

Amended Guidances for the Classification of Steel Ships

(Part 9 Additional Installations)

Dec. 2019



KR

Effective Date : 1 January 2020

- (1) The contract date for ship construction or an application date for certification of an engine)**
- reflected IACS UR M35(Rev.8 Jan 2019) and M36(Rev.6 Dec 2018)**
 - The requirements for alarm of high oil mist concentrations in the crankcase have been amended to alarm the operation of the oil mist detection device or the bearing lubricant outlet temperature or the operation of the bearing temperature monitoring device.

Present	Amendment
<p style="text-align: center;">CHAPTER 3 AUTOMATIC AND REMOTE CONTROL SYSTEMS</p> <p>Section 1 - 2 <same as the present Rules></p> <p>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. - 4. <same as the present Rules></p> <p>Table 9.3.1 Crosshead diesel engines <i>(2017)</i> Table 9.3.2 Trunk piston diesel engines <i>(2017)</i></p> <p>306. <same as the present Rules></p>	<p style="text-align: center;">CHAPTER 3 AUTOMATIC AND REMOTE CONTROL SYSTEMS</p> <p>Section 1 - 2 <same as the present Rules></p> <p>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. - 4. <same as the present Rules></p> <p>Table 9.3.1 Crosshead diesel engines <i>(2020)</i> Table 9.3.2 Trunk piston diesel engines <i>(2020)</i></p> <p>306. <same as the present Rules></p>

<Amendments>

Table 9.3.1 Crosshead diesel engines (2017)(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	c	c	c	s	s	c = common; s = separate
Lubri- cating oil	Oil mist concentration in crankcase - H or Main, crank, crosshead bearing temp. (or bearing oil outlet temp).- H Activation of oil mist detection arrange- <u>ments (or activation of the temperature</u> <u>monitoring systems or equivalent devices</u> <u>of:</u> - the engine main, crank and crosshead <u>bearing oil outlet; or</u> - the engine main, crank and crosshead <u>bearing)</u>	H O	●	●			For engines having power ≥ 2250 kW or cylinder bore > 300 mm ⁽¹⁾

<Amendments>

Table 9.3.2 Trunk piston diesel engines (2017)(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	c	c	c	s	s	c = common; s = separate
Lubricating oil (Diesel engine)	Oil mist in crankcase, mist concentration(H) or main & connecting rod bearing temp. (or oil outlet temp.) (H) or an equivalent device <u>Activation of oil mist detection arrangements (or activation of the temperature monitoring systems or equivalent devices of:</u> <u>- the engine main and crank bearing oil outlet; or</u> <u>- the engine main and crank bearing)</u>	H O	●			●	<p>Only for medium speed engines having power ≥ 2250 kW or cylinder bore > 300 mm: Single sensor : for each engine, <u>one oil mist detector (or engine bearing temperature monitoring system or equivalent device)</u> having two independent outputs for initiating alarm and for shutdown will satisfy independence of alarm and shut-down systems. ⁽¹⁾</p> <p>An equivalent device could be interpreted as measures applied to high speed engines where specific design features to preclude the risk of crankcase explosions are incorporated.</p>

Present	Amendment
<p>307. Automatic and remote control of electric generating sets</p> <p>1. - 4. <same as the present Rules></p> <p>Table 9.3.8 Auxiliary diesel engines and auxiliary turbines <i>(2017)</i></p> <p>308. - 310. <same as the present Rules></p> <p>Section 4 - 5 <same as the present Rules></p>	<p>307. Automatic and remote control of electric generating sets</p> <p>1. - 4. <same as the present Rules></p> <p>Table 9.3.8 Auxiliary diesel engines and auxiliary turbines <i>(2020)</i></p> <p>308. - 310. <same as the present Rules></p> <p>Section 4 - 5 <same as the present Rules></p>

<Amendments>

Table 9.3.8 Auxiliary diesel engines and auxiliary turbines (2017)(2020)

