



The new evolution in Open Gear lubrication

The new CEPLATTYN GT range

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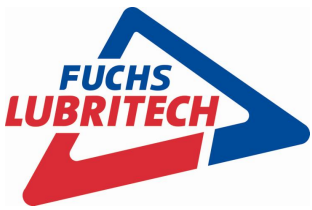
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Today's Open Gear lubricants

Today's Open Gear lubricants all have certain restrictions.

Some still contain solvents and asphaltics, some have disadvantages in cleanliness and drainability, and some are of nice drainability and colour but not suitable for the use as an universal Open Gear lubricant.

light-coloured fluids

brown asphaltics

black greases

The Challenge

The challenge for FUCHS LUBRITECH was to combine all advantages and exclude the disadvantages of today's Open Gear lubricants.



The CEPLATTYN GT range combines all benefits of commonly used graphited products and high-viscosity fluids.

CEPLATTYN GT is free of asphaltics and dilutants.

Performance features of CEPLATTYN GT: Fluid with white solid lubricants



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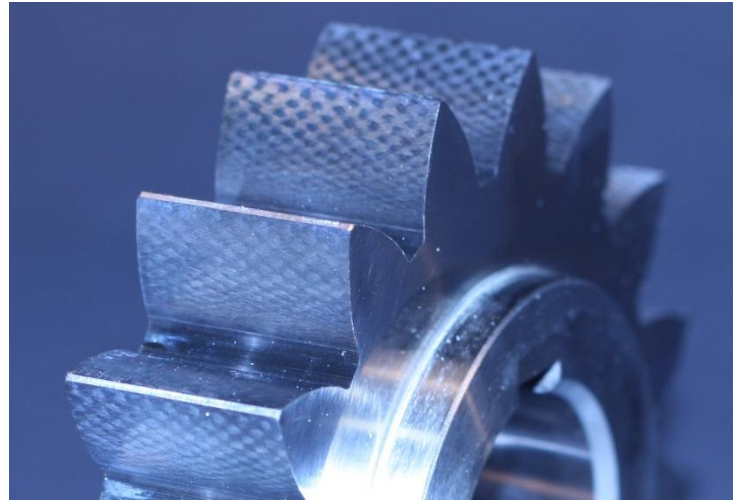
- High-viscosity oil → hydrodynamic lubricant layer
- White solid lubricants → optimum protection from incidental metal to metal contact

Performance features of CEPLATTYN GT: No ignition on hot surfaces



- Flame-retarding additives
 - ➔ isolation from surrounding oxygen
 - ➔ no self ignition on hot kiln shells

Performance features of CEPLATTYN GT: Thick, long-lasting lubricant layer



Test gear after DIN wear test:
No wear, manufacturing marks still visible

- Lowest consumptions → 25% reduction compared to conventional fluids possible
- Improved gear parameters → less gear-related vibrations
→ lower gear/pinion temperatures achievable

Performance features of CEPLATTYN GT: For spray, bath and circulation systems



- Spray application → good spray pattern across a wide temperature range
- Bath lubrication → good back-flow to gear mesh
→ low evaporation (kilns)
- Circulation application → good pumpability / filtration

Performance features of CEPLATTYN GT: Thixotropy



Lubrication film after 6 hours shutdown of a cement mill / spray application



Retention film after 21 days lab test

- Extreme retention times → lube film stays on tooth flank even after long shutdown
- Self sealing → hardly any leakages as self-sealing if unmoved
- Flowability → good pumpability / sprayability

CEPLATTYN GT performance features: Summary

- **Excellent wear protection**
- **Reduced consumption**
- **Light yellowish / milky**
- **Very good „emergency lubrication“**
- **Unlimited suitability for mills and kilns**
- **No self-ignition on hot metal**
- **No flow-off from tooth flank after shutdown**
- **Free of solvents, asphaltics and heavy metals**
- **Suitable for spray, circulation and dip lubrication**
- **Designed for AGMA and DIN/ISO gears**

Field results – kiln gear

Dual pinion drive at a German cement plant

- Previously running on graphite product
- Change over without cleaning procedure
- Shortly after change over, lubricant consumption was reduced by 1/3

