation may be assigned to ships for which CCS-approved PMS is adopted as an alternative to special or continuous (if adopted) survey of machinery and electrical installations	Appendix 16 "Guidelines for Survey of Planned Maintenance Scheme (PMS) for Machinery" of Ch. 5 of this PART①

Note: For newbuildings having PMS notation are to be subject to surveys as specified in appendix 16 of ch.5, PART 1 of the rules.

Environmental Protection Notations **Table I**

Class notation	Description		Technical requirements
Clean	Clean	This notation may be assigned to ships complying with relevant requirements for pollution-preventing structures, equipment and operational procedures in CCS rules, in addition to statutory requirements for pollution prevention	Sec.2, Ch. 8, Pt. 8 of the Rules
FTP (+)	Fuel tank protection	This notation may be assigned to ships with all fuel tanks provided with double-hull protection	Sec. 3, Ch. 8, Pt. 8 of the Rules
FTP	Fuel oil tank protection	This notation may be assigned to ships with double-hull protection or equivalent protective measures	
GWC	Gray water control	This notation may be assigned to ships having control of drainage from laundry, bathroom, galley, accommodation and fitted with a grey water holding tank of required capacity, high level alarm and a sewage disposal system with required processing capacity	Sec. 3, Ch. 8, Pt. 8 of the Rules
RSC	Refrigeration system control	This notation may be assigned to ships, of which all refrigerants used are to have an Ozone Depleting Potential (ODP) rating of zero and a Global Warming Potential (GWP) of less than 2,000	Sec. 3, Ch. 8, Pt. 8 of the Rules
SEC(I)	SO_x emission control	Sulphur content of all fuel oils used on board is not to exceed 1.0% (m/m) or equivalent means are used	Sec. 3, Ch. 8, Pt. 8 of the Rules
SEC(II)		Sulphur content of all fuel oils used on board is not to exceed 0.5% (m/m) or equivalent means are used	
SEC(III)		Sulphur content of all fuel oils used on board is not to exceed 0.1% (m/m) or equivalent means are used	
AFS	Anti-fouling system	This notation may be assigned to ships, of which anti-fouling system is not to contain any biocides	Sec. 3, Ch. 8, Pt. 8 of the Rules
BWMP	Ballast water management plan	For ships implementing approved ballast water management plan on board	Guidelines for Development of Ship's Ballast Water Management Plan
COMF (NOISE N)	Comfort (noise N)	This notation may be assigned if the noise levels in related spaces of the ship meet the Rule requirements for comfort of crew and passengers, with N = 1 or 2 or 3 indicating different comfort levels, where 1 represents the highest	Ch. 16, Pt. 8 of the Rules

