

# STORAGE

## **LANEX, a. s.**

Hlučínská 96/1  
Bolatice 747 23  
Czech Republic

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Traditional manufacturer since 1949

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# STORAGE ■

All ropes should be stored in clean dry places with no direct sunlight, protected from weathering and mechanical damage, with no exposure to high temperatures including places close to central heating, radiators, etc. Ropes should not be stored on the ground, but rather on pallets or reels in places with good ventilation, room temperature and normal humidity. Avoid storing the ropes on concrete or dirty floors and never put them anywhere near acids and bases (the effect of chemicals on individual fibers is described in the service life and retirement criteria). Certain synthetic ropes (especially polypropylene and polyethylene) could be severely damaged by long-lasting UV exposure. The effect of UV-degradation is described in the guideline **Service Life and Retirement Criteria** or **Inspection Guideline**.

During storage each rope requires regular inspection and the ship's personnel should check for damage after unwinding and prior to any use of the rope. Ropes on winches should be protected by a suitable waterproof mat or other type of protective coating.

The indicated shelf life applies for synthetic fiber ropes. For other ropes, the storage conditions vary depending on the exact type of material.

## Recommendations on Coiling

### **a) Storing Twisted Ropes in a Coil - Circular Shape**

Right-handed Z-twist ropes (Figure no. 1) should always be coiled clockwise, which corresponds to the direction of the twist. Rather than in layers placed one on another, it is advisable to coil the rope into a helix shape with each layer removed a few centimeters from the previous one (Figure no. 2)



Figure no. 1: **Z-twist ropes**

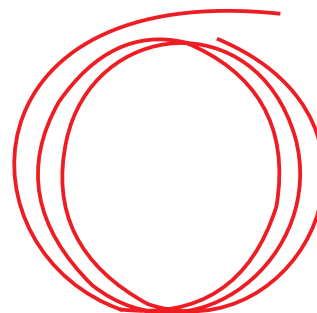


Figure no. 2: **Helix shape of the rope**

## b) Ropes Storing - 8 shape

Coiling the rope into shape 8 may even be preferable to the above technique. This method is suitable for both twisted and braided ropes. It prevents kinking in either direction. It is necessary to coil twisted ropes around their axis every other turn to avoid tension build-up (figure no. 3).

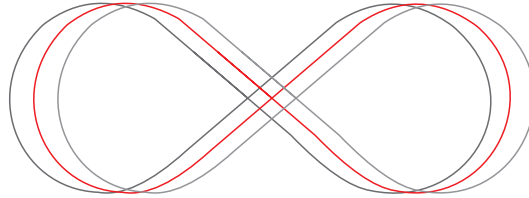


Figure no. 3: **Coiling the rope into figure 8 shape**

## Ropes Labeling

Ropes must be properly labeled for easier identification during all storage. The rope label should contain the certificate number. We recommend ship-crew to record correctly all the ropes, including ropes certificates.

### **Fiber Ropes**

Under the international standard EN ISO 9554, the material identification, quality and place of origin of the textile rope have to be indicated on a piece of tape located inside the product. For 3-, 4-, 8-, and 12-strand ropes this identification strip is inserted inside one of the braids. The tape must have at least 3 mm in width. It has to have the number corresponding to the International ISO standard and manufacturer identification information printed on it. The maximum distance between two following labels is 0.5 m.

### **HMPE ropes**

HMPE ropes are not labeled with an identification strip in the braids as damage could occur during rope production. HMPE ropes are therefore labeled with a plastic or metal badge bearing the certificate number and the standard according to which it was tested (see figure no. 4). The badge is always attached at the end of a rope without an eye splice or in the whipping knot of a rope which has an eye splice.



Figure no. 4: **rope identification**

HMPE ropes also contain identification information holders in the form of chips implemented in the rope behind the whipping knot. Their exact location on the rope is marked with a label reading "CHIP INSIDE". These chips can be scanned with a phone data application. The chips contain the rope's identification information and its technical specifications.

The labeling has to be visible even if during manipulation the rope gets dirty, wet or its color is changed.

## **Labeling Rope Coils**

Each coil must have a fast label with the following information:

- Composition
- Manufacturer identification
- Reference number
- Length supplied

# RESOURCES

1. ČSN EN ISO 9554 Fibre ropes - general specifications, May 2011

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