SC 267 (Jan 2015) Implementation of the requirements relating to lifeboat release and retrieval systems (LSA Code Paragraph 4.4.7.6 as amended by resolution MSC.320(89))

LSA Code, paragraph 4.4.7.6.9, as amended by resolution MSC.320(89):

.9 all components of the hook unit, release handle unit, control cables or mechanical operating links and the fixed structural connections in a lifeboat shall be of material corrosion resistant in the marine environment without the need for coatings or galvanizing. ...

Interpretation

All Interlocks ("mechanical protection" of on load release), which include hydrostatic components in the operating mechanism, shall also be of material corrosion resistant in the marine environment.

Where stainless steel having a Pitting Resistance Equivalent Number (PREN = 1 • %Cr + 3.3 (%Mo + 0.5 • %W) + 16 • %N) of 25 or more is chosen, such stainless steel do not need to be subjected to ISO 9227:2012 or other equivalent recognized national standard.

Where stainless steel having a PREN < 25, or another corrosion resistant material/alloy is chosen, the material is to be qualified by corrosion test according to ISO 9227:2012 or other equivalent recognized national standard. When the test is carried out in accordance with ISO 9227:2012, neutral salt spray (NSS) is to be used, with 1000 hours test duration for components outside the lifeboat, and 160 hours for those inside the lifeboat. The salt spray tests may be conducted by using round specimens (diameter is 14mm) according to IACS UR W2.4.2.

After the salt spray test, the release mechanism shall be subjected to load and release test as described in resolution MSC.81(70), as amended by resolution MSC.321(89), part 1, paragraph 6.9.4.1 to demonstrate satisfactory operation. The load and release shall be repeated 10 times. Where specimens are used for the salt spray tests, tensile tests shall be conducted in lieu of the load and release test. The results from the tests shall in order to verify that the reduction in the ultimate tensile strength and reduction in cross sectional area ratio is less than 5% between corrosion tested and non-corrosion tested specimens.

Where austenitic stainless steels (e.g. 316L or 316) are used for welded structures, the risk of sensitisation to intergranular corrosion is to be addressed by the component manufacturer's quality control system.

Austenitic stainless steels 201, 304, 321, 347 are susceptible to pitting and crevice corrosion, and therefore unsuitable for these applications.

NOTE:

1. This Unified Interpretation is to be uniformly implemented by IACS Societies for approvals issued in accordance with SOLAS III/34 and the LSA Code on or after 1 January 2016.

SC 267 (cont)

LSA Code, paragraph 4.4.7.6.7.2, as amended by resolution MSC.320(89):

... This release mechanism shall be provided with a hydrostatic interlock unless other means are provided to ensure that the boat is waterborne before the release mechanism can be activated. In case of failure or when the boat is not waterborne, there shall be a means to override the hydrostatic interlock or similar device to allow emergency release ...

LSA Code, paragraph 4.4.7.6.6, as amended by resolution MSC.320(89):

.6 if a hydrostatic interlock is provided, it shall automatically reset upon lifting the boat from the water.

Interpretation

The reset function as required by paragraph 4.4.7.6.6 is also to apply to the “other means” or “similar device” referred to in paragraph 4.4.7.6.7.2.

Where a safety pin is fitted to facilitate compliance with SOLAS regulation III/1.5 then, in line with paragraph 4 of the Annex to MSC.1/Circ.1327, the safety pin arrangement must be acceptable to the hook manufacturer (as defined in paragraph 9.9 of the Annex to MSC.1/Circ.1392).

LSA Code, paragraph 4.4.7.6.14, as amended by resolution MSC.320(89):

.14 the load-bearing components of the release mechanism and the fixed structural connections in the lifeboat shall be designed with a calculated factor of safety of 6 based on the ultimate strength of the materials used, and the mass of the lifeboat when loaded with its full complement of persons, fuel and equipment, assuming the mass of the lifeboat is equally distributed between the falls, except that the factor of safety for the hanging-off arrangement may be based upon the mass of the lifeboat when loaded with its full complement of fuel and equipment plus 1,000 kg; ...

Interpretation

The hanging off arrangement (including the connections to the lifeboat RRS and davit) shall be designed with a calculated factor of safety of 6 based on the ultimate strength of the materials used, and mass of the lifeboat when loaded with its full complement of fuel and equipment plus 1,000 kg equally distributed between the falls.

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