Class notation	Description		Technical requirements
		comfort level	
COMF (VIB N)	Comfort (vibration N)	This notation may be assigned if the vibration levels in related spaces of the ship meet the Rule requirements for comfort of crew and passengers, with N = 1 or 2 or 3 indicating different comfort levels, where 1 represents the highest comfort level	Ch. 16, Pt. 8 of the Rules
HAB (VIB)	Habitability (vibration)	This notation may be assigned if the vibration levels in related spaces of the ship meet the habitability requirements regarding crew and passengers in ISO 6954	Ch. 14 & 15 of Guidelines for Shipboard Vibration Control
VIB (S)	Structural vibration	This notation may be assigned if related structures of the ship meet the structural vibration requirements in the Guidelines and no damage will be caused due to structural fatigue	Ch. 14 & 15 of Guidelines for Shipboard Vibration Control
VIB (M)	Machinery vibration	This notation may be assigned if related machineries of the ship meet the mechanical vibration requirements in the Guidelines and no damage due to mechanical fatigue or accelerated wear of moving parts will be caused	Ch. 14 & 15 of Guidelines for Shipboard Vibration Control
VIB	Vibration	This notation may be assigned if the ship meets the requirements for both structural vibration VIB(S) and mechanical vibration VIB(M)	Ch. 14 & 15 of Guidelines for Shipboard Vibration Control
Green Ship I	Green ship	The green elements of the ship in terms of environmental protection, energy efficiency (including design energy efficiency and operation energy efficiency) and working environment comply with all applicable requirements for Green Ship I	Rules for Green Ships
Green Ship II		The green elements of the ship in terms of environmental protection, energy efficiency (including design energy efficiency and operation energy efficiency) and working environment comply with all applicable requirements for Green Ship II	
Green Ship III		The green elements of the ship in terms of environmental protection, energy efficiency (including design energy efficiency and operation energy efficiency) and working environment comply with all applicable requirements for Green Ship III	
EEDI(I)	Energy efficiency in ship design	The ship's attained EEDI value is equivalent to the requirement for EEDI Phase 0 of MARPOL Annex VI	Ch. 2 of Rules for Green Ships
EEDI(II)		The ship's attained EEDI value is equivalent to the requirement for EEDI Phase 1 of MARPOL Annex VI	
EEDI (II+)		The ship's attained EEDI is equivalent to the requirement for EEDI Phase 2 of MARPOL Annex VI	
EEDI(III)		The ship's attained EEDI value is equivalent to the requirement for EEDI Phase 3 of MARPOL Annex VI	
NEC (II)	NO_x emission control	In compliance with standards of Tier II in MARPOL Annex VI	Sec. 3, Ch. 8, Pt. 8 of the Rules
NEC (III)		In compliance with standards of Tier III in MARPOL Annex VI	
GPR	Green passport	The ship is to carry the Inventory of Hazardous Materials verified by CCS and complying with the requirements of Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009	Sec. 3, Ch. 8, Pt. 8 of the Rules
GPR(EU)		The ship is to carry the Inventory of Hazardous Materials verified by CCS and complying with the requirements of EU Regulation No.1257/2013	
BWMS	Ballast water management system	Ship's ballast water management system must be approved and comply with the requirements for the installation and arrangements of the Rules	Sec. 3, Ch. 8, Pt. 8/ Ch. 26, Pt. 8 of the Rules
SEEMP(I)	Energy efficiency in ship operation	The ship is to have a Ship Energy Efficiency Management Plan (SEEMP) developed in accordance with the relevant IMO guidelines	Ch. 2 of Rules for Green Ships
SEEMP(II)		For a ship with notation SEEMP(I), where a ship energy	

Class notation	Description		Technical requirements
		efficiency management system is established by the Company or the Operator of the ship and certified by CCS, this notation may be assigned	
SEEMP(III)		For a ship with notation SEEMP(II), where a ship has software for real time monitoring of e.g. route optimization and hull biofouling so as to monitor relevant parameters affecting ship energy efficiency and/or adjust energy efficiency measures at any time, this notation may be assigned	
Crew Accommodation (MLC)	Accommodation of crew members	This notation may be assigned to ships meeting the plan approval and construction requirements for accommodation of crew members on board sea-going ships in CCS Guidelines, in addition to those statutory requirements	Guidelines for Implementation of Inspections of Maritime Labour Conditions
AMPS	High-voltage Shore Connection System	The class notation may be assigned to a ship fitted with a high-voltage shore connection system having rated alternating voltage above 1 kV and up to and including 15 kV for supplying shore power while in port so as to ensure normal operation of equipment intended to be used when generating sets of the ship are stopped	Ch. 19, Pt. 8 of the Rules
IBTS	Integrated Bilge Water Treatment System	The IBTS notation may be assigned for ships the management and discharge arrangements of the bilge water from machinery spaces complying with the requirements of the integrated bilge water treatment system (IBTS) as specified in MEPC.1/Circ.642, as revised by MEPC.1/Circ.676 and MEPC.1/Circ.760	Ch. 8, Pt. 8 of the Rules
EAL	Environmentally Acceptable Lubricants	The EAL notation may be assigned for ships the lubricants used for the oil/water interfaces complying with the relevant provisions on environmentally acceptable lubricants as specified in CCS Guidelines for implementation of the survey of the requirements for environmentally acceptable lubricants by US EPA	Ch. 8, Pt. 8 of the Rules
Biofouling-C	Biofouling Control	The Biofouling-C notation may be assigned for ship having a biofouling management plan, which is prepared in accordance with 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species adopted by IMO by resolution MEPC.207(62) and to be approved by CCS	Ch. 8, Pt. 8 of the Rules
SEC (EGCS)	SO_x emission control (Exhaust gas cleaning system)	Ships installed with the EGC systems for reduction of SO_x emission may be assigned this notation	Guidelines for Design and Installation of Exhaust Gas Cleaning Systems
NEC (SCRS)	NO_x emission control (Selective catalytic reduction system)	Ships installed with the SCR systems for reduction of NO_x emission may be assigned this notation	Guidelines for Application of Selective Catalytic Reduction (SCR) System Onboard Ships

