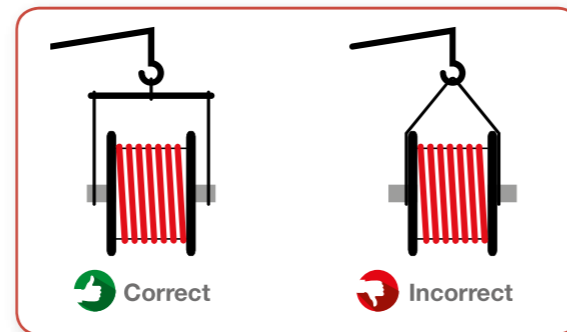
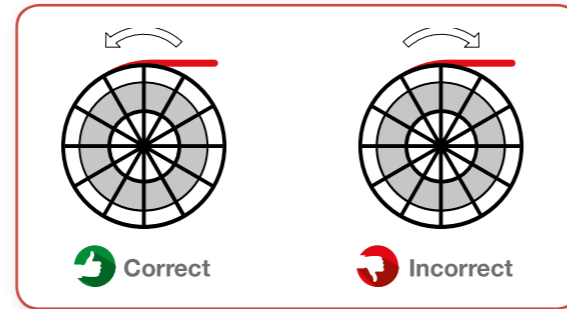


GUIDE TO USE

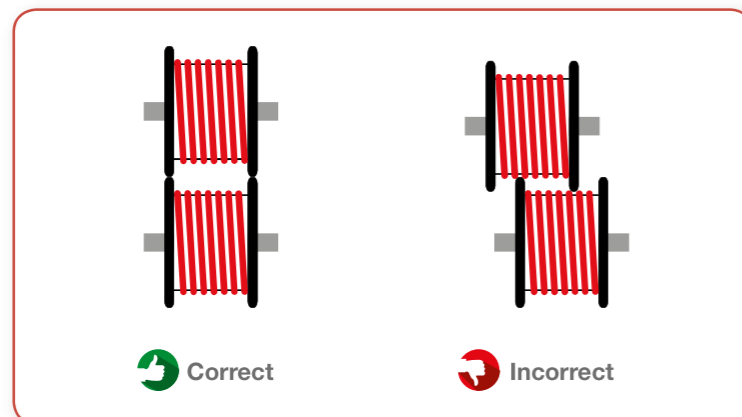
HANDLING

When handling drums, reasonable precautions should be taken in consideration in order to avoid damage to the cable and injury to people. Due regard should be paid to the mass of the drum, the method and direction of rolling and the method of lifting.



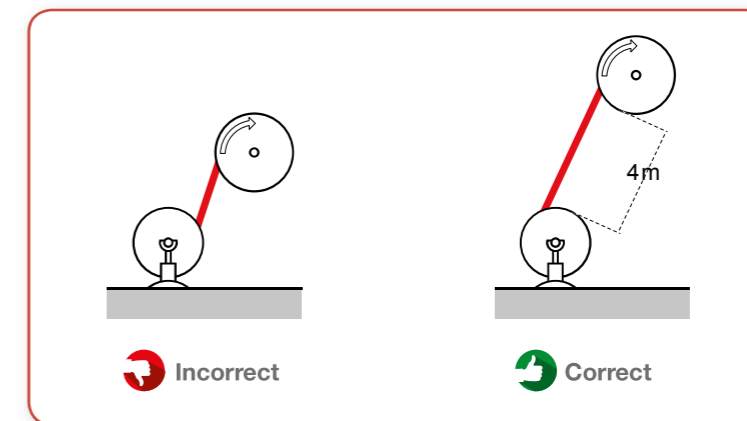
STORAGE

Cable drums should be stored so that the drum flanges do not contact cable on another drum. Cables stored at temperatures which are below those recommended for installation conditions, should not be subject to any mechanical stress including shocks, impacts, bending and torsions. If cables are not fully protected (with battens or plastic foils for example), store should be in a protected area and not weather-beaten. The cable end should be sealed, in case, to prevent ingress of moisture during transport and storage.



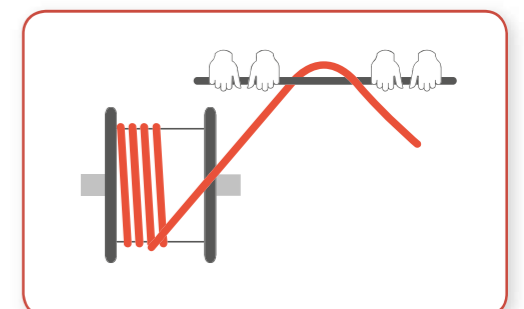
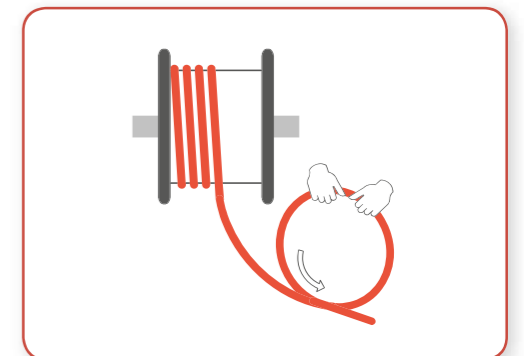
INSTALLATION & USE

The correct installation method should be done by unwinding the cable along the machine with standard cable pulling system and rollers. If this is not possible, because of the site conditions, it's possible to transfer the cable directly to the operating drum but avoiding reverse bending and, if possible, with a distance between the reels at least of 4 meters.



