

Rules for the Classification of Steel Ships

(Development Review : For external opinion inquiry)

Part 9 Additional Installations

- Chapter 3 Automatic and Remote Control Systems
- Chapter 5 Navigation Bridge Systems
- Chapter 8 High Voltage Shore Connection Systems

2020. 9.



Machinery Rule Development Team

Effective Date : 1 July 2021

(The contract date for ship construction)

Present	Amendment	Remark
<p style="text-align: center;">CHAPTER 3 AUTOMATIC AND REMOTE CONTROL SYSTEMS</p> <p style="text-align: center;">Section 1 – 2 <same as the present Rules></p> <p style="text-align: center;">Section 3 Centralized Monitoring and Control Systems for Main Propulsion and Essential Auxiliary Machinery</p> <p>301. – 304. <same as the present Rules></p> <p>305. Automatic and remote control of main propulsion machinery or controllable pitch propellers [See Guidance]</p> <p>1. – 3. <same as the present Rules></p> <p>4. Safety measures</p> <p>(1) – (6) <same as the present Rules></p> <p>(7) Crosshead main diesel engines For crosshead main diesel engines, safety system specified in Table 9.3.1 is to be provided.</p> <p>(8) Trunk piston main diesel engines For trunk piston main diesel engines, safety system specified in Table 9.3.2 is to be provided.</p> <p>(9) Propulsion steam turbine For propulsion steam turbines, safety system specified in Table 9.3.3 is to be provided.</p> <p>(10) – (11) <same as the present Rules></p>	<p style="text-align: center;">CHAPTER 3 AUTOMATIC AND REMOTE CONTROL SYSTEMS</p> <p style="text-align: center;">Section 1 – 2 <same as the present Rules></p> <p style="text-align: center;">Section 3 Centralized Monitoring and Control Systems for Main Propulsion and Essential Auxiliary Machinery</p> <p>301. – 304. <same as the present Rules></p> <p>305. Automatic and remote control of main propulsion machinery or controllable pitch propellers [See Guidance]</p> <p>1. – 3. <same as the present Rules></p> <p>4. Safety measures</p> <p>(1) – (6) <same as the present Rules></p> <p>(7) Crosshead main diesel engines For crosshead main diesel engines, safety system specified in Table 9.3.1 is to be provided.</p> <p>(8) Trunk piston main diesel engines For trunk piston main diesel engines, safety system specified in Table 9.3.2 is to be provided.</p> <p>(9) Propulsion steam turbine For propulsion steam turbines, safety system specified in Table 9.3.3 is to be provided.</p> <p>(10) – (11) <same as the present Rules></p>	<p>(Amended)</p> <p>– The requirements have been amended to clarify the meaning of the common and separate sensor.</p> <p>: Table 9.3.1, Table 9.3.2, Table 9.3.3</p>

Present	Amendment	Remark
<p>306. Automatic and remote control of boilers</p> <p>1. – 3. <same as the present Rules></p> <p>4. Safety measures</p> <p>(1) <same as the present Rules></p> <p>(2) For main boilers, safety system specified in Table 9.3.6 is to be provided.</p> <p>(3) <same as the present Rules></p> <p>307. – 310. <same as the present Rules></p> <p>Section 4 – 5 <same as the present Rules></p>	<p>306. Automatic and remote control of boilers</p> <p>1. – 3. <same as the present Rules></p> <p>4. Safety measures</p> <p>(1) <same as the present Rules></p> <p>(2) For main boilers, safety system specified in Table 9.3.6 is to be provided.</p> <p>(3) <same as the present Rules></p> <p>307. – 310. <same as the present Rules></p> <p>Section 4 – 5 <same as the present Rules></p>	<p>(Amended)</p> <p>– The requirements have been amended to clarify the meaning of the common and separate sensor.</p> <p>: Table 9.3.6</p>

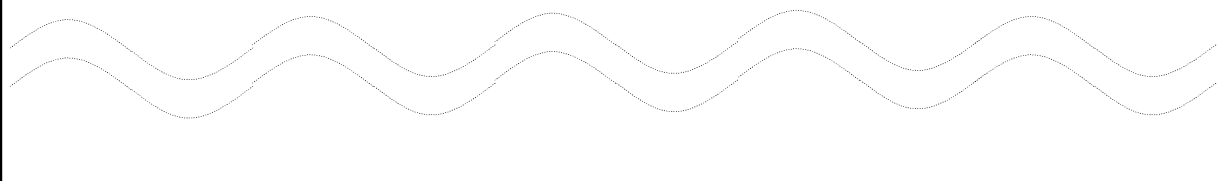
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Table 9.3.1 Crosshead diesel engines (2020)

