



## A. NOBLE & SON LTD.

### *World Class Lifting Solutions*

Nobles **SuperMax 4WD** is an ideal synthetic rope for use on vehicle mounted 4wd recovery winches. The rope can also be used as an alternative to winch extension straps as required.

**SuperMax 4WD** is manufactured from the very latest Ultra High Molecular Weight Polyethylene (UHMWPE) fibres and is about 30% stronger than wire rope of the same diameter. It is also only 1/8<sup>th</sup> of the weight of wire rope.

**SuperMax 4WD** is very easy to handle due to its lightweight and the combination of high strength and low elongation make it ideal for vehicle mounted recovery winches.

**SuperMax 4WD** has recently performed very well in a number of winch challenge events.

#### **Some technical facts are as follows:**

##### BREAKING LOAD (Tonnes)

###### **SuperMax 4WD**

8mm	6.7
9mm	8.4
10mm	10.8
11mm	13.6

###### **Wire rope – 1770 grade**

8mm	4.1
9mm	5.2
10mm	6.4
11mm	7.8

##### WEIGHT (kg's per 100m)

###### **SuperMax 4WD**

8mm	3.9
9mm	4.2
10mm	5.9
11mm	6.3

###### **Wire rope – 1770 grade**

8mm	26.4
9mm	33.9
10mm	41.8
11mm	50.6



## Recommended splicing instructions for Nobles SuperMax 4WD winch ropes.

The recommended splice is a quick and simple splice for winching and towing applications only and is not recommended for use as a means of splicing SuperMax ropes to be used as lifting slings. For splicing details for lifting slings please refer to A. Noble & Son Ltd.

1. Using electrical tape attach a biro, pencil or similar diameter spike or pointed object to the end of the rope. Make sure the spike used is smooth and free from burrs or sharp edges so the rope is not damaged during the splicing process.



2. If splicing on a hook, pass the spike and end of the rope through the eye of the hook.



3. Pull the rope through the eye of the hook approximately 700mm. This will be the overall length of the splice.



4. The end of the rope with the spike attached should then be passed back through the centre of the rope (six strands either side) about 50mm from the point in the rope where the hook is located. The hook should be captive between the end of the rope and the first pass. The first pass should form a loop in the rope of approximately 50mm around the eye of the hook.



5. A further two passes are then required at intervals of 50mm. The end of the rope has now passed through the centre of the rope three times.





SuperMax™ 4WD D/S|R

6. The spike end of the rope is then to be pushed up the centre of the rope. This should be done a further 50mm from the third pass. The body of the rope should be "bunched" to open the rope up and assist in pushing the spike down the centre.



7. Push the spike end down the rope about 400mm and then pass the spike out from the centre leaving a tail of approximately 150mm.

Ensure that the spike passes directly down the centre of the rope and no strands are crossed over.



8. The tail should then be passed through the centre of the rope a further two times leaving an end tail of about 50mm. The spike can be removed at this stage





9. You are now ready to use your SuperMax 4WD rope in a winching application.



When the rope is not under load the splice can be pulled out from the top of the eye and unravelled. However the splice is very effective under heavy winching loads as the outer rope grips the inner rope in a manner that increases in friction grip as the load increases. Nobles has conducted a number of destruction tests on *SuperMax 4WD* winch ropes with this type of splice and have found the splice to have 100% efficiency i.e. the rope will break under tension before the splice will fail or pull out.



*Nobles SuperMax 4WD in action at an Xtreme Winch Challenge event*