Other Notations **Table K**

Class notation	Description		Technical requirements
~~OTA~~	~~Ship's optimal trim decision~~	~~Capable of applying technical means of optimal trim operation recommended by IMO or trim optimization system installed on board for guiding operational trim adjustment~~	~~Rules for Intelligent Ships~~
EOM	Ship's energy efficiency real-time on-line monitoring	Capable of monitoring ship's operation in real time and supporting decision on operational energy efficiency management and optimization by collecting operational parameters of ship's energy-consuming equipment and navigational equipment and synchronizing with shore-based equipment	Sec.7, Ch.6 of this PART

Class notation	Description		Technical requirements
~~COS~~	~~Oil tanker's cargo operational emulate optimization~~	~~Capable of automatically creating and optimizing cargo oil unloading operation plan or installing oil tanker unloading operation intelligent decision-making system by carrying out emulation or real-time monitoring of oil tanker in-port operation~~	~~Rules for Intelligent Ships~~
~~HLM~~	~~Hull structure full-life-cycle management~~	~~Intelligent solution based on 3D emulate technology, creating digital hull information model, serving each phase of ship construction and operation and facing healthy monitoring management of hull structure~~	~~Rules for Intelligent Ships~~
HIMS	Hull inspection and maintenance scheme	Periodical inspection and maintenance scheme for hull structure and deck equipment. By implementation of scheme, which is implemented by means of computerized management system	Guidelines for Hull Inspection and Maintenance Scheme
~~TS-N~~	~~Hull structure thickness monitoring and strength assessment~~	~~Relating thickness measurement data collected by CCS hull structure thickness measurement software with digital hull model based on 3D emulate technology and creating hull structure thickness database to monitor structure thickness and forecast corrosion trend, and evaluating hull structural strength. The following notation may be assigned, where N being one of them:~~ ~~1 – Hull structure thickness monitoring;~~ ~~2 – Hull structure thickness monitoring, longitudinal bending strength evaluation;~~ ~~3 – Hull structure thickness monitoring, longitudinal bending strength evaluation, fatigue strength evaluation~~	~~Rules for Intelligent Ships~~
Cyber Security	Ship Cyber Security	This notation may be assigned when only the assessment result of ship cyber system is qualified.	Guidelines for Requirement and Security Assessment of Ship Cyber System
CBM(X)	Condition-Based Maintenance	According to the analysis and evaluation result of the operation status and health condition of an mechanical equipment or system of the ship, this notation may be assigned when the condition based maintenance scheme of the equipment or system is drawn up, for example, CBM(Cargo Pumps) may be assigned when the Cargo Pumps comply with the requirements of Guidelines.	Guidelines on survey for the intelligent engine room of the ship

CHAPTER 3 INSPECTIONS OF PRODUCTS

Appendix 1B LIST OF CERTIFICATION REQUIREMENTS FOR STATUTORY MARINE PRODUCTS

No.	Product name	Document		Approval mode				Plan approval	Remark
		C/E	W	DA	TA-B	TA-A	WA	PA	
2	Pollution prevention at sea								
2.12	Ballast water management ~~equipment~~ System	X	–	–	X	O	–	X	