System s	Monitored parameters [H: High L: Low O: Abnormal status]	AA	RI	Auto slow down with alarm	Auto start of Stand by pump with alarm	Auto shut down with alarm	Notes [AA = Alarm Activation RI = Remote Indication* ●=apply]
Sensor s	Common or separate	c	c	c	s	s	c = common; s = separate
Fuel oil	Fuel oil after filter (engine inlet), pressure	L	●	●	●		
	Fuel oil before injection pumps, temp. (or viscosity L)	H	●				
	Fuel oil before injection pumps, temp. (or viscosity H)	L	●				
	Leakage from high pressure pipes	O	●				
	Fuel oil service tank, level	L	●				
	Common rail fuel oil pressure	L	●				
Power	Control, alarm or safety system, power supply failure	O	●				
<p>(NOTES)</p> <p>* Remote Indication(RI) : presentation of values in engine control room or another centralized control station</p> <p>(1) Oil mist detection system is to be of the approved type by the Society, tested by Ch 3, Sec. 10 of the Guidance for Approval of Manufacturing Process and Type Approval, Etc. and applied to Pt 5, Ch 2, 203.</p> <p>(2) Where outlet temperature from each bearing cannot be monitored due to the engine/turbocharger design, alternative arrangements may be accepted. Continuous monitoring of inlet pressure and inlet temperature in combination with specific intervals for bearing inspection in accordance with the turbocharger manufacturer's instructions may be accepted as an alternative.</p>							

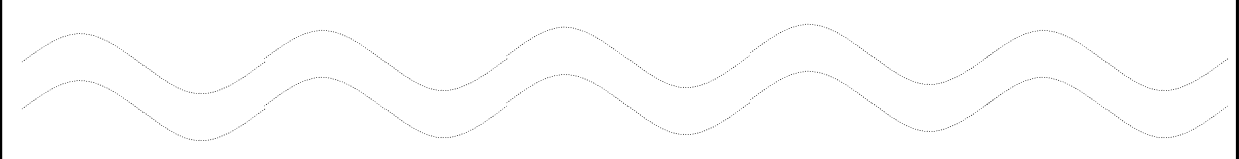
〈Amendments〉

Table 9.3.1 Crosshead diesel engines (2020)(2021)

System s	Monitored parameters [H: High L: Low O: Abnormal status]	AA	RI	Auto slow down with alarm	Auto start of Stand by pump with alarm	Auto shut down with alarm	Notes [AA = Alarm Activation RI = Remote Indication* ●=apply]
Sensor s	Common or separate			c Gr 1	s Gr 2	s Gr 3	c = common; s = separate
Fuel oil	Fuel oil after filter (engine inlet), pressure	L	●	●		●	
	Fuel oil before injection pumps, temp. (or viscosity L)	H	●				
	Fuel oil before injection pumps, temp. (or viscosity H)	L	●				
	Leakage from high pressure pipes	O	●				
	Fuel oil service tank, level	L	●				
	Common rail fuel oil pressure	L	●				
							
Power	Control, alarm or safety system, power supply failure	O	●				
<p>(NOTES)</p> <p>* Remote Indication(RI) : presentation of values in engine control room or another centralized control station</p> <p>* Gr 1 : Common sensor for indication, alarm, slow down</p> <p>Gr 2 : Sensor for automatic start of standby pump with alarm</p> <p>Gr 3 : Sensor for shut down</p> <p>(1) - (2) <same as the present Rules></p>							

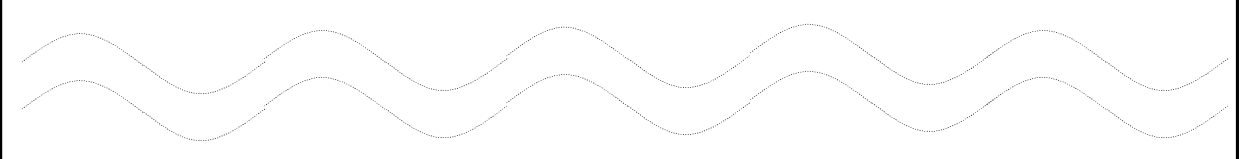
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Table 9.3.2 Trunk piston diesel engines (2020)

