

PRODUCT BULLETIN



FIELD CUTTING OF CATEGORY 1 ROTATION-RESISTANT ROPES

November 2012

Casar® brand and Oliveira® brand high performance rotation-resistant ropes, such as STARLIFT XTRA, EUROLIFT, STARLIFT PLUS, NR MAXIPACT and NR MAXILIFT, are classified as Category 1 rotation-resistant ropes as per ASTM A 1023. As Category 1 rotation-resistant ropes, they must be handled differently than other types of wire ropes. The operational properties of this type of rope are the result of the relationship of the lay of the outer strands to the inner strands. The outer strands are not preformed and must be tightly restrained when the rope is cut to maintain the rope's operational properties. It is for this reason that we recommend not removing the welded ends provided. If it becomes necessary to cut a Category 1 rotation-resistant rope, the following procedures for cutting and preparing the rope must be followed:

1. Before cutting the rope make three separate bands with seizing on each side of where the cut is to be made (total of six bands of seizing for each cut). Each band of seizing is to be tightly wrapped and have a minimum length of one and one half times the rope diameter. The two bands of seizing closest to the cut should be located at a distance equal to one rope diameter away from the cut. The four remaining bands of seizing should be evenly spaced at a distance equal to three rope diameters.
2. a) If a welder is available, the cut should be made with an abrasive saw. Immediately after the cut, both ends of the rope are to be cap welded so that all inner and outer strands are welded together, preventing any movement between them. Note: The outer strands must not be able to move with respect to the inner strands. The weld must not exceed the diameter of the rope.

b) If a welder is not available, the cut is to be made with an acetylene torch. The cut is to be made in such a way that both ends of the rope are completely fused so that all inner and outer strands are bonded together, preventing any movement between strands. Note: The outer strands must not be able to move with respect to the inner strands. The weld must not exceed the diameter of the rope.
3. Once the cuts and welding have been completed, the seizing bands are to be left in place if possible.

