



DRUMS

INFORMATION

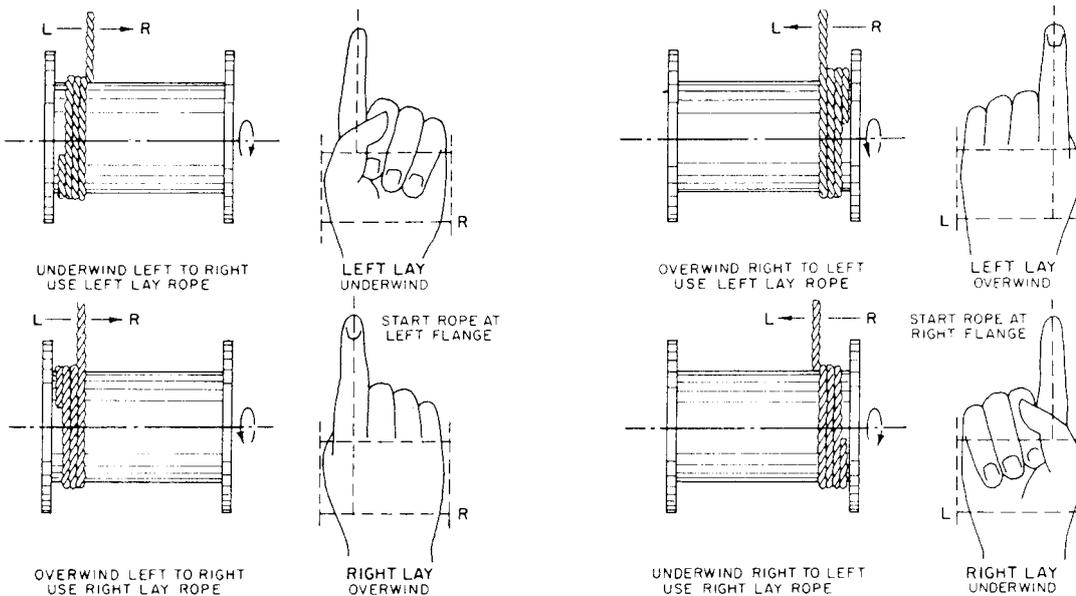
INSTALLATION FROM REEL TO DRUM

Installation of a wire rope on a plain (smooth) face drum requires a great deal of care. The starting position should be at the correct drum flange so that each wrap of the rope will wind tightly against the preceding wrap (see figure). Here too, close supervision should be maintained all during installation. This will help make certain that:

- 1) the rope is properly attached to the drum,
- 2) appropriate tension on the rope is maintained as it is wound to the drum,
- 3) each wrap is guided as close to the preceding wrap as possible, so that there are no gaps between turns.
- 4) And that there are at least two dead wraps on the drum when the rope is fully unwound during normal operating cycles.

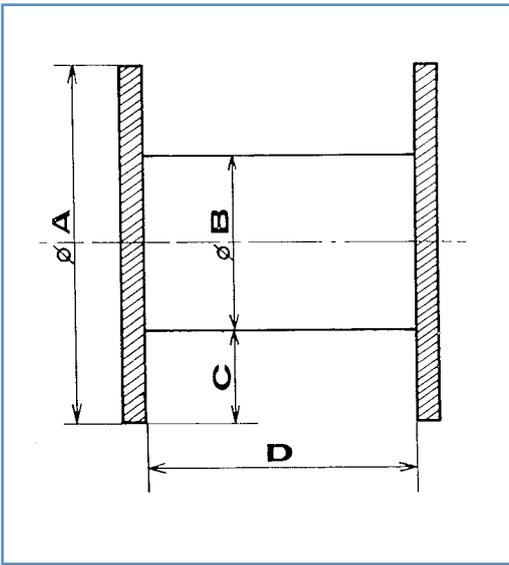
Loose and uneven winding on a plain – (smooth) – faced drum, can and usually does create excessive wear, crushing and distortion of the rope. The results of such abuse are lower operating performance, and a reduction in the rope's effective strength. Also, for an operation that is sensitive in terms of moving and spotting a load, the operator will encounter control difficulties as the rope will pile up, pull into the pile and fall from the pile to the drum surface. The ensuing shock can break or otherwise damage the rope.

The proper direction of winding the first layer on a smooth drum can be determined by standing behind the drum and looking along the path of the rope travels, and then following one of the procedures illustrated in next figure. The diagrams show: the correct relationship that should be maintained between the direction of lay of the rope (right or left), the direction of rotation of the drum (over wind or under wind), winding from left to right or right to left. By holding the right or left hand with index finger extended, palm up or palm down, the proper procedure for applying left – and right – lay rope on a smooth drum can be easily determined.





REEL AND DRUM CAPACITY



SPOOLING CAPACITY OF THE DRUM

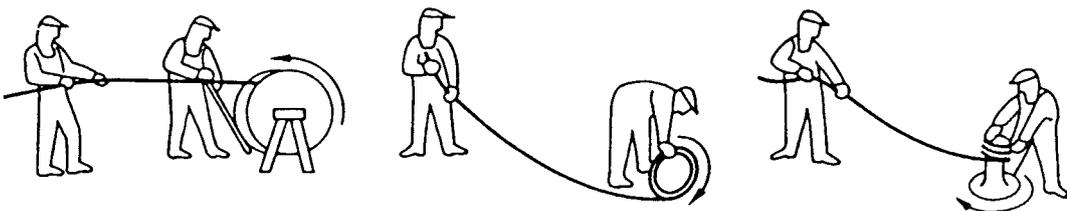
A,B,C and D: reel sizes in cm

d = rope diameter in mm

L = rope length in m

$$\text{Spooling capacity} = L = \frac{C \times D \times (B + C)}{d^2} \times \pi \times 0,9$$

0,9 = 10% safety in case of wild spooling pattern.



Right