Engine	System	Monitored parameters [H: High L: 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]
Diesel Engine	Lubricating oil	<p>Oil mist in crankcase, mist concentration(H) or main & connecting rod bearing temp. (or oil outlet temp.) (H) or an equivalent device:</p> <p><u>Activation of oil mist detection arrangements (or activation of the temperature monitoring systems or equivalent devices of:</u></p> <ul style="list-style-type: none"> - <u>the engine main and crank bearing oil outlet; or</u> - <u>the engine main and crank bearing)</u> 	H O				<p>Only for medium speed engines having power ≥ 2250 kW or cylinder bore > 300 mm. Single sensor : for each engine, one oil mist detector (or engine bearing temperature monitoring system or equivalent device) having two independent outputs for initiating alarm and for shutdown will satisfy independence of alarm and shut-down systems.⁽¹⁾</p> <p>An equivalent device could be interpreted as measures applied to high speed engines where specific design features to preclude the risk of crankcase explosions are incorporated.</p>

Amended Guidances for the Classification of Steel Ships

(Part 9 Additional Installations)

Dec. 2019



KR

Effective Date : 1 January 2020

(1) The contract date for ship construction)

- The requirement for equivalence has been amended in accordance with the amendment to Part 1 of the Rules.

Present	Amendment
<p style="text-align: center;">CHAPTER 3 AUTOMATIC AND REMOTE CONTROL SYSTEMS</p> <p style="text-align: center;">Section 2 Surveys of Automatic and Remote Control Systems</p> <p>201. General</p> <p>1. Preparation for surveys and others [See Rule] In application to 201. 3 (1) of the Rules, the term "a standard deemed appropriate by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or 105. of the <u>Guidance</u>.</p> <p>202. <same as the present Rules></p> <p>203. Shop tests</p> <p>1. <same as the present Rules></p> <p>2. Shop tests of automatic systems [See Rule] In application to 203. 2 (1) (E) of the Rules, the term "Other tests considered necessary by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or 105. of the <u>Guidance</u>.</p> <p>204. - 208. <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 2 Surveys of Automatic and Remote Control Systems</p> <p>201. General</p> <p>1. Preparation for surveys and others [See Rule] In application to 201. 3 (1) of the Rules, the term "a standard deemed appropriate by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or 105. of the <u>Rules</u>.</p> <p>202. <same as the present Rules></p> <p>203. Shop tests</p> <p>1. <same as the present Rules></p> <p>2. Shop tests of automatic systems [See Rule] In application to 203. 2 (1) (E) of the Rules, the term "Other tests considered necessary by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or 105. of the <u>Rules</u>.</p> <p>204. - 208. <same as the present Rules></p>

Present	Amendment
<p style="text-align: center;">Section 3 Centralized Monitoring and Control Systems for Main Propulsion and Essential Auxiliary Machinery</p> <p>302. System design</p> <p>1. Control systems [See Rule]</p> <p>In application to 302. 4 (7) of the Rules, the term "other measures considered appropriate by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or 105. of the <u>Guidance.</u></p> <p>2. <same as the present Rules></p> <p>303. - 305. <same as the present Rules></p> <p>306. Automatic and remote control of boilers</p> <p>1. General [See Rule]</p> <p>In application to 306. 1 (3) of the Rules, the term "deemed appropriate by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or 105. of the <u>Guidance.</u></p> <p>2. Automatic combustion control systems</p> <p>(1) In application to 306. 2 (2) (F) of the Rules, the term "as deemed appropriate by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or 105. of the <u>Guidance.</u> [See Rule]</p> <p>(2) In application to 306. 2 (4) of the Rules, the term "deemed appropriate by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or 105. of the <u>Guidance.</u> [See Rule]</p>	<p style="text-align: center;">Section 3 Centralized Monitoring and Control Systems for Main Propulsion and Essential Auxiliary Machinery</p> <p>302. System design</p> <p>1. Control systems [See Rule]</p> <p>In application to 302. 4 (7) of the Rules, the term "other measures considered appropriate by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or 105. of the <u>Rules.</u></p> <p>2. <same as the present Rules></p> <p>303. - 305. <same as the present Rules></p> <p>306. Automatic and remote control of boilers</p> <p>1. General [See Rule]</p> <p>In application to 306. 1 (3) of the Rules, the term "deemed appropriate by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or 105. of the <u>Rules.</u></p> <p>2. Automatic combustion control systems</p> <p>(1) In application to 306. 2 (2) (F) of the Rules, the term "as deemed appropriate by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or 105. of the <u>Rules.</u> [See Rule]</p> <p>(2) In application to 306. 2 (4) of the Rules, the term "deemed appropriate by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or 105. of the <u>Rules.</u> [See Rule]</p>

