



STOP

LUBRICATING WIRE ROPE BY HAND!

OR BY OTHER INEFFECTIVE METHODS

GIVES MAXIMUM SAFETY

ONLY
**HIGH
PRESSURE**
ENSURES EFFECTIVE
INTERNAL CLEANING AND LUBRI-
CATION WITH HEAVY DUTY LUBRICANT



USE THE ORIGINAL - PATENTED
NASTOTM
WIRE ROPE LUBRICATOR TO GET
EXCELLENT RESULTS

THE PROBLEM

RUST AND CORROSION WHICH
ATTACKS WIRE ROPES INTERNALLY

This 7/8" (22 mm) special wire rope, with plastic-coated core, is only 8 months old, rusted through from lack of lubrication. It had to be replaced.

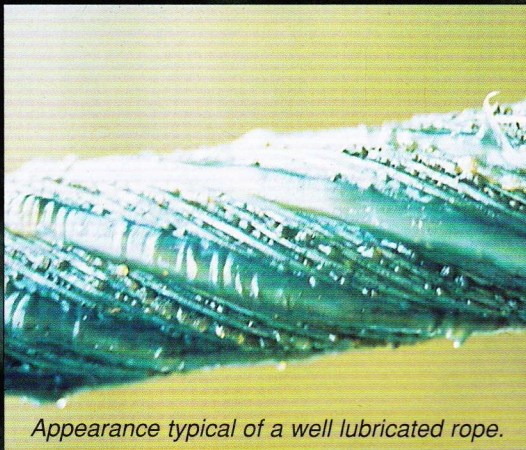


Lubricating with the aid of brushes, rags, gloves, or by other means is costly, risky, and ineffective. The lubricant forms a film on the surface which water vapour can penetrate, thus becoming trapped. Temperature changes cause condensation and rust then begins to form from the inside. A wire rope can appear to be in good condition, when in fact corrosion and friction are destroying it from the inside. Its useful life is shortened and it becomes potentially dangerous. Even factory lubricated wire rope requires regular relubrication.

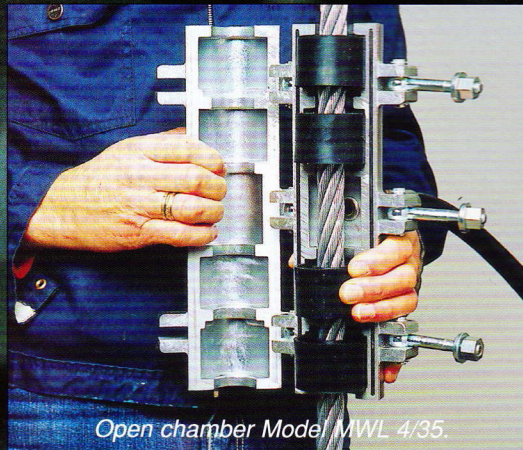
THE MASTO L SOLVES THE THE SOLUTION

THE MASTO LUBRICATOR LUBRICATES ALL
TYPES OF WIRE ROPE INSIDE AND OUT

Only the Masto Lubricator penetrates under high pressure all types of wire rope, such as Non-rotating, Dyform, and Locked Coil with heavy grade lubricant. NB. To obtain total penetration through a compact rope the pressure must be minimum 20 bar (285 PSI) in the chamber. Even wire rope subjected to severe surface wear will have a longer life when lubricated with the Masto. Stainless steel, galvanized, and other special types of wire rope require just as much lubrication since friction is the same and corrosion can also occur.



Appearance typical of a well lubricated rope.



Open chamber Model MWL 4/35.

*Wire rope type:
Non-rotating
Dyform. A tightly
woven 1 1/4" (32 mm)
rope, completely
lubricated straight to the core.
The masto also works
easily with heavy grade
lubricants which last
much longer and give
the best results.*

*In the test, lubricant was applied
at a pressure of 35 bars (511
PSI.). Lubricant consumption
was about 3,3lbs. (1,5 kg.) per
50 ft. (15 m) of rope. Wire-rope
speed can be up to 165 - 198 ft.
(50 - 60 m) per min.*

*Rust, old lubricant, water and
foreign objects are forced out of
the rope, scraped off, and fresh
lubricant is applied - all in one
operation. Normal lubricant
consumption: 1-2 % of the wire
rope weight.*

LUBRICATOR PROBLEM

HOW ITS DONE

EASY INSTALLATION REGARDLESS OF WIRE-ROPE POSITION

The Masto Lubricator is easy to use. Split seals are fitted around the rope and clamped in place by the two halves of the lubricating chamber. The unit is coupled to a high-pressure lubricating pump via flexible hose, and lubricant is forced into the lub. chamber.

