



# British Ropes

## Guidance Note

### B. S. 462: Wire Rope Grips

British Ropes Ltd felt it necessary to produce this explanatory guidance note for customers and users, following work carried out by the 'Health and Safety Executive' when it was found that under certain conditions the recommended number of wire rope grips quoted in the standard were insufficient to achieve the required efficiency.

Suggested minimum number of wire rope grips related to rope size (for self coloured and galvanised grips.)

Nominal diameter of wire rope (mm)	Suggested minimum number of wire rope grips
Up to and including 19	6
Over 19 up to and including 32	7
Over 32 up to and including 38	8
Over 38 up to and including 44	9
Over 44 up to and including 56	10

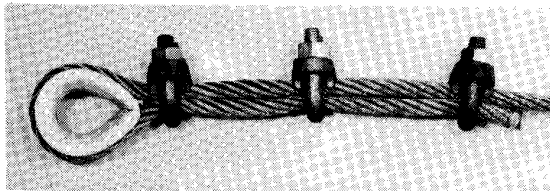
The above stated number of grips should be spaced at a distance of at least approximately six times the nominal rope diameter.

#### Note

Wire rope grips using B.S.W. threads or grips where the 'U' bolt and bridge are incompatible are not covered by the above table.

#### Fitting of wire rope grips

The bridge of the grip should always be fitted on to the 'live' part of the rope only whereas the 'U' bolt should bear on to the tail or dead part of the eye assembly.



Correct method of fitting wire rope grips

Prior to applying the nut on the 'U' bolt threads, both should be devoid of contamination or any medium that may prevent correct tightening. It is recommended that the threads are lightly greased.

The grip fitted nearest to the eye should be positioned as close to the eye as practicable but nevertheless in such a position that the correct tightening of the grip does not damage the outer wires of the rope.

Suggested torque to be applied to attain required minimum grip efficiency.

Grip size (mm) (for metric grips to BS 462: 1969 or 1983 only)	Recommended torque (N/mm)
3	2.0
6	3.5
8	6.0
9	10.0
11	30.0
13	60.0
16	70.0
19	80.0
22	100.0
26	150.0
28	200.0
32	275.0
35	320.0
38	320.0

British Ropes Ltd will supply on request torque values for other sizes of grips.

After the application of a load in service, the grips should be inspected and re-tightened as and when necessary. It is further recommended that where wire rope grips are used to form a terminal eye that is under constant load, the grips are further inspected and re-tightened on a regular planned basis.

Wire rope grips should **not** alternate in position on the rope.

Wire rope grips should **not** be used to join two lengths of rope unless via two eyes.

Wire rope grips should **not** be used for forming sling assemblies.

If further advice is required, queries should be channelled through your local British Ropes sales office or to the Technical Services Department British Ropes Ltd., Carr Hill, Doncaster DN4 8DG Telephone: 0302 4010 Telex: 547981