

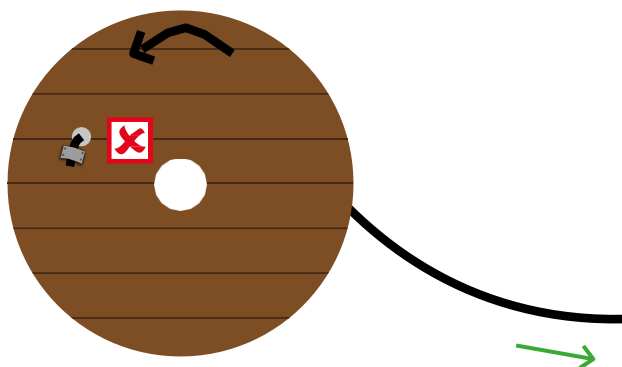
# General handling

With cables and wires

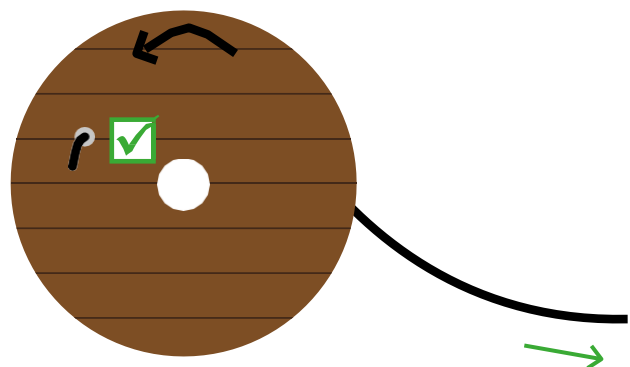


## Handling

When moving and lifting cable drums, the occurring strengths must be considered to prevent damage to the cable and injury of persons. The unwinding of cable drums should be implemented as shown below. To avoid unwanted entanglement of the cable and tension inside the cable, the fixing of the inner cable end to the outer flange of the cable drum should be removed.



Fixed cable end - creep occurs

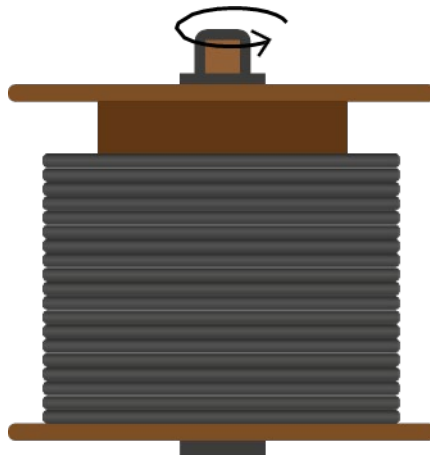


Loose cable end - excess length of the cable is pressed outwards

If the cable drum lies on the flange during unwinding, the cables and wires will move downwards, which may result in looping. In addition, the weight of the cable presses the bottom layers onto the flange, which may cause damage. Small cable drums with light cables are excluded from this.