Systems	Monitored parameters [H: High L: Low O: Abnormal status]	AA	RI	Auto slow down with alarm	Auto start of Stand by pump with alarm	Auto shut down with alarm	Notes [AA = Alarm Activation RI = Remote Indication* ●=apply]
Sensors	Common or separate	<u>c</u>	<u>c</u>	<u>c</u>	<u>s</u>	<u>s</u>	<u>c = common; s = separate</u>
Fuel oil	Fuel oil after filter (engine inlet), pressure	L	●	●	●		
	Fuel oil before injection pumps, temp. (or viscosity L)	H	●				For heavy fuel oil burning engines only.
	Fuel oil before injection pumps, temp. (or viscosity H)	L	●				For heavy fuel oil burning engines only.
	Leakage from high pressure pipes	O	●				
	Fuel oil service tank, level	L	●				High level alarm is also required if without suitable overflow arrangements.
	Common rail fuel oil pressure	L	●				
							
Power	Control, alarm or safety system, power supply failure	O	●				
(NOTES) * Remote Indication(RI) : presentation of values in engine control room or another centralized control station (1) - (2) <same as the present Rules>							

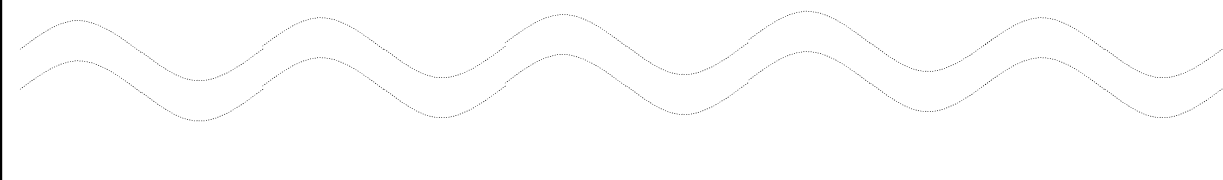
〈Amendments〉

Table 9.3.2 Trunk piston diesel engines ~~(2020)~~(2021)

Systems	Monitored parameters [H: High L: Low O: Abnormal status]	AA	RI	Auto slow down with alarm	Auto start of Stand by pump with alarm	Auto shut down with alarm	Notes [AA = Alarm Activation RI = Remote Indication* ●=apply]
Sensors	Common or separate			c Gr 1	s Gr 2	s Gr 3	c = common; s = separate
Fuel oil	Fuel oil after filter (engine inlet), pressure	L	●	●		●	
	Fuel oil before injection pumps, temp. (or viscosity L)	H	●				For heavy fuel oil burning engines only.
	Fuel oil before injection pumps, temp. (or viscosity H)	L	●				For heavy fuel oil burning engines only.
	Leakage from high pressure pipes	O	●				
	Fuel oil service tank, level	L	●				High level alarm is also required if without suitable overflow arrangements.
	Common rail fuel oil pressure	L	●				
							
Power	Control, alarm or safety system, power supply failure	O	●				
<p>(NOTES)</p> <p>* Remote Indication(RI) : presentation of values in engine control room or another centralized control station</p> <p>* Gr 1 : Common sensor for indication, alarm, slow down</p> <p>Gr 2 : Sensor for automatic start of standby pump with alarm</p> <p>Gr 3 : Sensor for shut down</p> <p>(1) - (2) <same as the present Rules></p>							

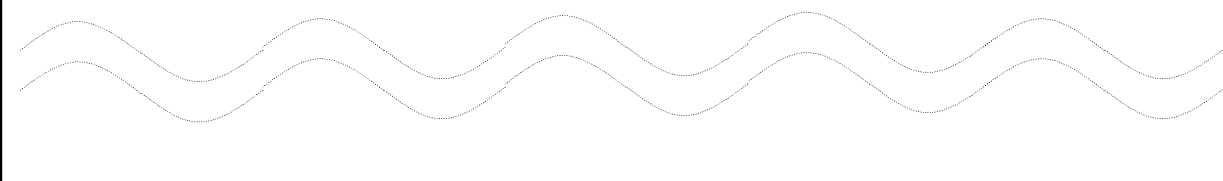
<Present>

Table 9.3.3 Propulsion steam turbines

Systems	Monitored parameters [H: High L: Low O: Abnormal status]	AA	RI	Auto slow down with alarm	Auto start of Stand by pump with alarm	Auto shut down with alarm	Notes [AA = Alarm Activation RI = Remote Indication* ●=apply]	
Sensors	Common or separate	<u>c</u>	<u>c</u>	<u>c</u>	<u>s</u>	<u>s</u>	<u>c = common; s = separate</u>	
Lubri- cating oil	Pressure at bearing inlets	L	●	●		●	●	For turbines, gears and thrust bearings.
	Temp. at bearing inlet	H	●	●				For turbines, gears and thrust bearings
	Bearing temp. or bearing oil outlet temp.	H	●	●				For turbines, gears and thrust bearings
	Filter differential pressure	H	●					
	Gravity tank and sump levels	L	●	●				
								
