

Fact Sheet

Splicing Jacketline 12strand braided core

13.09.2011

General

Here the new splicing procedure is described for a jacketline with a 12-strand braided rope core. This splicing procedure has been developed to reduce scatter in strength and sensitivity to damage.

Activities

1. Lay out the rope in a straight line. Measure and mark the splice length and length for the eye (depending on the size).
2. Tension the length for splice and eye in a straight line.
3. Tie five heavy yarns around the standing leg, just before the beginning of the turn. Cut protective cloth and sew it onto the rope in such a way that you have an overlength of 50cm.
4. Bend the eye around the pin in such a way that the free end is on the right side.
5. Fixate the eye around the pin.
6. Put the assembly on the splice table.
7. Remove the cover from the free leg (cut the yarns 45 cm away from the eye).
8. Cut the cover 45 cm away from the eye from the standing leg and unravel up to the beginning of the eye.

Calculation of the splice

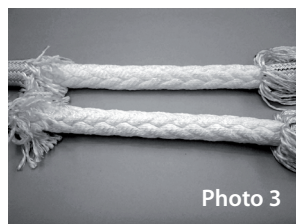
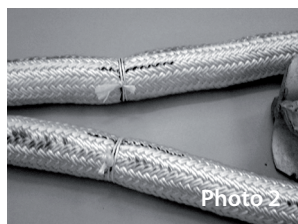
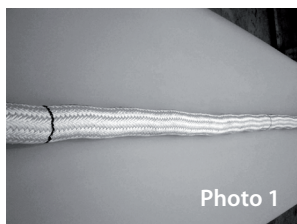
Take the number of tucks and divide this number of tucks by two. These number duplicate by the theoretical plait length plus 300mm is the length of the free leg in mm. Example: A rope with a plait length of 300mm.

Number of tucks 3-2-2 = 7 tucks
 $7:2 = 3,5$ $3,5 \times 300\text{mm} = 1050\text{mm}$
 $1050\text{mm} + 300\text{mm} = 1350\text{mm}$ free end

Material	Number of Tucks
PP	3-2-2
Composite	4-2-2
HMPE	7-3-2

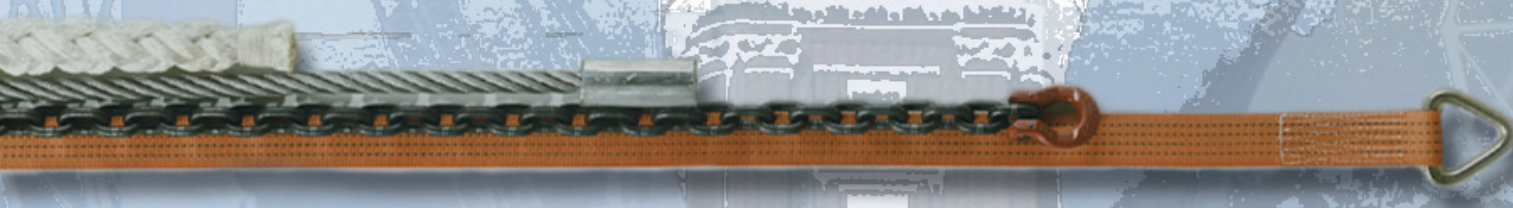
Splicing

- Mark the free end (point A) and the length of the eye (point B). See photo 1.
- Apply deltasheet and PU coating when necessary.
- Pull the rope through the hose, as such that the splice is on the right side.
- Make a halter at point A and point B. See photo 2.
- Cut the hose of both legs loose at 60 cm and unravel both hoses towards the eye. See photo 3.



Fact Sheet

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- Remove the hose of the splice en cut the hose of the continuous leg loose up to where the last splice will end. See photo 4.
- Provide each strand with tape and unravel the strands until point A. See photo 5.
- Split up the strands in 2 vertical groups, each group consisting of 3 left and 3 right strands.
- Isolate a left and a right strand from one group, put sufficient torsion on the strands and tape them together. Repeat this until you have 6 pares of strands. See photo 6.



Photo 4



Photo 5



Photo 6

- Now determine where the 3 pares of strands will go into the rope. From now on the 6 points of the first splice can be noticed. See photo 7.
- Put the 3 pares of strands from the left group in 1 hole on the right side of the rope and next down inclined through the left side of the rope. See photo 8. The strands each go through a different hole on the left side of the rope, such that they appear in different lines. See photo 9.



Photo 7



Photo 8

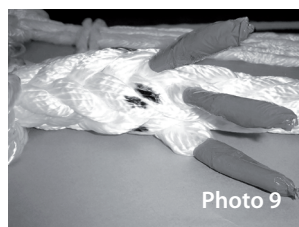


Photo 9

- Now the 3 pares of strands (from the right group) can each be put, in a different line, on the right side of the rope. See photo 10 and 11.

