



Construction Plant-hire Association Tower Crane Interest Group



TIN 004

Installing Wire Ropes on Winch Drums and Storage Reels

To avoid damage to wire ropes such as kinking or damage to the lay, ropes should always be transferred from storage reels to winch drums without slack and in a straight line.

The lay of the rope should not be disturbed during installation, i.e. turns should be neither put in nor taken out of the rope. Ordinary lay ropes are usually stable but special care should be taken with Lang lay and multi-strand ropes.

When winding a rope from a reel to a drum, the rope should be bent in the same direction. Rereeling should be from the top of the reel to the top of the reel/drum or from the bottom of the reel to the bottom of the reel/drum.

A tensioning load should also be applied to the rope to achieve good coiling. This can be accomplished by use of a powered reeling device such as that shown below.



Further advice on the installation, inspection and maintenance of wire ropes is given in:

- Clause 19 of BS 7121-1:2016, Code of practice for safe use of cranes Part 1: General
- Clause **14** of BS 7121-2-1:2012, Code of practice for safe use of cranes Part 2-1: Inspection, maintenance, and thorough examination General.