Power	Throttle control system power failure	O	●					
(NOTES)								
* Remote Indication(RI) : presentation of values in engine control room or another centralized control station								


〈Amendments〉

Table 9.3.3 Propulsion steam turbines (2021)

Systems	Monitored parameters [H: High L: Low O: Abnormal status]	AA	RI	Auto slow down with alarm	Auto start of Stand by pump with alarm	Auto shut down with alarm	Notes [AA = Alarm Activation RI = Remote Indication* ●=apply]	
Sensors	Common or separate			c Gr 1	s Gr 2	s Gr 3	c = common; s = separate	
Lubri- cating oil	Pressure at bearing inlets	L	●	●		●	●	For turbines, gears and thrust bearings.
	Temp. at bearing inlet	H	●	●				For turbines, gears and thrust bearings
	Bearing temp. or bearing oil outlet temp.	H	●	●				For turbines, gears and thrust bearings
	Filter differential pressure	H	●					
	Gravity tank and sump levels	L	●	●				
								
Power	Throttle control system power failure	O	●					
<p>(NOTES)</p> <p>* Remote Indication(RI) : presentation of values in engine control room or another centralized control station</p> <p>* Gr 1 : Common sensor for indication, alarm, slow down</p> <p>Gr 2 : Sensor for automatic start of standby pump with alarm</p> <p>Gr 3 : Sensor for shut down</p>								


<Present>

Table 9.3.6 Main boiler

System	Monitored parameters [H: High L: Low LL: Low-Low O: Abnormal status]	AA	RI	Auto start of Stand by pump with alarm	Auto shut down with alarm	Notes [AA = Alarm Activation RI = Remote Indication* ●=apply]	
Sensors	Common or separate		<u>c</u>	<u>c</u>	<u>s</u>	<u>s</u>	<u>c = common sensor; s = separate sensor</u>
Feed water	Atmospheric drain tank level	H L	●	●			
	Dearator level	H L	●	●			
	Dearator pressure	H L	●	●			
	Feed water pump pressure	L	●	●	●		
	Feed water temperature	H	●	●			
	Feed water outlet salinity	H	●	●			
							
Power	Control system power supply fails	O	●	●		●	Automatic closing of fuel valve(s)
(NOTES) * Remote Indication(RI) : presentation of values in engine control room or another centralized control station							

<Amendments>

Table 9.3.6 Main boiler (2021)

System	Monitored parameters [H: High L: Low LL: Low-Low O: Abnormal status]	AA	RI	Auto start of Stand by pump with alarm	Auto shut down with alarm	Notes [AA = Alarm Activation RI = Remote Indication* ●=apply]
Sensors	Common or separate		e Gr 1	s Gr 2	s Gr 3	e = common sensor; s = separate sensor
Feed water	Atmospheric drain tank level	H L	●	●		
	Dearator level	H L	●	●		
	Dearator pressure	H L	●	●		
	Feed water pump pressure	L	●	●	●	
	Feed water temperature	H	●	●		
	Feed water outlet salinity	H	●	●		
						
Power	Control system power supply fails	O	●	●	●	Automatic closing of fuel valve(s)
(NOTES)						
* Remote Indication(RI) : presentation of values in engine control room or another centralized control station						
* Gr 1 : Common sensor for indication, alarm, slow down						
Gr 2 : Sensor for automatic start of standby pump with alarm						
Gr 3 : Sensor for shut down						

