Pressure Relief Systems for Gas-fuelled Engines

Amended Guidance

Guidance for the Survey and Construction of Steel Ships Parts GF and N

Reason for Amendment

With regard to gas-fuelled engines installed in ships using liquified gas fuels and/or carrying liquefied gas cargoes, there is a risk of explosion due to stagnating gas vapour resulting from flame failure and methane slip, etc.; therefore, Chapter 10 of the IGF Code and Chapter 16 of IGC Code specify that pressure relief devices are to be fitted to the main components of gas-fuelled engines so as to protect them from such explosions.

The use of non-self-closing pressure relief devices such as rupture discs in enclosed spaces, however, might result in a lack of oxygen within the space; for example, the continuous discharge of exhaust gas into the enclosed space lead to such a situation. Consequently, it was considered that the gas discharged from such devices needs to be released at appropriate locations.

As a result of a review of requirements for the pressure relief systems for gas-fuelled engines, relevant requirements were amended.

Outline of Amendment

(1) With regard to the Guidance for Parts GF and N, and their associated annexes, specified that the pressure relief systems for gas-fuelled engines are not to continuously discharge exhaust gas into enclosed spaces.

(2) Similarly to the Rules for Parts GF and N, specified in the annexes of Parts GF and N that venting due to activation of the pressure relief systems for gas-fuelled engines is to be led away from locations where personnel may normally be present.

Amended Requirements

Guidance for the Survey and Construction of Steel Ships
Part GF: GF10.2.2, Annex 3 2.3.2, Annex 4 2.3.2
Part N: N16.7, Annex 3 2.3.2, Annex 4 2.3.2