

Arrangement of Fixed Fire Detection and Alarm Systems Required for Control Stations in Cargo Ships

Object of Amendment

Rules for the Survey and Construction of Steel Ships Part R
Guidance for the Survey and Construction of Steel Ships Part R

Reason for Amendment

SOLAS Chapter II-2 requires fixed fire detection and fire alarm systems be installed in machinery spaces, accommodation spaces, service spaces, control stations and cargo spaces. The IMO, however, subsequently published an interpretation of relevant requirements in Chapter II-2 as MSC.1/Circ.1456 to clarify that control stations on cargo ships do not need to be covered by such systems, and this interpretation has already been incorporated into the NK Rules.

Navigation bridges during anchoring, machinery control rooms during voyage and cargo control stations during voyage are typically unmanned, and fires breaking out in such spaces at such times might go undetected for a long time. For this reason, amendments to MSC.1/Circ.1456 and Chapter II-2 were proposed at the 101st session of the IMO Maritime Safety Committee (MSC 101) in June 2019. These amendments were discussed by the MSC and subsequently adopted as MSC 550(108) and MSC.1/Circ.1456/Rev.1 at MSC 108 in May 2024.

Accordingly, relevant requirements are amended based on MSC.550(108) and MSC.1/Circ.1456/Rev.1.

Outline of the Amendment

Amends requirements related to the installation of smoke detectors in all cargo control rooms and control stations.

Effective Date and application

This draft amendment applies to ships the keels of which are laid or which are at a similar stage of construction on or after 1 January 2026.

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

ID:DX24-17

Amended-Original Requirements Comparison Table
(Arrangement of Fixed Fire Detection and Alarm System Required for Control Stations in Cargo Ships)

Amended	Original	Remarks
<p>RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS</p> <p>Part R FIRE PROTECTION, DETECTION AND EXTINCTION</p> <p>Chapter 7 DETECTION AND ALARM</p> <p>7.5 Protection of Accommodation and Service Spaces and Control Stations</p> <p>7.5.1 Fire Detection and Fire Alarm Systems* Accommodation and service spaces and control stations of ships are to be protected by a fixed fire detection and fire alarm system and/or an automatic sprinkler, fire detection and fire alarm system as follows depending on a protection method adopted in accordance with 9.2.2. Where deemed necessary by the Society, additional smoke detectors in ventilation ducts may be required.</p> <p>(1) Method IC A fixed fire detection and fire alarm system is to be so installed and arranged as to provide smoke detection in all corridors, stairways and escape routes within accommodation spaces, <u>and in all control stations and cargo control rooms.</u></p> <p>(2) Method IIC An automatic sprinkler, fire detection and fire alarm system of a type deemed appropriate by the Society</p>	<p>RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS</p> <p>Part R FIRE PROTECTION, DETECTION AND EXTINCTION</p> <p>Chapter 7 DETECTION AND ALARM</p> <p>7.5 Protection of Accommodation and Service Spaces and Control Stations</p> <p>7.5.1 Fire Detection and Fire Alarm Systems* Accommodation and service spaces and control stations of ships are to be protected by a fixed fire detection and fire alarm system and/or an automatic sprinkler, fire detection and fire alarm system as follows depending on a protection method adopted in accordance with 9.2.2. Where deemed necessary by the Society, additional smoke detectors in ventilation ducts may be required.</p> <p>(1) Method IC A fixed fire detection and fire alarm system is to be so installed and arranged as to provide smoke detection in all corridors, stairways and escape routes within accommodation spaces.</p> <p>(2) Method IIC An automatic sprinkler, fire detection and fire alarm system of a type deemed appropriate by the Society</p>	

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<p>and complying with the relevant requirements of Chapter 28 is to be so installed and arranged as to protect accommodation spaces, galleys and other service spaces, except spaces which afford no substantial fire risk such as void spaces, sanitary spaces, etc. In addition, a fixed detection and fire alarm system is to be so installed and arranged as to provide smoke detection in all corridors, stairways and escape routes within accommodation spaces, <u>and in all control stations and cargo control rooms.</u></p> <p>(3) <i>Method IIIC</i> A fixed fire detection and fire alarm system is to be so installed and arranged as to detect the presence of fire in all accommodation spaces and service spaces, except spaces which afford no substantial fire risk such as void spaces, sanitary spaces, etc. In addition, a fixed fire detection and fire alarm system is to be so installed and arranged as to provide smoke detection in all corridors, stairways and escape routes within accommodation spaces, <u>and in all control stations and cargo control rooms.</u></p>	<p>and complying with the relevant requirements of Chapter 28 is to be so installed and arranged as to protect accommodation spaces, galleys and other service spaces, except spaces which afford no substantial fire risk such as void spaces, sanitary spaces, etc. In addition, a fixed detection and fire alarm system is to be so installed and arranged as to provide smoke detection in all corridors, stairways and escape routes within accommodation spaces.</p> <p>(3) <i>Method IIIC</i> A fixed fire detection and fire alarm system is to be so installed and arranged as to detect the presence of fire in all accommodation spaces and service spaces, except spaces which afford no substantial fire risk such as void spaces, sanitary spaces, etc. In addition, a fixed fire detection and fire alarm system is to be so installed and arranged as to provide smoke detection in all corridors, stairways and escape routes within accommodation spaces.</p>	

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Amended	Original	Remarks
<p>GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS</p> <p>Part R FIRE PROTECTION, DETECTION AND EXTINCTION</p> <p>R7 DETECTION AND ALARM</p> <p>R7.5 Protection of Accommodation and Service Spaces and Control Stations</p> <p>R7.5.1 Fire Detection and Fire Alarm Systems (-1 is omitted.)</p> <p>2 In case where the central control station is arranged as shown in Fig. R7.5.1-1, the spaces of such control stations which can be regarded as the service spaces are to be provided with the fire detection system conforming to the requirements of Chapter 29, Part R of the Rules and the space of such control stations which can be regarded as the navigation bridge is to be provided with manual call points. However, in case where a general alarm system is provided, such manual call points are not necessary. (Deleted)</p>	<p>GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS</p> <p>Part R FIRE PROTECTION, DETECTION AND EXTINCTION</p> <p>R7 DETECTION AND ALARM</p> <p>R7.5 Protection of Accommodation and Service Spaces and Control Stations</p> <p>R7.5.1 Fire Detection and Fire Alarm Systems (-1 is omitted.)</p> <p>2 In case where the central control station is arranged as shown in Fig. R7.5.1-1, the spaces of such control stations which can be regarded as the service spaces are to be provided with the fire detection system conforming to the requirements of Chapter 29, Part R of the Rules and the space of such control stations which can be regarded as the navigation bridge is to be provided with manual call points. However, in case where a general alarm system is provided, such manual call points are not necessary.</p> <p>3 <u>With respect to the requirement of 7.5.1, Part R of the Rules, unless otherwise specified in -2 above, control stations need not be covered by a fixed fire detection and fire alarm system.</u></p>	

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Amended	Original	Remarks
EFFECTIVE DATE AND APPLICATION		
<ol style="list-style-type: none"> 1. The effective date of the amendments is 1 January 2026. 2. Notwithstanding the amendments to the Amendments, the current requirements may apply to ships the keel of which were laid or which were at a similar stage of construction before the effective date. (Note) The term “a similar stage of construction” means the stage at which the construction identifiable with a specific ship begins and the assembly of that ship has commenced comprising at least 50 <i>tonnes</i> or 1% of the estimated mass of all structural material, whichever is the less. 		

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