Present	Amendment	Remark
<p style="text-align: center;">CHAPTER 8 HIGH VOLTAGE SHORE CONNECTION SYSTEMS</p> <p style="text-align: center;">Section 1 – 2 <same as the present Rules></p> <p style="text-align: center;">Section 3 Testing and Inspection</p> <p>301. Shop Tests</p> <p>1. Type approval</p> <p>(1) <u>Electrical equipment and cables required by Pt 6, Ch 1, 103. 1, (1) are to be type approved, in principle, according to the test methods approved by the Society before the commencement of work.</u></p> <p>(2) <u>The high voltage shore connection switchboard and the high voltage onboard receiving switchboard are to be type approved.</u></p> <p>2. <same as the present Rules></p> <p>302. – 303. <same as the present Rules></p>	<p style="text-align: center;">CHAPTER 8 HIGH VOLTAGE SHORE CONNECTION SYSTEMS</p> <p style="text-align: center;">Section 1 – 2 <same as the present Rules></p> <p style="text-align: center;">Section 3 Testing and Inspection</p> <p>301. Shop Tests General</p> <p>1. Type approval General (2021)</p> <p>(1) Electrical equipment and cables required by Pt 6, Ch 1, 103. 1, (1) are to be type approved, in principle, according to the test methods approved by the Society before the commencement of work. Electrical equipment and cables applicable to Pt 6, Ch 1 are to comply with Table 6.1.1 in Pt 6, Ch 1, 103.</p> <p>(2) The high voltage shore connection switchboard and the high voltage onboard receiving switchboard are to be type approved.</p> <p>2. <same as the present Rules></p> <p>302. – 303. <same as the present Rules></p>	<p>(Amended)</p> <p>- The requirements have been revised so that the rules can be applied in the same way as in Pt 6 of the Rules, as there are different contents from Pt 6 of the Rules for general electrical equipment, causing confusion in application.</p> <p>In general, switchboards do not require type approval and perform tests and inspections in manufacturer's works.</p>

AMENDMENTS OF RULES FOR CLASSIFICATION OF STEEL SHIPS

(Part 9 Additional Installations)

(Ch.2 : External opinion inquiry)

2020. 04.



Hull Rule Development Team

- Main Amendments -

(1) Effective Date : 1 July 2020

● Establishment of requirement for force majeure due to the global pandemic (such as COVID-19)

Present	Amendment	Remark
<p style="text-align: center;">CHAPTER 1 <omitted></p> <p style="text-align: center;">CHAPTER 2 CARGO HANDLING APPLIANCES</p> <p style="text-align: center;">Section 1 <omitted></p> <p style="text-align: center;">Section 2 Surveys</p> <p>201. <omitted></p> <p>202. Surveys of Cargo Handling Appliances</p> <p style="padding-left: 20px;">1. <omitted></p> <p style="padding-left: 20px;">2. Due range</p> <p style="padding-left: 40px;">The timing of the Surveys of cargo handling appliances are to be in accordance with the followings:</p> <p style="padding-left: 40px;">(1) ~ (4) <omitted></p> <p style="padding-left: 40px;"><newly added></p> <p style="padding-left: 20px;">3. <omitted></p> <p>203. ~ 205. <omitted></p> <p style="text-align: center;">Section 3 ~ Section 5 <omitted></p> <p style="text-align: center;">CHAPTER 3 ~ 10 <omitted></p>	<p style="text-align: center;">CHAPTER 1 <same as the present></p> <p style="text-align: center;">CHAPTER 2 CARGO HANDLING APPLIANCES</p> <p style="text-align: center;">Section 1 <same as the present></p> <p style="text-align: center;">Section 2 Surveys</p> <p>201. <same as the present></p> <p>408. Thermal Insulation</p> <p style="padding-left: 20px;">1. <same as the present></p> <p style="padding-left: 20px;">2. Due range</p> <p style="padding-left: 40px;">The timing of the Surveys of cargo handling appliances are to be in accordance with the followings:</p> <p style="padding-left: 40px;">(1) ~ (4) <omitted></p> <p style="padding-left: 40px;"><u>(5) Notwithstanding (2) to (4) above, the postponement of inspection due to the force majeure are to be in accordance with the requirements specified in Pt 1, Ch 1, 906. 6 of the Rules.</u></p> <p style="padding-left: 20px;">3. <same as the present></p> <p>203. ~ 205. <same as the present></p> <p style="text-align: center;">Section 3 ~ Section 5 <same as the present></p> <p style="text-align: center;">CHAPTER 3 ~ 10 <same as the present></p>	<p>- Establishment of re-quirement for force majeure relating to the global pan-demic(such as COCOVID-19)</p>

RULES FOR CLASSIFICATION(STEEL SHIPS)

(Development Review : For external opinion inquiry)

Part 9 ADDITIONAL INSTALLATIONS

2020. 9.