It's necessary to be careful during the transfer of the cable because it could have a residual torsion from the beginning, before to start its real application. In order to remove the initial torsions, if present, we suggest a couple of solutions:

- Create a spiral with the cable from the drum jacked on and roll it up to the free end, this operation will remove the twisting
Fix the cable in order to start the operation. If after the first operation there is still a twisting it's better to repeat the removal process.
- A couple of people could walk handling a cylinder bar under the cable from the drum jacked on up to free end, in this way they will push the twisting out from the cable. In case of residual twisting repeat the operation.



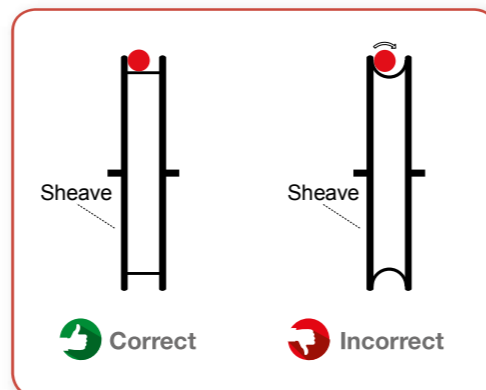
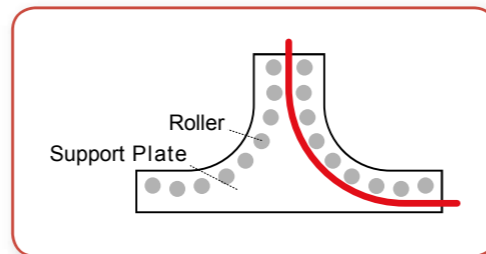
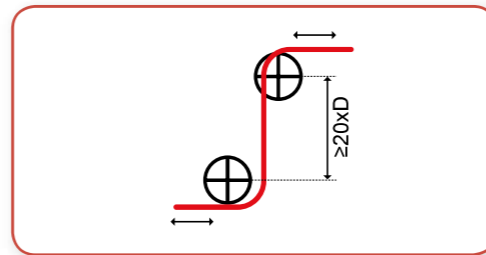
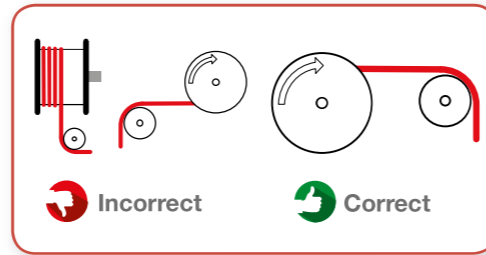
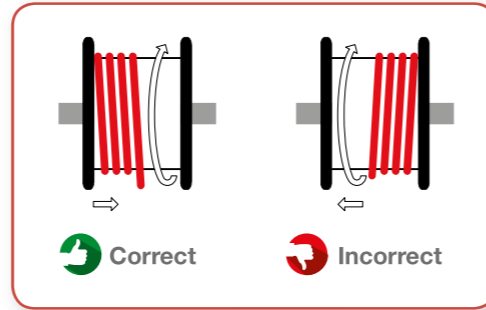
UTV CAVI'S cables are produced with S stranding direction. In this case we recommend to start winding the cables, on the reeling drum, from the left side of reel as shown in the pictures:

Changing direction during winding or unwinding, is a dangerous operation: it has to be gradual. The rollers and the shaves must be well positioned at an adequate distance in order to avoid mechanical stresses to the cores.

If the change of direction cannot be avoided, the minimum distance with double or S-type directional changer must be bigger than $20 \times D$ (D = overall cable diameter).

For a large diameter cable it would be better to use rollers to reduce the friction with the sheath during the change of direction.

If sheaves are used, it is important to have a flat surface profile, to avoid unwanted rotations or twisting caused by the continuous clash with the sides of the sheave. In any case, the width of a cradle or that of a roller, should be 10-15% larger than the outer cable diameter to allow a correct running.



CABLE GUIDE

Safe and smooth guidance of the cable for end and centre feed.

ROLLER GUIDE

Defined guidance of the cable from reel body to feed point.

CABLE FEED POINT

Ideal cable guidance at feeding point for centre feed applications.

CABLE MESH GRIP

Ideal tension relief for cable at feeding point. Safe and simple to handle, it spreads the forces over a wide surface area to prevent cable damage.

TYPES

Monospiral drum (single spire multi layers) ideal to guarantee the heat dissipation and the control of irregular twisting during unwinding. The limit could be the cable's length in relation with the reel's diameter.

Multispiral drum (multi spires single layer) used in case of long cable lengths. It is important to ensure that the guide mechanism doesn't damage the cable during unwinding, for example: avoiding anomalous rub against the surface of the previous spire or irregular twisting. It is advisable to use maximum two layers to allow the thermal balance.

Cylindric drum (multi spires multi layers random wound) it is the cheaper reel but it doesn't guarantee the control over the layers of cable: the cable could be stacked, for example, on one side of the drum.