Appendix 2B LIST OF CERTIFICATION REQUIREMENTS FOR STATUTORY MARINE PRODUCT PARTS

No.	Product name	Document		Approval mode				Plan approval	Remark
		C/E	W	DA	TA-B	TA-A	WA	PA	
2	Pollution prevention at sea								
2.12	Ballast water management ~~equipment~~ System								

CHAPTER 4 SURVEYS DURING CONSTRUCTION

Appendix 1 HULL SURVEY FOR NEW CONSTRUCTION

10. Ship construction file

~~10.2 The purpose of documents held in the ship construction file on board the ship is to facilitate inspection (survey) and repair and maintenance, and, therefore, such documents are at least to include:~~

10.2 It is recognised that the purpose of documents held in the Ship Construction File on board the ship, is to facilitate inspection (survey) and repair and maintenance, and, therefore,is to include in addition to documents listed in Table 1, but not be limited to:

CHAPTER 5 SURVEYS AFTER CONSTRUCTION

Section 12 SURVEYS OF PROPELLER SHAFTS AND TUBE SHAFTS

5.12.1 General

5.12.1.2 Definitions (see Figure 5.12.1.2)

(17) Keyed connection: Keyed connection is the forced coupling Methodology between the shaft and the propeller with a key and keyway achieved through the interference fit of the propeller boss on the shaft tapered end.

5.12.2 Oil lubricated shafts or closed loop system fresh water lubricated shafts (closed system)

5.12.2.4 Closed loop system fresh water lubricated shafts

(2) Survey extensions

The maximum interval between two surveys carried out according to Method 1 is not to exceed 15 years, except in the case when one extension for no more than three months is granted.

5.12.3 Water lubricated shafts (open systems)

5.12.3.2 Shaft extension surveys - extension types

(1) Extension up to 1 year

The survey is to consist of:

④ Verification of the effectiveness of the inboard seal.

5.12.3.4 Table of survey intervals (open systems)

Survey intervals (open systems)			
- Single shaft operating exclusively in fresh water. - Single shaft provided with adequate means of corrosion protection, Single corrosion resistant shaft. - All kinds of multiple shafts arrangements.		Other shaft configuration.	
All kinds of propeller coupling[d]		All kinds of propeller coupling[d]	
Every five years[a]	Method 4	Every three years[a]	Method 4
Extension 1 Y	Yes[b]	Extension 1 Y	Yes[b]

Extension 3 M	Yes[c]	Extension 3 M	Yes[c]

General notes:
For surveys (Method 4) completed within 3 months before the shaft survey due date, the next period will start from the shaft survey due date.
The extension survey should normally be carried out within 1 month of the shaft survey due date and the extension counts from the shaft survey due date. If the extension survey is carried out more than 1 month prior to the shaft survey due date, then the period of extension counts from the date of the extension survey was completed.

Notes:
a: Unless an extension type (Extension 1 Y, Extension 3 M) is applied in between.
b: No more than one extension can be granted. No further extension, of other type, can be granted.
c: No more than one extension can be granted. In the event an additional extension is requested the requirements of the one year extension are to be carried out and the shaft survey due date prior to the previous extension is extended for a maximum of one year.
d: For keyless propeller connections the maximum interval between two consecutive dismantling and verifications of the shaft cone by means of non-destructive examination (NDE) is not to exceed 15 years.

Section 13 BOILER SURVEYS

5.13.1 General requirements

5.13.1.1 This Section applies to surveys of the ship's main boilers, auxiliary boilers for essential services, superheaters, steam heated steam generators, economizers, thermal oil and hot water units, boilers for non-essential services having working pressure exceeding 0.35 MPa and a heating surface exceeding 4.5 m^2 and steam pipes.

5.13.2 Interval of surveys

5.13.2.2 For auxiliary boilers for essential services, superheaters, thermal oil heaters, boilers for non-essential services having working pressure exceeding 0.35 MPa and a heating surface exceeding 4.5 m^2, a minimum of two internal inspections is to be carried out during each 5-year special periodical survey period. In all cases, the interval between any two such inspections is not to exceed 36 months.

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PART SIX

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