Machinery Rule Development Team

- Main Amendments -

(1) Effective date : 1 July 2021 (Date of which contracts for construction are signed or delivery of the ballast water management system)

- In reflection of the Resolution MSC.460(101)(14 June 2019)
- In reflection of the Request for Establishment or revision of Classification Technical Rules(ENP4500-935-2020), the requirements have been matched with actual drawing approval list.
- In reflection of the Request for Establishment or revision of Classification Technical Rules(MET4600-335-2020), the date of application has been clearly noted according to the amendment of the related convention.

Present	Amendment	Note
<p style="text-align: center;">CHAPTER 10 BALLAST WATER MANAGEMENT</p> <p style="text-align: center;">Section 3 Ballast Water Management Systems</p> <p>301. General</p> <p>1. Application</p> <p>(1) ~ (2) <omitted></p> <p>(3) The ballast water management system is to be type-approved by Flag Administration and the Society <u>in accordance with Guidelines G8, Guidelines for Approval of Ballast Water Management Systems (IMO Res. MEPC.174(58))</u> (2018)</p> <p>(4) ~ (6) <omitted></p> <p>302. ~ 305. <omitted></p>	<p style="text-align: center;">CHAPTER 10 BALLAST WATER MANAGEMENT</p> <p style="text-align: center;">Section 3 Ballast Water Management Systems</p> <p>301. General</p> <p>1. Application</p> <p>(1) ~ (2) <same as the present></p> <p>(3) The ballast water management system is to be type-approved by Flag Administration and the Society as followings. <i>(2021)</i></p> <p><u>(A) BWMS to be installed on or after 28th October 2020 is to be approved by Res. MEPC.300(72) (BWMS Code) or Res. MEPC.279(70) (2016 G8)</u></p> <p><u>(B) BWMS to be installed before 28th October 2020 is to be approved by Res. MEPC.300(72) (BWMS Code), Res. MEPC.279(70) (2016 G8) or Res. MEPC.174(58)(G8)</u></p> <p><u>(C) The word "installed" means the contractual date of delivery of the ballast water management system to the ship. In the absence of such a date, the word "installed" means the actual date of delivery of the ballast water management system to the ship. In addition, in the International Ballast Water Management Certificate, the installation date described above in relation to the installation of the ballast water treatment system and the date of commissioning thereafter may be existed.</u></p> <p>(4) ~ (6) <omitted></p> <p>302. ~ 305. <omitted></p>	<p>(amendment) -MET4600-335-20 20 (Clearly noted the date of application according to the amendment of the related convention)</p>

Present	Amendment	Note
<p>306. Surveys</p> <p>1. General (2018)</p> <p>(1) ~ (2) <omitted></p> <p>2. Classification Survey</p> <p>(1) Drawings and data <u>For the BWMS intended to undergo a Classification Survey during construction</u>, the following plans and information in triplicate are to be submitted to the Society before the work is commenced.</p> <p>(A) <u>General arrangement drawings of the BWMS</u> (B) <u>Ballast piping diagram</u> (C) <u>The location of ballast water and sediment sampling openings</u> (D) <u>Electrical schematic drawing of BWMS</u> (E) <u>Drawing of tanks containing liquid chemicals including air pipes, sounding and drain systems from drip trays</u> (F) <u>Arrangement of detection system associated with toxic or flammable gases</u> (G) <u>Test plan for onboard or sea trial</u> (H) <u>Ballast water management plan</u> (G) <newly added></p> <p>(2) Tests and inspections</p> <p>(A) Piping systems and control systems of BWMS are to be tested and inspected in accordance with applicable requirements in Pt 5 and Pt 6.</p> <p>(B) <u>It is to confirmed that the documentation required in G8 Guidelines(IMO Res. MEPC.174(58)), Paragraph 8.1 is on board.</u></p> <p>(C) <u>Items required in G8 Guidelines(IMO Res. MEPC.174(58)), Paragraph 8.2 are to be verified.</u></p> <p>(D) After installation of the BWMS, a function test is to be carried out to at the onboard test or sea trial.</p>	<p>306. Surveys</p> <p>1. General (2018)</p> <p>(1) ~ (2) <omitted></p> <p>2. Classification Survey</p> <p>(1) Drawings and data <u>For the BWMS intended to newly install or register to this Society</u>, the following plans and information in triplicate are to be submitted to the Society before the work is commenced.</p> <p>(A) <u>General specification of the BWMS</u> (B) <u>Ballast piping diagram</u> (C) <u>The location of ballast water openings</u> (D) <u>Electrical schematic drawing</u> (E) <u>Drawing of tanks containing liquid chemicals including air pipes, sounding and drain systems from drip trays (when fitted)</u> (F) <u>Arrangement of detection system associated with toxic or flammable gases</u> (G) <u>Test plan for onboard or sea trial</u> (H) <u>Ballast water management plan</u> (G) <u>operation and maintenance manual</u></p> <p>(2) Tests and inspections</p> <p>(A) Piping systems and control systems of BWMS are to be tested and inspected in accordance with applicable requirements in Pt 5 and Pt 6.</p> <p>(B) <u>It is to confirmed that the documentation required in IMO Res. MEPC.279(70) or Res. MEPC.300(72), Paragraph 8.2 is on board. In cases where BWMS has been approved in accordance with Res. MEPC 174(58), it is to confirmed that the documentation required in G8 Guidelines(IMO Res. MEPC.174(58)), Paragraph 8.1 is on board.</u></p> <p>(C) <u>Items required in IMO Res. MEPC.279(70) or Res. MEPC.300(72), Paragraph 8.3 are to be verified. In cases where BWMS has been approved in accordance with Res. MEPC 174(58), items required in G8 Guidelines(IMO Res. MEPC.174(58)), Paragraph 8.2 are to be verified.</u></p> <p>(D) After installation of the BWMS, a function test is to be carried out to at the onboard test or sea trial.</p>	<p>(amendment) -ENP4500-935-20 20 (1. Added application of installation other than Classification Survey during construction 2. Matched with actual drawing approval list)</p> <p>-MET4600-335-20 20 (Clearly noted the date of application according to the amendment of the related convention)</p>

