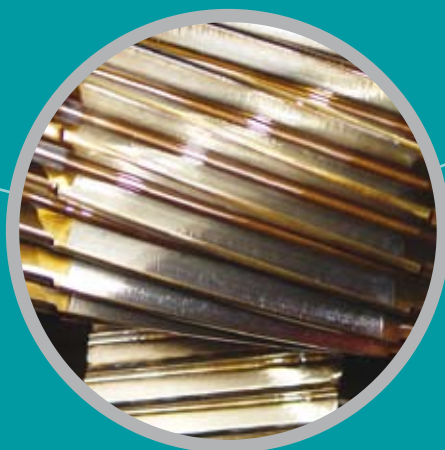


life x 4

ADDINOL[®]
THE ART OF OIL • SINCE 1936

ADDINOL Eco Gear – Longlife x 4
Long-term warranty



Guarantee

Longlife

Long-term warranty terms

For ADDINOL Eco Gear M and S ADDINOL guarantees a service life of four years in industrial gears and gears of wind turbine generators, where oil changes will not be needed. A service life of four years corresponds to 10,000 operating hours in one shift operations respectively 30,000 operating hours in three shift operation.

ADDINOL Eco Gear M and S with Surftec® technology are designed as high-performance industrial gear oils for modern gears. The Surftec® combination adapts to the changing loads in the gear teeth and bonds to the gear. ADDINOL Eco Gear M and S prevent the formation of pittings and micro-pitting at new gears. At used gears progressive wear (metal abrasion) is transformed into degressive wear, sharp edges of previous pittings are smoothed and a nearly wear-free and friction-reduced operation is achieved.

Compared to conventional gear oils oil sump temperatures in the contact area are lower; combined with oxidation inhibitors and Surftec® this makes a long-term application possible exceeding oil drain intervals of conventional industrial gear oils by far.

For a long-term warranty the following conditions must be fulfilled by the operator:

- 1)** ADDINOL Eco Gear M and S are applied in the viscosity grades specified by the machine or gear manufacturer.
- 2)** When changing over to ADDINOL Eco Gear M or S the gear or flushing oil previously used must be drained completely. The maximum residue must not exceed 3 % of the filling quantity.
- 3)** The operator is not allowed to add any additives to ADDINOL Eco Gear M or S without the written consent of ADDINOL.
- 4)** After checking the operating conditions ADDINOL decides whether Eco Gear S or M is to be used.
- 5)** Depending on the age of the gear and its operating conditions the gear needs to be flushed before it is filled with Eco Gear and/or further measures must be taken if deemed necessary by ADDINOL.

6) Regular analyses of the lubricants are an integral part of the contract:

The application of ADDINOL Eco Gear has to be monitored during the entire warranty period of four years, respectively 10,000 operating hours in one shift and for 30,000 operating hours in three shift operation, by the help of oil analyses at appropriate intervals.

All oil analyses and diagnoses are carried out by the OELCHECK GmbH, the leading

and independent laboratory for lubricant analysis in Germany.

For analysing ADDINOL Eco Gear the OELCHECK analysis set type 2 has to be used. Such an analysis set includes a sample bottle (100 ml) which indicates that the analysis of 25-30 individual values and the diagnosis have been paid by ADDINOL already. Analysis sets are available at ADDINOL. Please just send the completely filled form with all necessary information to ADDINOL.

Oil samples must be taken according to the guidelines specified by OELCHECK and given on page 4. The oil sample and the completed form are to be sent to OELCHECK in the prepared envelope.

All analysis data and comments by OELCHECK are sent within one week. The comments in the lab report must be followed and required measures must be taken immediately.



Longlife

Lubricant analyses have to be carried out in the following rhythm:

- **Analysis 1:** The first sample has to be taken within one day or 8 hours after filling with ADDINOL Eco Gear. This sample is considered as reference for further analyses. The sample should be taken from the oil circuit in front of the filter or from the oil sump of the gear (approximately 10 centimetres above the bottom) during operation or not later than one hour after the machines have stopped.

- **Analysis 2:** The first analysis of the used oil has to be carried out after approximately 2,500 operating hours respectively 8,000 operating hours in three shift operation. The analysis has to be realised after one year at the latest. Trend analysis compares the results to the reference sample and comments possible changes.