The unit is anchored by two chains to a convenient, stationary object. The pump is started and the wire rope is pulled through the Lubricator.

LIST OF SOME USERS:
Bridon International / Certex
Scanrope / Mobil Oil UK / Mexico
Elf Italiana / Petrobras / BP / PEMEX
Conoco / Esso / Texaco / ETPM S.A.
Maersk Drilling / Shipping / Amoco
Confexip Stena Offshore / Exxon
Mc Dermott / Rockwater / Chevron
Diamond Offshore Drilling / Chevron
Solumberger / Saipem / Great White fleet
Swire Pacific Offshore / Transocean
Norw. Navy / Army / UK Navy
State Gold Mines / Inco Limited
Stott & Pitt / Hydrallit / Liebherr
Geoteam / Geco / Sunsub / Ceanic
Aicatel / Oceanering / Stolt Fleet
seaway / Rederei «Nord» / Smith Fleet
Ceres Management / Athenamarine
Unicom Management / MOL tankship mgn.
Vela-International / MCL tankship mgn.
Vela-International / Bergesen d.y.
Universe Tankships / Acomarit / RCCL
Barber Shipmgn. / V-ships
Neptune Shipmgn. / J.J. Uglund
World Wide Shipping / J.J. Uglund
I.T.M. / Mitsui O.S.K. Line / Stena Line
Teekay Shipping / Crystal cruises
Bergwerk Prosper-Haniel / Wheel Jane

THE RESULTS

ARE EXCEPTIONAL, EXPERTS SAY

Authorities now recognize the value of effective lubrication.

Masto-lubricated wire ropes on lifeboats, cranes, and deep diving equipment, for example can be certified for longer service. Long use by Mobil Exploration/ Statoil Norway, tests by Mobil Oil UK, Bridon Ropes UK and by others demonstrate up to 300% prolonged rope-life whether used onshore, offshore, in shipping or in mining operations.

The Norwegian Maritime Directorate: We require the lubricant to penetrate the rope. Masto extends wire rope life time and improves safety.

Det Norske Veritas: We confirm the fact that lubricant penetrated the entire cross-section of 22 mm (7/8") Dyform, non-rotating rope and 34 mm (1 3/8"). Locked coil.

The Norwegian Industrial Safety Departement:

We observed that the space in an old rusted, Dyform wire rope was filled with fresh lubricant, forcing out the old lubricant, thus improving both safety and economy

Professor Oplatka PhD., E.T.H. Zürich: The lubricant penetrated straight to the core. I congratulate Masto for achieving such remarkable results.

Mobil Exploration/ Statoil: We have used the Masto Lubricator for ten years. Wire rope life has been extended 100-200%. We will give our highest recommendation.

Health & Safety Executive Diving Inspectorate (UK): Diving bell wire ropes: An effective high pressure lubricator should be used that will convey fresh heavy grade marine lubricant to the core of the rope and displace entrained water. Type of lubricant to be used as recommended by the manufacturer of the lubricator, and the rope manufacturer.

Elf Aquitaine: We save two man-days of labour on an average-size crane. The high pressure, forces the lubricant to the very core.

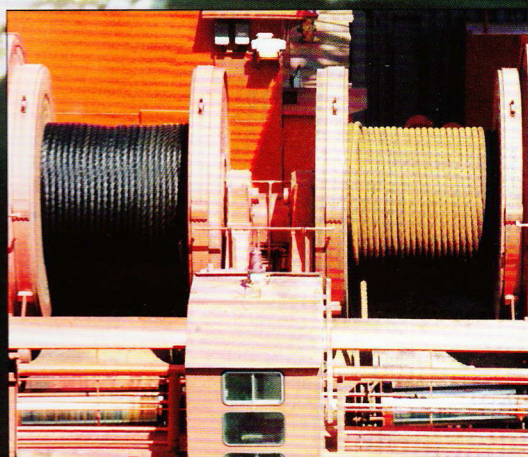
Bridon International/Certex (UK): We have tested various devices. We found that Masto greatly assists effective lubrication.

The wire rope below is like new, completely and thoroughly lubricated.

The Masto Lubricator is portable, but it can also be mounted permanently, for example by installing a lubricating chamber on each lifeboat rope with a T-coupling.

Lubricated with Masto. Unlubricated.

Model MWL 4/35 is designed to take 4 seals. Model MWL 36/77 takes 2 seals. Lubricators are delivered as standard in aluminium but can also be delivered in other metals, approved for underground mines.



