

Fact Sheet

Jacketline Inspection

16.09.2010

Installation

The rope should not be dragged over a rough surface. When the rope is dragged over the deck or a quay it can easily pick up dirt or grit and causing external abrasion on the cover of the mooring rope.

Avoid contact with sharp edges.

Avoid twist during installation of the mooring line.



Abrasion

The cover of the mooring rope isn't designed to withstand excessive external abrasion, caused by burrs, grooves or sharp edges. If abrasion does occur initially the cover becomes fuzzy and if the correct measures are not taken immediately then fibres in the cover will fail. This will lead to exposure of the inner load bearing cores. Exposure of the load bearing cores should be prevented by all means. Abrasion on the cover will have no influence on the strength of the rope but when the inner core is abraded the rope will lose strength.

If abrasion is noted then the cause should be found and if possible removed to prevent further chafing of the hawser. When the cover is damaged and the inner core is still 100% intact, then the cover can be repaired without restriction on the breaking strength of the mooring rope.

Abrasion-Related Wear



Wear and abrasion are the most common causes of rope failure. Rough surfaces, sharp edges, burrs, rust and dirt can cause serious damage to a rope. Winches, pulleys, chocks, bitts, etc. should be clean and in good condition.

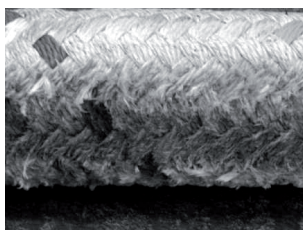
Wear and abrasion can occur over greater lengths or locally. Particular attention should be paid to the splice area and the eye.



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Damage Examples



Damage

Mild external abrasion of cover, no yarn cut, cover construction still intact

Action

Inspection of rope after each operation, no further actions needed, mooring rope can still be used

Influence on strength

No influence on rope strength



Damage

Mild external abrasion of cover, local damage; cover yarn cut, cover construction still intact

Action

Bring the cut cover yarn under the cover, inspection of rope and particularly this area after each operation, mooring rope may still be used

Influence on strength

No influence on rope strength



Damage

Moderate external abrasion of cover, local damage; cover yarn cut, cover construction still intact

Action

Stop using rope, bring the cut cover yarn under the cover, apply a small seizing, see appendix A

Influence on strength

No influence on rope strength, mooring rope may still be used after repair



Damage

Moderate external abrasion of cover, local damage; cover yarn cut, cover construction still intact

Action

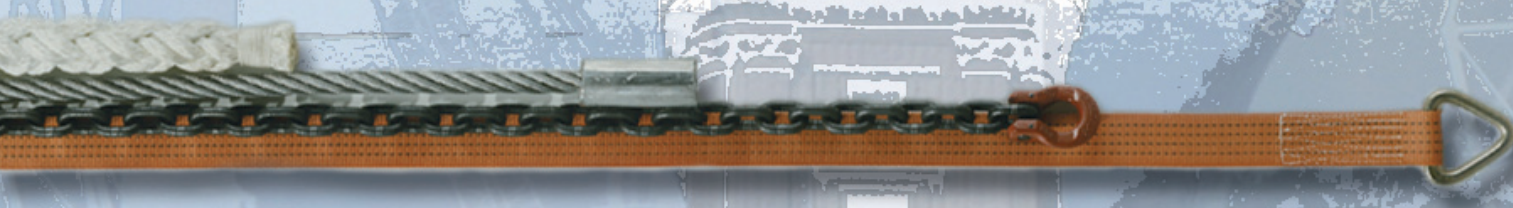
Stop using rope, bring the cut cover yarn under the cover, repair the sling with Deltaweb®, see appendix B.

Influence on strength

No influence on rope strength, mooring rope may still be used after repair

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Damage

External abrasion of cover, local damage of the cover, load bearing cores come out of the cover

Action

Stop using the rope, pull the rope in a straight line, open up the cover, inspect the load bearing cores, depending on the load bearing core damage, repair or discard the rope

Influence on strength

Depending on the load bearing core damage



Damage

Cover completely broke, damage noticed on the load bearing cores

Action

Stop using the rope, inspect the load bearing cores (number of cores affected, load history,...), take detailed pictures of the rope and application and send them together with the load history overview to us for a second opinion

Influence on strength

Depending on the load bearing core damage, stop using the mooring rope

Summary Damages

If only the cover is damaged and the load bearing yarns are still 100% intact, it is possible to repair the cover without any restrictions on the strength.

Depending on the extent of the damage on the cover either a small repair or an extensive repair is recommended.

The repairs have to be carried out by qualified people and in accordance to us proposed repair procedures. See appendix A, B and C.

If the inner strength member is damaged, there will be a reduction of the strength of the rope. The rope must be taken out of service. Detailed photos from the damages can always be sent to us for a second opinion.