Offshore Special Regulation 3.14.6 – Lifelines

Minimum diameters, required materials, specification

A submission from the Life line Working Party, Special Regulations Sub-Committee

Purpose or Objective

To amend 3.14.6 following review by the working party established in 2013 to review material requirements as discussed in the attached paper “ISAF OSR Lifelines 140919”

Proposal

a) Lifelines shall be of:
   - stranded stainless steel wire, or
   - High Modulus Polyethylene (HMPE) (Dyneema®/Spectra® or equivalent) rope (Braid on braid is recommended)

b) The minimum diameter is specified in table 8 below

c) Stainless steel lifelines shall be uncoated and used without close-fitting sleeving, however, temporary sleeving may be fitted provided it is regularly removed for inspection.

d) When stainless wire is used, Grade 316 is recommended.

e) When HMPE (Dyneema®/Spectra®) is used, it shall be spliced in accordance with the manufacturer’s recommended procedures.

f) A taut lanyard of synthetic rope may be used to secure lifelines provided the gap it closes does not exceed 100 mm (4in). This lanyard shall be replaced annually at a minimum.

fg) All wire, fittings, anchorage points, fixtures and lanyards shall comprise a lifeline enclosure system which has at all points at least the breaking strength of the required lifeline wire.

TABLE 8 – Minimum Diameters

<table>
<thead>
<tr>
<th>LOA</th>
<th>Wire</th>
<th>HMPE rope (Single braid)</th>
<th>HMPE Core (Braid on braid)</th>
</tr>
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<tbody>
<tr>
<td>Under 8.5 m (28 ft)</td>
<td>3mm (1/8 in)</td>
<td>4mm (5/32 in)</td>
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<tr>
<td>8.5 m – 13 m</td>
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<td>5mm (3/16 in)</td>
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Current Position

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**Reason**

Previous research and test suggest that HMPE lifelines are capable of performing the necessary requirements that are met by wire lifelines in an ideal world, with correct assembly, associated materials, maintenance and usage. However, it is apparent that with the allowance of HMPE to be used for lifelines we have and will continue to see more failures than if HMPE is not permitted. The risk of crew members ending up in the water, both inshore and offshore is increased if HMPE lifelines are used rather than stainless steel wire, for reasons other than the materials ultimate strength, and for reasons that may be unrecognised by the crews until it is too late.