Review of the Organization of Rules for Machinery

Amended Rules and Guidance

Rules for Approval of Manufacturers and Service Suppliers

Rules for the Survey and Construction of Steel Ships Parts B, D, H, K, I, P, and PS

Rules for Marine Pollution Prevention Systems

Rules for Automatic and Remote Control Systems

Rules for Preventive Machinery Maintenance Systems

Rules for Integrated Fire Control Systems

Rules for High Speed Craft

Rules for the Survey and Construction of Passenger Ships

Rules for the Survey and Construction of Inland Waterway Ships

Guidance for the Survey and Construction of Steel Ships Parts B, D, GF, H, K, N, P, and PS

Guidance for Automatic and Remote Control Systems

Guidance for Preventive Machinery Maintenance Systems

Guidance for High Speed Craft

Guidance for the Survey and Construction of Passenger Ships

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 ClassNK Rules regard waterjet propulsion systems and azimuth thrusters as "machinery installations with novel design features", and specifies requirements for them in annexes to Part D of the Guidance for the Survey and Construction of Steel Ships. In a similar manner, requirements for exhaust gas abatement systems (such as exhaust gas cleaning systems) were also specified in the annexes to said Part D.

Although the above-mentioned waterjet propulsion systems and azimuth thrusters as well as exhaust gas abatement systems are not necessarily provided on all ships, ClassNK still considers them to be important systems. Thus, relevant requirements were amended so as to transfer the annexes related to such systems from the Guidance for Part D to the corresponding Part D of the Rules for the Survey and Construction of Steel Ships as part of a comprehensive review of the ClassNK Rules.

In addition to the above, relevant requirements were amended so that requirements for diesel engines could be applied to all other types of reciprocating internal combustion engines as well as to harmonize the testing requirements for reciprocating internal combustion engines using gas as fuel throughout the ClassNK Rules.

Outline of Amendment

The main details of the amendment are as follows:

- (1) Transferred the requirements for the following machinery from the annexes of Part D of Guidance for the Survey and Construction of Steel Ships to Chapters 19 to 23 of Part D of the Rules for the Survey and Construction of Steel Ships as well as to relevant chapters of Part B and of the Rules for the Survey and Construction of Steel ships and other ClassNK technical rules.:
 - (a) waterjet propulsion systems;

- (b) azimuth thrusters;
- (c) selective catalytic reduction systems and associated equipment;
- (d) exhaust gas cleaning systems and associated equipment; and
- (e) exhaust gas recirculation systems and associated equipment.
- (2) Amended the terms related to reciprocating internal combustion engines so that the requirements for diesel engines could be applied directly to all other types of reciprocating internal combustion engines unless otherwise specified in legal mandatory regulations such as SOLAS Convention or MARPOL Convention.
- (3) Harmonized the expressions used to identify the purposes of prime movers in all relevant requirements to eliminate any inconsistency.
- (4) Amended testing requirements for reciprocating internal combustion engines using gas as fuel installed on high speed craft and inland waterway ships so as to harmonize said requirements with those applied to steel ships.

Amended Requirements

Rules for Approval of Manufacturers and Service Suppliers

Part 2: Title of 4.2, 4.2.1, 4.7.1

Rules for the Survey and Construction of Steel Ships

Parts B: 1.1.3, 1.2.3, 1.2.4, 2.1.2, 2.1.3, 2.1.6, 2.3.1, 3.3.1, 3.3.4, 3.3.5, Table B3.7, 4.3.4, 4.3.5, 5.3.4, 5.3.5, Table B5.25, 6.1.1, Table B6.1, 6.1.3, 8.1.3, Table B9.1

Parts D: 1.3.1, Title of Chapter 2, 2.1.1, 2.1.3, 2.1.4, 2.2.1, 2.2.2, Table D2.1, 2.3.1, 2.4.1, 2.4.2, 2.4.3, 2.4.5, Table D2.5, 2.5.3, 2.5.4, 2.5.5, 2.6.1, Table D2.6, 3.2.2, 3.3.1, 3.3.2, 3.3.3, Table D5.1, Table D6.1, 7.3.1, 8.1.1, 8.1.2, 8.1.3, 8.2.1, 8.2.2, 8.2.3, 8.2.5, 9.1.2, 9.13.3, 13.5.7, 13.9.1, 13.9.4, 13.9.6, 13.10.2, 13.10.4, 13.12.1, 13.12.3, 13.16.1, 18.2.2, 18.2.7, 18.3.2, 18.3.4, 18.5.1, 18.5.2, Table D18.2, 18.6.9, Chapter 19, Chapter 20, Chapter 21, Chapter 22, Chapter 23, Chapter 24, Chapter 25

Parts H: 2.4.1, 2.4.11, Table H2.3, 2.9.11, 3.5

Parts K: 5.1.13

Part I: 1.1.3

Parts P: 11.1.2, 11.1.15

Parts PS: 6.3.3, 6.4.4, 7.1.2, Title of 7.2, 7.2.1, Title of 7.4, 7.4.1, 7.6.1

Rules for Marine Pollution Prevention Systems

Part 1: 1.1.4

Rules for Automatic and Remote Control Systems

2.2.5, 3.2.2, 3.3.2, 3.3.4, Table 3.1, Table 3.2, Table 3.4, Table 3.7, Table 3.9, 4.2.1

