

Bulkhead Valves

Amended Rules and Guidance

Rules for the Survey and Construction of Steel Ships Part D
Rules for the Survey and Construction of Passenger Ships
Guidance for the Survey and Construction of Steel Ships Part D
Guidance for the Survey and Construction of Passenger Ships

Reason for Amendment

Requirements related to valves fitted to pipes that penetrate collision bulkheads (hereinafter referred to as “bulkhead valves”) are specified in the Rules for the Survey and Construction of Steel Ships Part D and the Rules for the Survey and Construction of Passenger Ships. These requirements are based on corresponding SOLAS regulations (SOLAS regulation II-1/12).

At the 102nd Session of the IMO Maritime Safety Committee (MSC 102) held in November 2020, amendments to SOLAS regulations related to bulkhead valves were adopted by the IMO as resolution MSC.474(102); in addition, a circular which permits the voluntary early implementation of said amendments was adopted as MSC.8/Circ.1

Therefore, relevant requirements were amended in accordance with MSC.474(102) and MSC.8/Circ.1.

Outline of Amendment

Amended requirements related to the bulkhead valves.

“Rules for the survey and construction of steel ships” has been partly amended as follows:

Part D MACHINERY INSTALLATIONS

Chapter 13 PIPING SYSTEMS

13.2 Piping

13.2.5 Bulkhead Valves*

Sub-paragraph -2 has been amended as follows.

2 Pipes passing through collision bulkheads are to be in accordance with the following (1) or (2):

- (1) ~~Pipes passing through collision bulkheads are to be fitted with the~~ A suitable screw-down valves or butterfly valves suitably supported by a seat or flanges that are operable from above the freeboard deck are to be fitted with and valve chests are to be secured to a bulkhead located inside the forepeak. However, these valves may be fitted on the aft side of the collision bulkhead in question provided that the valves are readily accessible under all service conditions, and that the space in which they are located is not a cargo space. Remote control devices for these valves may be omitted.
- (2) Notwithstanding (1) above, in case where deemed appropriate by the Society, a remotely controlled valve capable of being operated from above the freeboard deck is to be fitted. The valve is to be normally closed. If the remote control system failure during operation of the valve, the valve is to be close automatically or be capable of being closed manually from a position above the freeboard deck. The valve may be located at the collision bulkhead on either the forward or aft side, provided the space on the aft side is not a cargo space.

“Rules for the survey and construction of passenger ships” has been partly amended as follows:

Part 3 HULL CONSTRUCTION AND EQUIPMENT

Chapter 6 WATERTIGHT BULKHEAD AND THE OPENING

6.3 Openings of Watertight Bulkhead

6.3.1 Arrangement of Openings (SOLAS Chap.II-1 Reg.12.4, 12.5, 12.8, 13.1, 13.2, 13.3, 13.4 and 15.8.5)*

Sub-paragraph -3 has been amended as follows.

3 Except as provided in paragraph -4, pipes passing through collision bulkheads are to be in accordance with the following (1) or (2):

- (1) the collision bulkhead may be pierced below the bulkhead deck by not more than one pipe for dealing with fluid in the fore peak tank, provided that the pipe is fitted with a screw down valve capable of being operated from above the bulkhead deck, the valve chest being secured inside the fore peak to the collision bulkhead. The Society may, however, authorize the fitting of this valve on the after side of the collision bulkhead provided that the valve is readily accessible under all service conditions and the space in which it is located is not a cargo space.
- (2) Notwithstanding (1) above, in case where deemed appropriate by the Society, the collision bulkhead may be pierced below the bulkhead deck by not more than one pipe for dealing with fluid in the forepeak tank, provided that the pipe is fitted with a remotely controlled valve capable of being operated from above the bulkhead deck. The valve is to be normally closed. If the remote control system failure during operation of the valve, the valve is to be close automatically or be capable of being closed manually from a position above the bulkhead deck. The valve may be located at the collision bulkhead on either the forward or aft side, provided the space on the aft side is not a cargo space.

“Guidance for the survey and construction of steel ships” has been partly amended as follows:

Part D MACHINERY INSTALLATIONS

D13 PIPING SYSTEMS

D13.2 Piping

D13.2.5 Bulkhead Valves

Sub-paragraph -5 has been added as follows.

1 With respect to the provisions of **13.5.10, Part D of the Rules**, bulkhead valves capable of being brought into operation from a readily accessible enclosed space, the location of which is accessible from the navigation bridge or continuously manned propulsion machinery control rooms without traversing exposed decks, may be accepted as an alternative to valves operable from above the freeboard deck required by the provisions of **13.2.5-2, Part D of the Rules**.

2 Pipes penetrating stern tanks are to be fitted with stop valves at the fore side of the bulkhead.

3 The requirements for pipes piercing collision bulkheads specified in **13.2.5-1 and -2, Part D of the Rules** apply only to those extending below the freeboard deck. However, in accordance with the provisions of **13.1.5(2), Part C of the Rules**, those pipes piercing the extension part of the collision bulkhead (the weathertight part above the freeboard deck) and opening into enclosed spaces behind such bulkheads, are to be fitted with non-return valves on the aft side of the bulkhead.

4 The number of pipes piercing the collision bulkhead specified in **13.2.5-2, Part D of the Rules**, is to be in principle just one. Where the forepeak is divided to hold two different kinds of liquids, the Society may allow the collision bulkhead to be pierced below the freeboard deck by two pipes. However, the Society is satisfied that there is no practical alternative to the fitting of such a second pipe and, that having regard to the additional subdivision provided in the forepeak, the safety of the ship is maintained. In addition, valves complied with the requirements in **13.2.5-2, Part D of the Rules**, are to be fitted.

5 The wording “where deemed appropriate by the Society” in **13.2.5-2(2), Part D of the Rules** means cases where the Administration has decided on the voluntary early implementation of the amendments in resolution in accordance with *MSC.8/Circ.1*.

“Guidance for the survey and construction of passenger ships” has been partly amended as follows:

Part 3 HULL CONSTRUCTION AND EQUIPMENT

Chapter 6 WATERTIGHT BULKHEAD AND THE OPENING

6.3 Openings of Watertight Bulkhead

6.3.1 Arrangement of Openings

Sub-paragraph -3 has been added as follows.

1 “One pipe for dealing with fluid in the fore peak tank” specified in **6.3.1-3, Part 3** of the Rules means the pipe for ballasting. And, a void and a similar place are not included in the place meaning the wording “readily accessible under all service conditions” in **6.3.1-3, Part 3** of the Rules.

2 “One door, apart from the doors to shaft tunnels, may be fitted in each main transverse bulkhead” specified in **6.3.1-5, Part 3** of the Rules means the entrance for access or construction. However, the entrance for construction is not to be installed in the transverse bulkhead having the openings closed by the removable plate which is fixed by the bolt.

3 The wording “where deemed appropriate by the Society” in **13.2.5-2(2), Part D of the Rules** means cases where the Administration has decided on the voluntary early implementation of the amendments in resolution in accordance with *MSC.8/Circ.1*.