Hi-Tech Purseline Class II Eye Splice

The round plait construction requires a splicing technique different from other 12-strand braided ropes. The “tuck” procedure may be performed in the field on both new and used rope with a minimum of tools.

The eye splice is used to place a permanent loop in the end of a rope, generally for attachment purposes to a fixed point. An eye is also used to form the rope around a thimble, which is used to protect the rope, especially when it is to be attached to a shackle, chain, or wire rope.

**STEP 1**

MEASURING AND MARKING

From the end of the rope, measure 1 fid length. At this point put 1 loose wrap of tape around the rope. This is Mark 1.

1A Form the desired eye size using the tape wrapped around the rope as a reference mark. Mark the body of the rope at the point where it matches up with Mark 1. This is Mark 2. Measure 1 fid length toward the standing end of the rope and mark the body, this is Mark 3.

1B Extract the core at Mark 3. Cut off flush so that the end of the core receeds back into the rope. Remove core from Mark 3 to the end of the rope.

**STEP 2**

PAIRING THE STRANDS

Divide the 12 individual strands into 6 pairs of 2 strands each. The strands that are paired together should be adjacent to each other at the point where the unbraided rope meets the tape wrapped around the rope. There should be 1 “S” strand (strand with clockwise twist) and 1 “Z” strand (strand with counterclockwise twist) in each pair. Before taping each set of strands together, twist each strand separately to maintain the twist of the fiber.

**Note:** Each taped pair of strands has 1 Z strand and 1 S strand.
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SAMSON SPICING INSTRUCTIONS

STEP 3 MARKING ENTRY AND EXIT POINTS
At Mark 2, make a mark at the intersection of an S and a Z strand. This will be the entry point for all 6 strands and the tail when it is buried. The entry point should be on the side of the rope facing the opposite leg of the eye.

From the entry point, count 2 picks down the rope and mark 6 strands around the circumference of the rope. There will be 3 S strands and 3 Z strands marked. At each intersection of an S and a Z strand, mark an exit point. There will be 6 exit points marked.

STEP 4 ROUTING THE STRANDS
The first 3 strands closest to the inside of the eye are now routed from the entry point at Mark 2 to the exit points on the opposite side of the rope. Each strand is routed separately, entering at the entry point and exiting at its own exit point. Do not pull the strands up tight yet. Leave slack at the entry point.

4A The 3 remaining strands are now routed from the entry point at Mark 2 to the exit point. Each strand is routed separately, entering at the entry point and exiting at its own exit point. Do not pull the strands up tight yet. Leave slack at the entry point.

4B With all 6 strands routed, pull each of the 6 routed strands to remove any slack, and make sure the rope is smooth and tight at the entry point.
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**SAMSON SPLICING INSTRUCTIONS**

**TAPERING THE SPLICE**

When all strand pairs are routed, snug the strands and remove the tape at the base of the tail. Once routed, the strand pairs should have an "X" (overlapping right and left strands) between them or they will touch.

**BEGIN TUCKING THE STRAND PAIRS**

Begin tucking the strand pairs over 1 and under 2 for 3 tucks. Each strand is tucked down the same row of picks in the braid, over 1 strand and under 2 strands.

**STEP 4C**

**STEP 5**

**STEP 6**

Finally, once 3 of the strand pairs have 6 full tucks, separate the strand pairs into individual strands and drop 1 strand in each pair, continuing down 2 more tucks.

Cut the excess tails to complete the splice. Leave enough of an end protruding so that the end does not slip back into the rope when over-loaded.

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