Rules for Preventive Machinery Maintenance Systems

3.2.2, 3.2.3, 3.2.4, 3.2.6, Table 3.1, Title of Table 3.2, Table 3.3

Rules for Integrated Fire Control Systems

1.1.6, 4.2.1, 4.5.1, 4.6.1

Rules for High Speed Craft

Part 2: 2.1.2, 2.1.3, 2.1.6, 3.6.2, 3.6.3, 3.7.3, 3.8.1, 3.8.4, Table 3.10.1

Part 9: 1.2.1, 1.3.1, 1.3.2, Title of Chapter 2, 2.1.1, 2.1.3, 2.1.4, 2.1.5, 2.2.1, 2.2.3, 2.3.2, 2.3.4, 2.3.5, 5.4.1, 8.8.1, 8.8.7, 8.9.2, 8.11.1, 8.11.3, 8.15, 13.1.1, 13.2.1

Rules for the Survey and Construction of Passenger Ships

Part 5: 1.1.1, 2.3.7, 4.2.1, 4.3.1, 4.3.2

Rules for the Survey and Construction of Inland Waterway Ships

Part 2: 1.1.3, 1.2.3, 2.1.2, 2.1.3, 2.1.6, 2.3.1, 3.3.3, 3.3.4, 4.3.4, 4.3.5, Table 2.5.6, 5.3.4, 5.3.5, 6.1.1, Table 2.6.1, 8.1.3, Table 2.9.1, Table 2.9.2

Part 7: 1.3.1, Title of Chapter 2, 2.1.1, 2.1.3, 2.1.4, 2.2.1, 2.2.2, Table 7.2.1, 2.3.1, 2.4.1,

2.4.2, 2.4.3, 2.4.5, Table 7.2.5, 2.5.3, 2.5.4, 2.5.5, 2.6.1, Table 7.2.6, Table 7.3.1, Table 7.4.1, 5.3.1, 6.1.1, 6.1.2, 6.1.3, 6.2.1, 6.2.2, 6.2.3, 6.2.5, 7.1.2, 7.4.3, 11.9.4, 11.9.6, 11.10.2, 11.10.3, 11.12.1, 11.12.3, 11.15.1, 14.2.2, 14.2.7, 14.3.2, 14.3.4, 14.5.1, 14.6.9

Part 8: 2.4.1, 2.4.11, Table 8.2.3, 3.3

Guidance for the Survey and Construction of Steel Ships

Parts B: B1.1.3, B1.2.3, B1.2.4, B2.3.1, Table B2.3.1-5, B2.5.1, B8.1.3, B9.1.1, B9.1.2, B9.1.3, Annex B2.1.4-3(3)(h)i): 1.2.2

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Parts D: D1.1.1, D1.1.3, D1.3.1, Title of D2, D2.1.1, Title of D2.1.4, D2.1.4, Title of Fig. D2.1.4-1, D2.5.3, D2.6.1, Table D2.6.1-1, D6.2.6, D8.2.2, D8.2.4, D9.12.3, D13.9.6, D13.9.7, D13.12.1, Title of D13.12.3, D13.16.1, Annex D1.1.3-1, Annex D1.1.3-2, Annex D1.1.3-3, Annex D1.3.1-5(1), Annex D1.3.1-5(2), Title of Annex D2.1.1, Annex D2.1.1: 1.1.1, 1.1.3, 4.1.2, Annex D2.1.1-5, Annex D2.3.1-2(1): 1.1, Annex D2.3.1-2(2): 1.1, Annex D5.3.5: 1.5.1, Annex D6.2.13: Table 1.1.1-1, 1.2.3, 1.2.4, 1.3.1, 1.3.2

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Parts GF: Annex 3: 1.1, Annex 4: 1.1

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Parts H: H2.3.5

Guidance for the Survey and Construction of Steel Ships

Parts K: K5.1.9, K5.1.10, K6.1.9, K6.1.10, Title of Annex K5.1.9(2), Title of Annex K6.1.9(2), Annex K6.1.9(2): 1.1, Annex K6.1.10(1): Table 4

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Parts N: N16.1.1, Title of Annex 3, Annex 3/1.1, Title of Annex 4, Annex 4/1.1

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Parts P: P11.1.15, Table P11.1.15-1, P12.1.8

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Title of PS7.4, PS8.3.1

Guidance for Automatic and Remote Control Systems

1.2.1, 2.2.5, Title of Fig. 2.2.5-1, Title of Fig. 2.2.5-2

Guidance for Preventive Machinery Maintenance Systems

Title of 3.2.3, Title of 3.2.4, 3.2.4

Guidance for High Speed Craft

Part 2: 2.3.1, 2.5.1, 3.10.1, 3.10.2, 3.10.3

Part 9: 1.2.1, Title of Chapter 2, 2.1.1, Title of 2.1.4, 2.1.4, Title of Fig. 2.1.4-1

Part 10: 2.3.5

Guidance for the Survey and Construction of Passenger Ships

Part 5: 1.1.1

Part 6: 2.2.1, 2.3.1

Guidance for the Survey and Construction of Inland Waterway Ships

Part 2: 1.1.3, 1.2, 2.3.1, Table 2.2.3.1-5, 2.4.1, 9.1.1, 9.1.2, 9.1.3

Part 7: 1.1.1, 1.1.3, 1.3.1, Title of Chapter 2, 2.1.1, Title of 2.1.4, 2.1.4, Title of Fig. 7.2.1.4-1, 2.5.3, 2.6.1, Table 7.2.6.1-1, 4.2.4, 6.2.2, 6.2.4, 7.3.3, 11.9.6, Title of 11.12.3, 11.15

Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use Part 6: Title of Chapter 8, 8.1.1, 8.1.2, 8.2.2, 8.5.2, 8.6.5, Title of Fig. 6.8-2, Title of Chapter 10, 10.1.1, 11.4.2

Part 7: Table 7.1-1, 6.3.3