

Fire Safety Measures for Vehicle Carriers Transporting Motor Vehicles Powered by Compressed Hydrogen or Compressed Natural Gas

Amended Rules and Guidance

Rules for the Survey and Construction of Steel Ships Parts A, B, H, and R
Guidance for the Survey and Construction of Steel Ships Parts A, B, and R

Reason for Amendment

SOLAS regulation II-2/20, which specifies requirements related to additional fire safety measures for the vehicle, special category and ro-ro spaces of ships used to transport motor vehicles powered by gasoline. In recent years, the increase in the number of motor vehicles powered by fuel other than gasoline, such as compressed hydrogen and compressed natural gas, due to environmental concerns has led to a corresponding increase in the number of ships transporting such vehicles. In response, IMO reviewed the existing requirements to determine whether requirements related to additional fire safety measures for vehicle carriers transporting such motor vehicles were needed.

As a result of this review, IMO established SOLAS II-2/20-1, which specifies additional fire safety measures for vehicle carriers with multi deck ro-ro spaces designed for the carriage of cars and trucks powered by compressed hydrogen and compressed natural gas as cargo. The new requirements were adopted as resolution MSC.365(93) at the 93rd Session of the IMO Maritime Safety Committee (MSC93) held in May 2014.

Accordingly, all relevant requirements were amended based upon MSC.365(93).

Outline of Amendment

- (1) Added the definition of “vehicle carrier” to the ships subject to the relevant requirements.
- (2) Specified the fire safety measures for new ships as follows:
 - (a) Electrical equipment, etc. in vehicle spaces is to be of a certified safe type for use in explosive hydrogen or methane and air mixtures; and
 - (b) At least two portable gas detectors of a safe type for use in explosive gas and air mixtures are to be provided.
- (3) Specified that the portable gas detectors referred to in (2)(b) above are also to be provided for existing ships.
- (4) Specified that corresponding notations are to be affixed to the classification characters of vehicle carriers transporting motor vehicles powered by compressed hydrogen and compressed natural gas.
- (5) Specified that fans fitted in vehicle spaces are to be designed such as to not generate sparks, etc. when in use.