Guidance Relating to the Rules for the Classification of Steel Ships

(Development Review : For internal opinion inquiry)

Part 9 Additional Installations

2021. 1.



Machinery Rule Development Team

Effective Date : 1 July 2021

(The contract date for ship construction)

Present	Amendment	Remark
<p style="text-align: center;">CHAPTER 3 AUTOMATIC AND REMOTE CONTROL SYSTEMS</p> <p>Section 2 Surveys of Automatic and Remote Control Systems</p> <p>201. – 205. <same as the present Rules></p> <p>206. Sea trials for the operating systems for periodically un-attended machinery spaces (2017) [See Rule] (1) As for the test procedures specified in 206. 2 of the Rules to test the main engine or controllable pitch propellers by bridge control devices, those shown in Fig 9.3.1 (for diesel ships) or Fig 9.3.2 (for steam turbine ships) of the Guidances are to be considered as the standard practice. (2) – (4) <same as the present Rules></p> <p>Fig 9.3.1 & 9.3.2 <same as the present Rules></p> <p>208. <same as the present Rules></p> <p style="text-align: center;">Section 3 - 5 <same as the present Rules></p>	<p style="text-align: center;">CHAPTER 3 AUTOMATIC AND REMOTE CONTROL SYSTEMS</p> <p>Section 2 Surveys of Automatic and Remote Control Systems</p> <p>201. – 205. <same as the present Rules></p> <p>206. Sea trials for the operating systems for periodically un-attended machinery spaces (2017) [See Rule] (1) As for the test procedures specified in 206. 2 of the Rules to test the main engine or controllable pitch propellers by bridge control devices, those shown in Fig 9.3.1 (for diesel ships) or Fig 9.3.2 (for steam turbine ships) of the Guidances are to be considered as the standard practice. (2) – (4) <same as the present Rules></p> <p>Fig 9.3.1 & 9.3.2 <same as the present Rules></p> <p>208. <same as the present Rules></p> <p style="text-align: center;">Section 3 - 5 <same as the present Rules></p>	<p>(Amended)</p> <p>- The running hours during the trial procedures for main engine or CPP by the bridge control devices has been deleted.</p>

