# RULES FOR AUTOMATIC AND REMOTE CONTROL SYSTEMS

**Rules for Automatic and Remote Control Systems**

**2017    AMENDMENT NO.1**

Rule No.32        1st June 2017

Resolved by Technical Committee on 30th January 2017

Approved by Board of Directors on 20th February 2017

**ClassNK**

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

Rule No.32    1st June 2017
AMENDMENT TO THE RULES FOR AUTOMATIC AND REMOTE CONTROL SYSTEMS

"Rules for automatic and remote control systems" has been partly amended as follows:

## Chapter 3    CENTRALIZED MONITORING AND CONTROL SYSTEMS FOR MACHINERY

### 3.3    Additional Requirements for Safety Measures

### 3.3.2    Main Propulsion Machinery or Controllable Pitch Propellers

Table 3.1 has been amended as follows.

Table 3.1        Main Propulsion Diesel Engine (and Gearing)

| Monitored Variables | | Alarms | Remarks |
|---|---|---|---|
| Temperature | | (Omitted) | |
| Pressure | | (Omitted) | |
| Others | Oily contamination of cylinder cooling water | H | in cases where cylinder cooling water is used in F.O. or L.O. heat exchangers |
| | Piston coolant flow rate for cylinder outlets | L | in the case of crosshead engines<br>Non –flow alarms may be accepted. Other alternative means may be accepted where it is impracticable to monitor piston coolant flows due to engine design. |
| | Cylinder oil flow rates for lubricators | L | non-flows may be accepted |
| | Scavenge air receiver water levels | H | alternative means may be accepted |
| | Wrong way | ○ | in the case of self-reversing engines |
| | Failure of engine starting | ○ | |
| | Leakage from F.O. burning pipes, level in leakage tanks | ○ | |
| | <u>Revolutions of turbochargers</u> | <u>H</u> | <u>applied only to categories *B* and *C* turbochargers specified in</u> **2.1.2, Part D of the Rules for the Survey and Construction of Steel Ships,** <u>with novel design features or no service records</u> |

Note : "H" and "L" mean high and low. "○" means abnormal condition occurred. Same meaning is applied to **Table 3.1** to **3.9**.

### 3.3.4    Generating Sets

Table 3.4 has been amended as follows.

Table 3.4    Electric Generating Sets

| Monitored Variables | | Alarms | Remarks |
|---|---|---|---|
| Diesel engine for generator | | | |
| Temperature | (Omitted) | | |
| Pressure | (Omitted) | | |
| Others | Leakage from F.O. burning pipes, levels leakage tanks | ○ | |
| | Revolutions of turbochargers | H | applied only to the categories *B* and *C* turbochargers specified in **2.1.2, Part D of the Rules for the Survey and Construction of Steel Ships,** with novel design features or no service records |
| Steam turbine for generator | | | |
| Temperature | (Omitted) | | |
| Pressure | (Omitted) | | |
| Main generator | | | |
| Electricity | (Omitted) | | |
| Propulsion generator | | | |
| Electricity | (Omitted) | | |
| Temperature | (Omitted) | | |
| Pressure | (Omitted) | | |

### 3.3.6    Prime Movers Driving Auxiliary Machinery

Table 3.7 has been amended as follows.

Table 3.7    Engine Driving Auxiliary Machinery

| Monitored Variables | | Alarms | Remarks |
|---|---|---|---|
| Diesel engines | | | |
| Temperature | (Omitted) | | |
| Pressure | (Omitted) | | |
| Others | Leakage from F.O. burning pipes, levels in leakage tanks | ○ | |
| | Revolutions of turbochargers | H | applied only to categories *B* and *C* turbochargers specified in **2.1.2, Part D of the Rules for the Survey and Construction of Steel Ships,** with novel design features or no service records |
| Turbine | | | |
| Temperature | (Omitted) | | |
| Pressure | (Omitted) | | |

## EFFECTIVE DATE AND APPLICATION

**1.** The effective date of the amendments is 1 July 2017.

**2.** Notwithstanding the amendments to the Rules, the current requirements apply to diesel engines for which the date of application for approval is before the effective date and which are installed on ships for which the date of contract for construction\* is before the effective date.

> \* "contract for construction" is defined in the latest version of IACS Procedural Requirement (PR) No.29.

### IACS PR No.29 (Rev.0, July 2009)

**1.** The date of "contract for construction" of a vessel is the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding.

**2.** The date of "contract for construction" of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder.

For the purpose of this Procedural Requirement, vessels built under a single contract for construction are considered a "series of vessels" if they are built to the same approved plans for classification purposes. However, vessels within a series may have design alterations from the original design provided:

(1) such alterations do not affect matters related to classification, or

(2) If the alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the alterations are submitted to the Society for approval.

The optional vessels will be considered part of the same series of vessels if the option is exercised not later than 1 year after the contract to build the series was signed.

**3.** If a contract for construction is later amended to include additional vessels or additional options, the date of "contract for construction" for such vessels is the date on which the amendment to the contract, is signed between the prospective owner and the shipbuilder. The amendment to the contract is to be considered as a "new contract" to which **1.** and **2.** above apply.

**4.** If a contract for construction is amended to change the ship type, the date of "contract for construction" of this modified vessel, or vessels, is the date on which revised contract or new contract is signed between the Owner, or Owners, and the shipbuilder.

Note:
This Procedural Requirement applies from 1 July 2009.