



Wire Rope Lubrication

IKV manufacture a full range of lubricants for wire ropes & marine chains. Finding the correct lubricant is important because it extends the service life of the wire rope & prevents corrosion.

Fibre core ropes are easier to lubricate than those made exclusively from steel materials.

For this reason, it is important to carefully consider the issue of field relubrication when selecting rope for an application. Wire rope lubricants need to:

- 1) Reduce friction as the individual wires move over each other.
- 2) Provide corrosion protection and lubrication in the core and inside wires and on the exterior surfaces.

There are two types of wire rope lubricants: penetrating and coating.

Our specialist wire rope products include: **G BESLUX SULPLEX ROPE 00** which is an NLGI grade 00 mineral oil grease with excellent anti-corrosion properties, high water resistance, very high load capacity & high mechanical working stability - the drop point is $>270^{\circ}\text{C}$ & working temperature -15 to 160°C .

IKV-TRIBOSTAR MGI 10000 BM which is an extra fluid mineral based grease with moly (Molybdenum Di-Sulphide— MoS_2) & EP additives. It has a working temperature of -10 to 165°C .

IKV-TRIBOSTAR MCS 462 which is a highly efficient calcium sulphonate, anti-corrosive water resistant grease. It is ideal for sea water immersion applications & wire rope applications. It has a working temperature of -15 to 160°C .

Cable life cycle and performance are influenced by several factors, including type of operation, care and environment.

Cables can be damaged by worn sheaves, improper winding and splicing practices and improper storage. High stress loading, shock loading, jerking heavy loads or rapid acceleration or deceleration (speed of the cable stopping and starting) will also accelerate the wear rate.

Corrosion can cause shortened rope life due to metal loss, pitting and stress risers from pitting. If a machine is to be shut down for an extended period the cables should be removed, cleaned, lubricated and properly stored.

In service, corrosion and oxidation are caused by fumes, acids, salt brines, sulphur, gases, salt air, humidity and are accelerated by elevated temperatures. Proper and adequate lubricant application can reduce corrosive attack of the cable



Abrasive wear occurs on the inside and outside of wire ropes when strands inside the rope move & rub against each other. The outside of the cable accumulates dirt and contaminants from sheaves and drums which erodes the outer wires and strands.

Abrasive wear usually reduces rope diameter and can result in core failure and internal wire breakage. Regular relubrication is required due to loss of the original lubricant from loading, bending and stretching of the cable to minimize corrosion, protect and preserve the rope core and wires, and thus extend the service life of the wire rope.