

January 2020

Safety risks of lifting slings encased in plastic sheathing on freefall lifeboats

This update is issued to raise awareness of the potential risk of using lifting slings encased in plastic sheathing for freefall lifeboats.

This safety update is for

- Ship owners and operators
- Surveyors and recognised organisations
- Maritime Administrations, their officers, investigators and technical advisors



Figure 1. Lifting sling encased in plastic sheathing

Ships that use lifting slings encased in plastic sheathing for freefall lifeboats

There is reason for concern with regard to lifting slings used for secondary means of launching free-fall lifeboats, which are encased in plastic sheathing.

Such arrangements have been found to restrict visual inspection of the wire ropes enclosed within and furthermore, prevent routine maintenance and survey being effectively carried out. As a result, the wire ropes may be seriously corroded due to passage of moisture/air inside and yet go undetected.

Serious incidents have occurred during launching and retrieval of freefall lifeboats using the secondary means of launching and retrieval with purpose built lifting slings encased in plastic sheathing. The slings have parted resulting in the freefall lifeboat plunging several meters into the sea with crew inside.

Investigations into the failure of the slings revealed that the slings parted under normal operational load due to significant weakening, as a result of internal corrosion. The internal corrosion within the sheathing went undetected, even though regular inspections were reportedly being carried out, as required by SOLAS Chapter III, Regulation 20 (Operational readiness, maintenance and inspections).



Figure 2. Corrosion beneath plastic sheathing.

Risk to safety

The presence of the plastic sheathing encasing the wire rope means that neither the crew nor the various surveyors tasked with inspecting the launching system can inspect and maintain the wire rope as required. by the International Maritime Organization Convention for the Safety of Life at Sea (SOLAS) and Res. MSC.402(96).

Furthermore, while it is a requirement under SOLAS Chapter III, Regulation 20.4 that falls used for launching of lifeboats are renewed when necessary if found deteriorated, or at intervals of not more than 5 years – there is no requirement in SOLAS for renewal of the slings used in secondary means of launching of freefall lifeboats. As such, many owners of vessels do not consider renewing the slings, as the true condition of the encased wire ropes cannot be correctly determined.



Figure 3. Lifting slings parted due to undetected corrosion.

What you should do

1. Masters and senior officers should physically check if freefall lifeboat lifting slings are encased in plastic sheathing.
2. Masters, senior officers and surveyors should physically inspect the sling for signs of corrosion beneath the sheathing.
3. Companies should consider means to ensure the inspection of slings encased in plastic sheathing and the risks posed by them is appropriately captured by their safety management system.
4. Consideration should be given to the use of slings without a plastic sheath, or an alternative method of encasing the sheath which allows for removal for inspection. Operators may wish to contact the lifeboat manufacturer for guidance in this regard.
5. Companies should ensure that the slings are renewed on a regular basis, using the same principle of maintenance of lifeboat falls as stipulated in SOLAS Chapter III, Regulation 20.4.

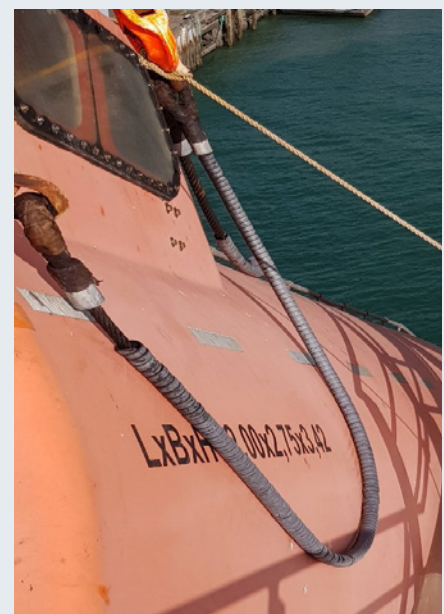


Figure 4. Alternative sheathing arrangement which allows for inspection