<Present>

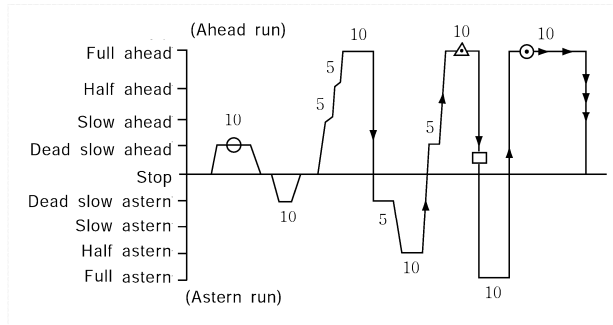


Fig 9.3.1 Trial Procedures for Diesel Ships

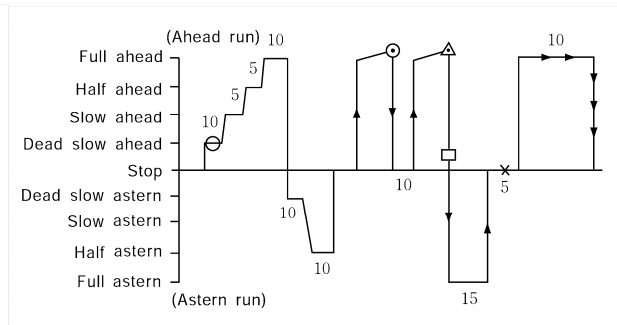


Fig 9.3.2 Trial Procedures for Steam Turbines Ships

[Remarks]

1. - 7. <same as the present Rules>
8. Numerals signify running hours(in a unit of minute).

<Amendment>

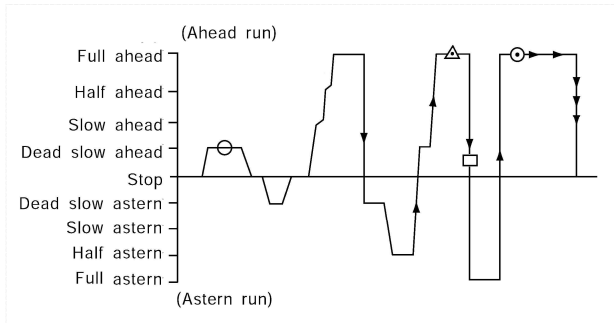


Fig 9.3.1 Trial Procedures for Diesel Ships (2021)

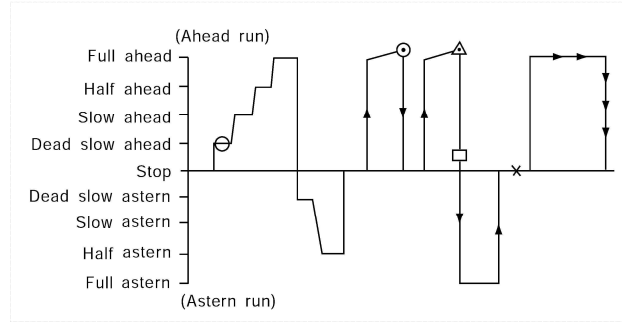


Fig 9.3.2 Trial Procedures for Steam Turbines Ships (2021)

[Remarks]

- 1. - 7. <same as the present Rules>
- 8. Numerals signify running hours(in a unit of minute).

Amendments of the Guidance relating to the Rules

(External Opinion Inquiry)

Pt. 9 Additional Installations



2021. 01.

Hull Rule Development Team

– Main Amendments –

(1) Effective Date : 1 Juen 2021(based on application date for certification)

- Reflection of internal request for rule revision

Present	Amendment
<p style="text-align: center;">CHAPTER 2 CARGO HANDLING APPLIANCES</p> <p style="text-align: center;">Section 1 <omitted></p> <p style="text-align: center;">Section 2 Surveys</p> <p>201. ~ 204. <omitted></p> <p>205. Load Tests [See Rule]</p> <p>1. Load Tests</p> <p>In application to 205. of the Rules, the followings are to be applied. (1) ~ (4) <omitted> (5) <u>In application to Table 9.2.2, the "load as considered appropriate by the Society" means the case where the test load are $1.1 \times SWL$.</u></p> <p style="text-align: center;">Section 3 ~ 8 <omitted></p>	<p style="text-align: center;">CHAPTER 2 CARGO HANDLING APPLIANCES</p> <p style="text-align: center;">Section 1 <same as the present></p> <p style="text-align: center;">Section 2 Surveys</p> <p>201. ~ 204. <same as the present></p> <p>205. Load Tests [See Rule]</p> <p>1. Load Tests</p> <p>In application to 205. of the Rules, the followings are to be applied. (1) ~ (4) <same as the present> (5) In application to Table 9.2.2, the "load as considered appropriate by the Society" means the case where the test load are $1.1 \times SWL$.</p> <p style="text-align: center;">Section 3 ~ 8 <same as the present></p>