

Interflon reference nr.: EN04259

Date: 01-06-2007

Confidential / For internal use only

Interflon Grease LS2, Interflon Degreaser EM56+, Interflon Metal Clean (Aerosol)

Application

Lubrication of pin and bearings.

The application is a pin and bearing joint for the wheels of roller carriages.

Machine: roller carriage, Make: Mennes / Stork.

Company: Koninklijke Niestern Sander BV, Delfzijl, The Netherlands.

For more information look on www.niesternsander.com

Sector

- 3569 General industrial machinery, NEC
- 3731 Shipbuilding and repairing
- · 3732 Boatbuilding and repairing

Company name & address

Koninklijke Niestern Sander BV Venjelaan 6 Delfzijl, Holland

Tel.: +31-(0)596-649400 Fax: +31-(0)596-649402

Problem

The company has twenty vehicles it uses to pull boats onto the wharf for repair and letting them into the water.

The pin and bearing poses problems here.

The grease is washed away and dries out if the roller carriages don't move for two weeks. When a ship is let into the water, it is a big problem if the cars get stuck halfway on the ramp. If this is the case, skill and tact are necessary to get the boat into the water, with all of the associated risks.

Lubrication frequency: monthly.

Environment

Moist and aggressive.

Previous product

Premium 2/3.

Solution

- Interflon Grease LS2
- Interflon Degreaser EM56+
- Interflon Metal Clean (Aerosol)

Result

After 6 months of exposure to the elements and sometimes standing underwater for three weeks, the pin and bearing still looked good and showed no signs of wear. The pin and bearing remained cleaned and showed no signs of corrosion.

Getting the boat into the water is no longer a risky enterprise.

Lubrication frequency: 1x per 3 months.

Costs per year in the old situation

There are 87 lubrication points on a single roller carriage It takes 2.5 hours to lubricate all of them. There are 20 carriages resulting in a total of 50 hours work just for lubrication. Labour costs for lubricating the roller carriages:

50 x € 40,- = € 2,000 per /1 month. 12 x € 2000,- = € 24,000 per year.

Grease costs, 200 litres per month: € 257.

12 x € 257 = € 3,084.

Total lubrication costs per year € 27,084



Roller carriage.



The rollers have bearings with a pin and bearing.



After six months of exposure to the elements and occasional periods of three weeks under water, the pin and bearings still look good and show no signs of wear.



Costs per year in the new situation

Labour costs for lubricating the roller carriages:

50 x € 40 = € 2,000 per / 3 months.

 $4 \times 2,000 = 8,000$ per year.

Grease costs, 200 litres per 3 months: € 4,150,-.

4 x € 4,150,- = € 16,600.

Total lubrication costs per year: € 24,600.

Total costs savings per year: 27,084 – 24,600 = € 2,484.

Total saving:

- The savings on lubrication amount to € 2,484.
- There is a much bigger saving on maintenance costs, such as materials and labour, because the problems are solved.

Instructions for use

After new bearings have been taken out of the packing and cleaned with Interflon Fin Degreaser EM 56+ and then with Interflon Metal Clean, they are installed. Next, they are filled 100% with Interflon Fin Grease LS2. The lubrication frequency for the first two times is once a month in connection with running in the bearings. After this, the bearings are lubricated once every three months.

AS created by

Albert Steeman asteeman@interflon.com

INTERFLON B.V., P.O. Box 1070 NL-4700 BB ROOSENDAAL TEL. (31) 165 55 39 11 / FAX (31) 165 53 80 82