Not recommended



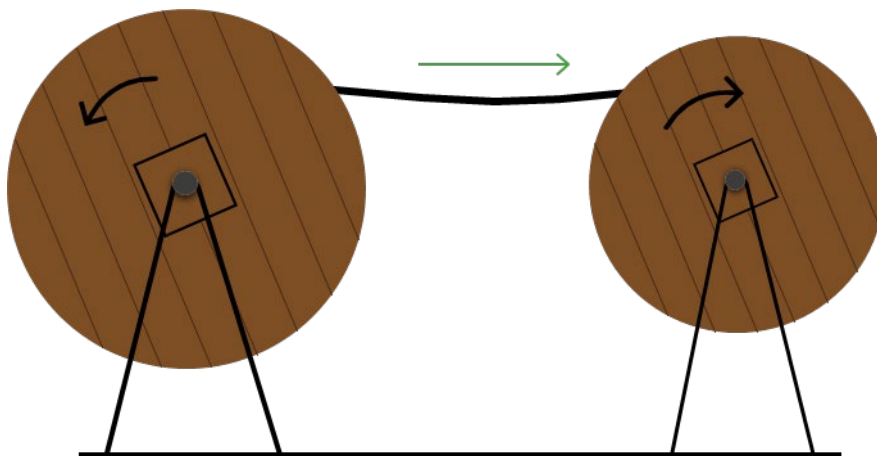
# General handling

## With cables and wires

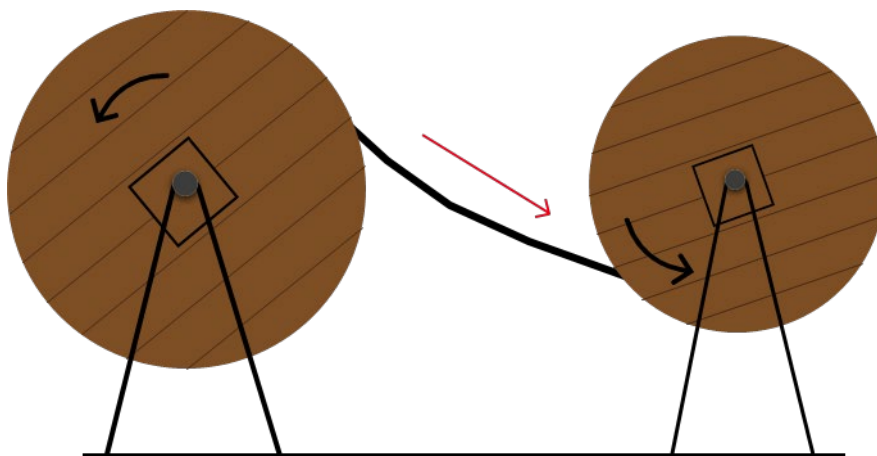
When rewinding the cable drum, make sure that this is always done horizontally over the upper or the lower level. Diagonal rewinding can lead to undesirable tangles and tensions within the cable.



Recommended



Not recommended



# General handling

With cables and wires



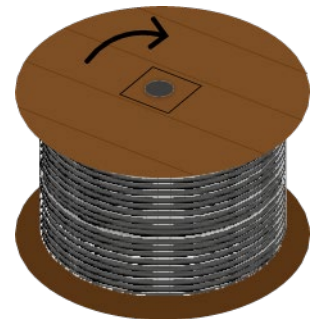
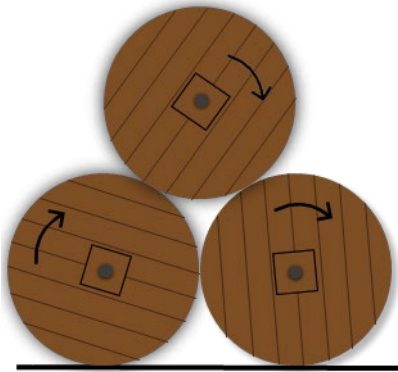
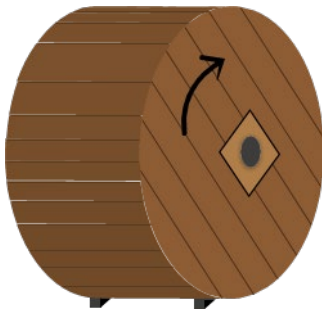
## Transportation

### Transport vehicles

In general, only suitable transport vehicles should be used for cables and wires. Drums can be fixed stand up longitudinal or transverse to the driving direction. The load should be secured by good shaped scantlings and wedges.

### Position of the drum axis

Drums should be transported with the axis horizontal and secured against uncontrolled movement.



Cable drums should stand upright and be secured with wedges.



Stacking of the cable drums may only realize with casing drums. The bottom layer must be secured over the entire width of the drum.



Horizontal storage is not recommendable.

### Loading and unloading

To avoid damage to the cable drums, they should be lifted and set down carefully. The drums may only be loaded using a suitable industrial truck or crane.

### Rolling of cable drums

Cable drums should only be rolled on solid level ground, in the rolling direction (arrow on the drum), over short distances. The rolling direction must be observed to avoid loosening of the winding package.

### Fixing of the cable ends

The cable ends should be securely fixed to the reel during transport and storage.

### Coils

Short cable lengths can be handled and transported as coils. The ring diameter should not be smaller than the smallest permissible bending radius of the cable. Protection against mechanical stress, impact and sunlight should be taken into account.

# General handling

## With cables and wires



### Storage

Cables and wires shall be transported in rings or on drums as in the section Transport. According to the characteristics of the cable or wire, suitably protected against mechanical damage and exposure to sunlight should be provided. When stored below the recommended storage temperature, they should not be exposed to mechanical stresses including vibration, impact, bending stresses or torsion. Suitable measures should be taken to protect the ends of the cables/wires against the ingress of water.

### Laying instructions

The laying of cables and lines should only be carried out by authorized and trained personnel. Compliance with applicable national regulations should be ensured. Cables and lines should be laid and operated in such a way that their characteristics correspond to the conditions of use.

Among them, the following points should be observed:

- a) Operating conditions:
  - ambient temperature
  - number of cables and laying arrangement (e.g. flat or in a triangle)
  - influence of external heat sources
  - specific ground thermal resistance
  - solar radiation
  - mutual influence of the cables
  - mechanical stress (pressure, tension, shear, vibration)
  - chemical influences (solvents)
- b) leakage or stray currents and corrosion
- c) ground movement
- d) laying methods and bedding material

See also:

Faber installation regulations crane and lifting equipment  
Faber laying regulations LWL  
Faber installation regulations for reelable cables  
Faber installation regulations for medium voltage cables  
Faber installation regulations for low-voltage cables  
Faber installation regulations for cables with function maintenance  
Faber installation regulations for outdoor telecommunication cables  
Faber installation regulation for indoor telecommunication cables  
Faber installation regulation drag chains

Faber installation regulations for solar cables  
Faber installation regulations for micro duct system  
Laying temperatures of cables and lines  
DIN VDE 0276-603  
DIN VDE 0298-3  
DIN VDE 0298-4  
DIN VDE 0298-565-1  
DIN VDE 0298-565-2  
VDI 2700