Present	Amendment
<p style="text-align: center;">Section 5 Specific Automatic Equipment</p> <p>502. Class 1 specific automation equipment</p> <p>1. - 2. <same as the present Rules></p> <p>3. Automatic steering system [See Rule]</p> <p>In application to 502. 2 (11) of the Rules, the term "Any other items considered necessary by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. <u>or 105.</u> of the <u>Guidance.</u></p> <p>4. - 7. <same as the present Rules></p> <p>503. - 504. <same as the present Rules></p>	<p style="text-align: center;">Section 5 Specific Automatic Equipment</p> <p>502. Class 1 specific automation equipment</p> <p>1. - 2. <same as the present Rules></p> <p>3. Automatic steering system [See Rule]</p> <p>In application to 502. 2 (11) of the Rules, the term "Any other items considered necessary by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or 105. of the <u>Rules.</u></p> <p>4. - 7. <same as the present Rules></p> <p>503. - 504. <same as the present Rules></p>

Present	Amendment
<p style="text-align: center;">CHAPTER 5 NAVIGATION BRIDGE SYSTEMS</p> <p>Section 2 Surveys of Navigation Bridge Systems</p> <p>202. Classification Survey</p> <p>1. Drawings and data [See Rule]</p> <p>In application to 202. 1 (1) (E) of the Rules, the term "Other drawings and data deemed necessary by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or 105. of the <u>Guidance.</u></p> <p>2. Shop tests [See Rule]</p> <p>In application to 202. 2 (J) of the Rules, the term "Other equipment deemed necessary by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or 105. of the <u>Guidance.</u></p> <p>203. Survey Assigned to Maintain Classification</p> <p>1. Annual survey [See Rule]</p> <p>In application to 203. 2 (1) (B) (f) of the Rules, the term "Other equipment deemed necessary by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or 105. of the <u>Guidance.</u></p> <p style="text-align: center;">Section 5 <same as the present Rules></p>	<p style="text-align: center;">CHAPTER 5 NAVIGATION BRIDGE SYSTEMS</p> <p>Section 2 Surveys of Navigation Bridge Systems</p> <p>202. Classification Survey</p> <p>1. Drawings and data [See Rule]</p> <p>In application to 202. 1 (1) (E) of the Rules, the term "Other drawings and data deemed necessary by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or 105. of the <u>Rules.</u></p> <p>2. Shop tests [See Rule]</p> <p>In application to 202. 2 (J) of the Rules, the term "Other equipment deemed necessary by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or 105. of the <u>Rules.</u></p> <p>203. Survey Assigned to Maintain Classification</p> <p>1. Annual survey [See Rule]</p> <p>In application to 203. 2 (1) (B) (f) of the Rules, the term "Other equipment deemed necessary by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or 105. of the <u>Rules.</u></p> <p style="text-align: center;">Section 5 <same as the present Rules></p>

Present	Amendment
<p style="text-align: center;">Section 6 Bridge Work Assist Systems</p> <p>602. Bridge Work Assist Systems</p> <p>1. <same as the present Rules></p> <p>2. Bridge information system [See Rule]</p> <p>In application to 602. 2 (E) of the Rules, the term "Other functions deemed necessary by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or <u>105.</u> of the <u>Guidance.</u></p> <p>3. <same as the present Rules></p> <p>4. Auto tracking system [See Rule]</p> <p>In application to 602. 4 (G) of the Rules, the term "Other functions deemed necessary by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or <u>105.</u> of the <u>Guidance.</u></p>	<p style="text-align: center;">Section 6 Bridge Work Assist Systems</p> <p>602. Bridge Work Assist Systems</p> <p>1. <same as the present Rules></p> <p>2. Bridge information system [See Rule]</p> <p>In application to 602. 2 (E) of the Rules, the term "Other functions deemed necessary by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or 105. of the <u>Rules.</u></p> <p>3. <same as the present Rules></p> <p>4. Auto tracking system [See Rule]</p> <p>In application to 602. 4 (G) of the Rules, the term "Other functions deemed necessary by the Society" means the acceptance in accordance with Pt 1, Ch 1, 104. or 105. of the <u>Rules.</u></p>