THE MASTO LUBRICATOR IMPROVES SAFETY, PREVENTS ACCIDENTS AND WIRE ROPE FAILURE

The Masto Lubricator extends rope life. It can use a wide range of lubricants but higher viscosity products are recommended. Oil or liquid will disappear very fast from the rope. Masto saves lubricant and time, and minimizes spillage.

NB! Do not use any biomastic lubricants as this is useless and to obtain penetration this must be cleaned off by a solvent such as whitespirit. Contact us for lubricant advice.

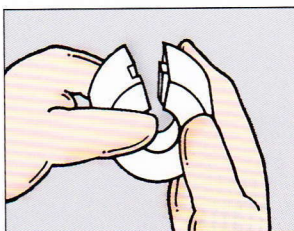
The Masto Lubricator comes in two models: Model MWL 4/35 mm dia. and Model MWL 36/77 mm dia. Seals for Model MWL 4/35 mm/dia. come in 16 different diameters (sets) at 2 mm intervals. Seals for Model MWL 36/77 mm dia. come in 15 different diameters (sets) at 3 mm intervals. One seal size covers only one rope diameter.

A lubricator for larger rope diameters is available upon special request.



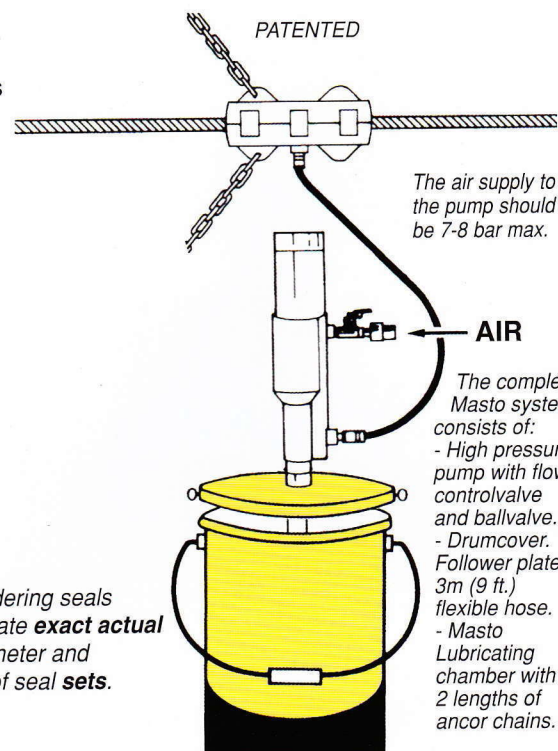
The Masto Lubricator is light in weight.

Model 4/35 weights 8 lbs, (3,6 kg). Model 36/77, 13 lbs. (5,9 kg.). Masto seals are very durable. A set of seals can lubricate approximately 9000 ft. (3000 m) of wire ropes.



*When ordering seals please state **exact actual** rope diameter and number of seal **sets**.*

MEMBER OF:



The air supply to the pump should be 7-8 bar max.

The complete Masto system consists of:

- High pressure pump with flow control valve and ball valve.
- Drumcover. Follower plate. 3m (9 ft.) flexible hose.
- Masto Lubricating chamber with 2 lengths of ancor chains.

The Masto Lubricator is in use on most oil rigs, on all suitable wire ropes.

Areas of application: Offshore, shipping, industry, fishing, mining, armed forces, construction, power stations, cable-cars, elevators, skilifts, diving, ROV, seismic operations, etc. In certain cases the Masto Lubricator can be used on stationary ropes by moving the lubricating chamber along the rope. Masto can lubricate two ropes simultaneously.

Seals will ordinarily clean the rope surface satisfactory. For special cases where unusually tough coatings or extensive corrosion is present passing the rope through the chamber twice, or soaking the rope before pressure lubrication with white spirit or some similar solvent it will often help to loosen the contaminants.

NB! When ordering seals please, measure the wire rope exactly best by hand since it may reduce in diameter after a periode in service. The actual diameter on a new wire rope is often larger than the certificate shows. A given seal size only works with one rope diameter.



MANUFACTURER:

MASTO TM
WIRE-SERVICE A/S

Industrigt. 14 - P.O.Box 1615 Lundsiden
4688 Kristiansand S - Norway
Telephone +47 38 09 70 50 / +47 38 09 70 51
Telefax +47 38 09 70 53

DISTRIBUTOR:

E-mail: t.h.kraageboen@masto.no • Internet: www.masto.no