- **Analysis 3 and all further oil analyses:** are carried out at intervals of 2,500 operating hours, 12 months or 8,000 operating hours in three shift operation, unless the OELCHECK-laboratory sets different intervals due to deviations of values from the tolerances. For questions on the interpretation please contact ADDINOL application technology.

Costs of the lubricant analysis:

- Depending on the ordered quantity ADDINOL bears the costs for up to 4 oil analyses.

The ADDINOL long-term warranty

The ADDINOL long-term warranty for Eco Gear guarantees to supply replacement free of charge for the oil filling quantity in the gear if the values determined by OELCHECK and checked with ADDINOL exceed the limits of:

- oxidation
- degradation of additives
- wear particles (metals).

Exclusion of long-term warranty

ADDINOL will not accept any warranty concerning a minimum service life of ADDINOL Eco Gear, if:

- the water content in the lubricating equipment rises to more than 0.20 % due to condensate, cooling water or steam jet water.
- solid or liquid impurities, as for instance dust or cleaner, pollute the gear oil strongly (e. g. an increased content of silicon, sodium or potassium)
- maintenance of gear and possible filters in the oil circuit were not carried out in a proper way
- oil analyses were not carried out regularly at set intervals

- the instructions listed in the lab report were not followed, attended to or carried out immediately
- the share of a mixture with another lubricant of any kind exceeds 5 %

Duty to supply information:

In the event of damage, the operator is obliged to inform ADDINOL immediately:
ADDINOL Lube Oil GmbH,
phone: + 49 (0) 3461/845-111
fax: +49 (0) 3461/845-555
e-mail: info@addinol.de

Additional oil analyses are possible:

ADDINOL is entitled to request additional oil samples for further analyses at any time after prior co-ordination.

ADDINOL LONGLIFE
HOTLINE

ADDINOL Lube Oil GmbH,

» **Phone:** +49(0)3461/845-111

» **Fax:** +49(0)3461/845-555

» **E-mail:** info@addinol.de

X4

The correct sampling

The correct sampling - guidelines of the OELCHECK GmbH

Each OELCHECK analysis set consists of:

- a sample bottle
- an addressed envelope
- a covering letter

How to sample:

- during operation or shortly after a stop
 - only at a normal operating temperature
 - always at the same place, always in the same manner
 - as far as possible take the sample in front of the filter (never out of the filter)
 - not after topping up large quantities of oil
 - the sample has to be filled into the bottle of the set immediately

The sample bottle has to be marked as follows:

- Remove the red OELCHECK number from the covering letter and stick it on the bottle.
- This way samples and covering letters can be assigned to each other.

It is important to complete the covering letter carefully:

- Detailed information on the machine and the oil used are necessary for an exact diagnosis by the OELCHECK engineers.
- The enclosed covering letter includes all essential information required by OELCHECK for analysis.
- By the way: the label once given to a sample should not be changed. Analyses results are collected in the OELCHECK database and referred to when dealing with samples with the same label.

Sending of samples:

- Please use the enclosed and already addressed envelope for sending. Due to a special kind of rag paper the envelope can absorb the oil in case of leakages.

The lab report will be sent to the operator with a detailed comment:

- by post, fax or e-mail + txt-file



**LUBE
Control**

Lube Control Pty Ltd

Providing lubrication solutions!

Unit 5/53 Norfolk Rd,
Marion, SA 5043

www.lubecontrol.com.au

t: (08) 8298 5563

f: (08) 8298 6253

e: info@lubecontrol.com.au

life x 4

Fax

to ADDINOL Hotline + 49 (0) 3461 845-555

Voucher for the lubricant analysis

ADDINOL Eco Gear - **Longlife x 4**

Please send to us:

The analysis set for ADDINOL Eco Gear

- Type:
- Quantity:
- Batch:
- Date of filling:

Gear manufacturer:

Gear type:

The analysis results are sent to:

Company:

Mrs. / Mr.:

Postal address:

E-mail:

Phone number: Fax:

I would like to receive the results by:

- ☐ Letter
- ☐ Fax
- ☐ e-Mail

Orderer:

Date / Signature:

ADDINOL Eco Gear – Longlife x 4
Long-term warranty