P.S.: The inclined splicing of the 3 pares of strands from the left group has to be done such that they are on the same level as the 3 pares of strands from the right group.

- Now all strands are spliced 1 time. See photo 12.

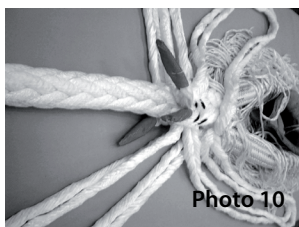


Photo 10



Photo 11

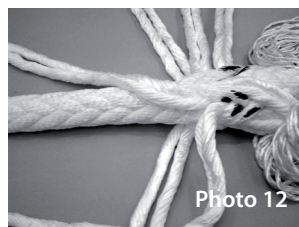
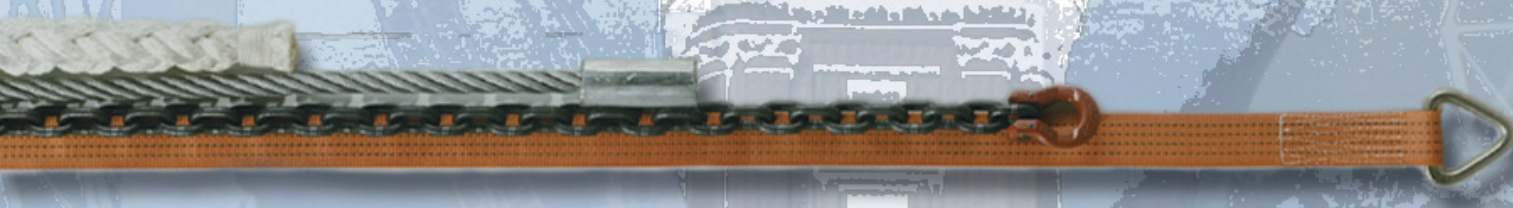


Photo 12

Fact Sheet

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- Complete the full splices. See photo 13.
- A first dilution is as follows:
Only 3 of 6 pares of strands are used to splice on, this means in practice that we either need the strands which are spliced under the left strands, or the strands which are spliced under the right strands.
- Complete the first dilution. See photo 14.
- A second dilution is as follows: From the remaining 3 pares of strands we take 1 strand, which is being spliced as far as needed. See photo 15.

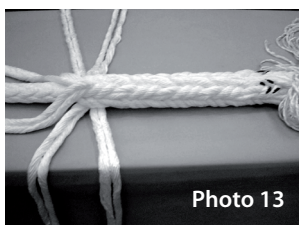


Photo 13

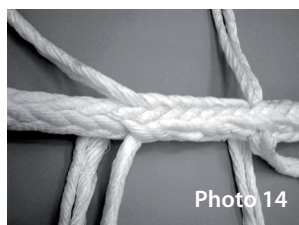


Photo 14

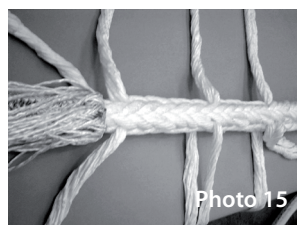


Photo 15

- At the eye the hose is spliced in 3 times, for this the hose is split up in 6 groups. See photo 16 and 17.
- Also at the end of the splice the hose is being split up in 3 groups and spliced in 4 times. This is done in the lines of strands which were not used for the dilution. See photo 18, 19, 20.

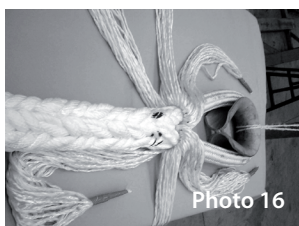


Photo 16



Photo 17



Photo 18

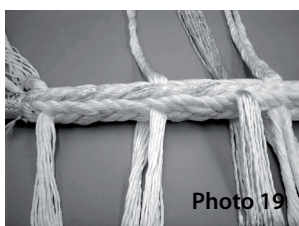


Photo 19

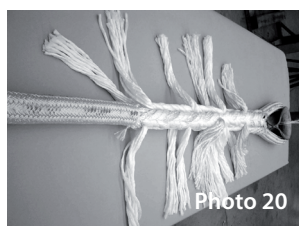


Photo 20

- If necessary apply special coating on the splice.

Splicing of the cover

Tension the splice and apply tape over the tapered section. Lay the 50 cm of protective cloth from the eyes on the splice and apply tape over it. Apply the protective cloth on the splice. Apply a whipping of 30 cm with a 14 mm rope. If necessary apply PUR coating on the splice and allow it to dry for 24 hrs.