Results after 2 years of operation

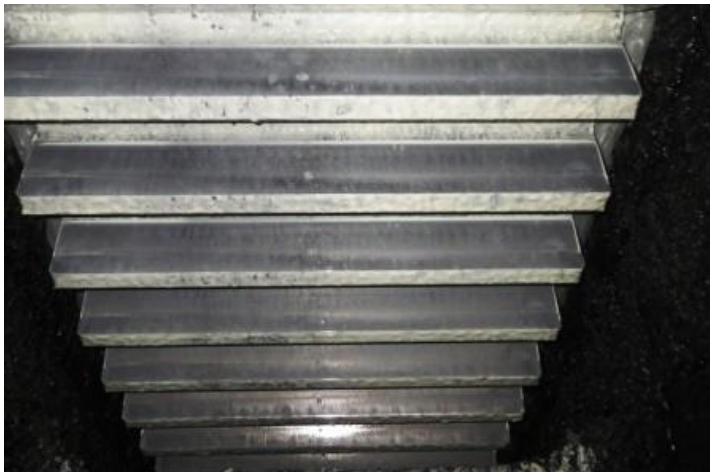
- Reduction of lubricant related costs
- Excellent drainability of used product out of gear sump
- No leakages on gear guard
- No negative impact on gear parameters



Field results – cement mill (1)

Single pinion / spur gear at a German cement plant

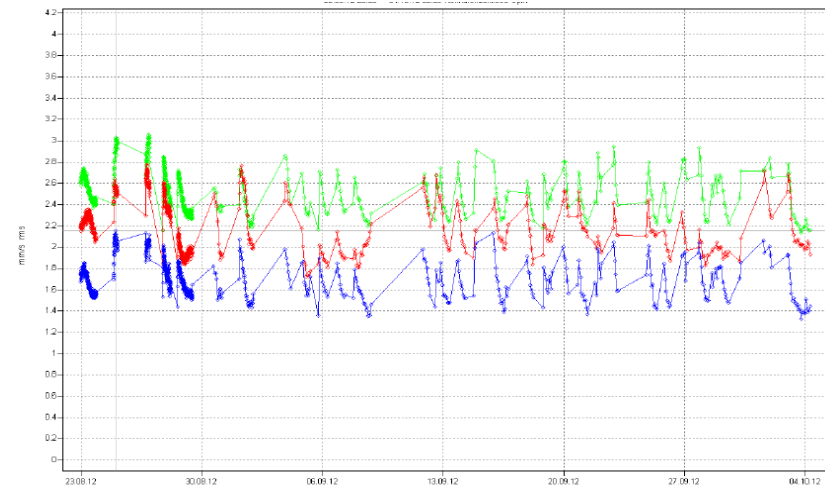
- Previously running on a fluid lubricant
- Change over without cleaning or flushing of lube system
- Shortly after change over lubricant consumption was reduced by 1/3



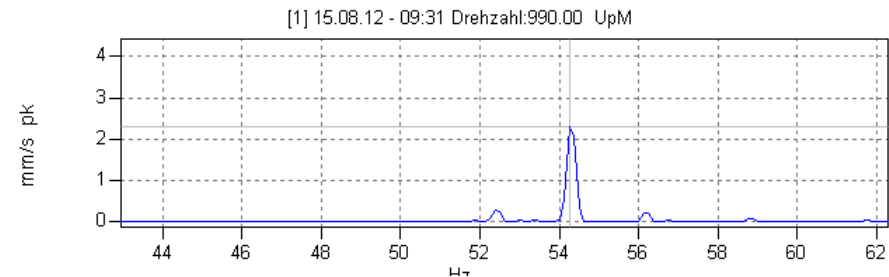
Field results – cement mill (2)

Results after 2 years of operation

- General vibration level could be reduced at lower consumptions
- Vibration level at start-up was reduced tremendously
- Improved visual inspection as gear appeared clean
- Improved drainability from gear sump
- Cost savings for customer



Highest vibration 3.2 mm/s



Vibration peak at start-up 2.2 mm/s

Field results

Cement kiln / circulation lubrication

Single pinion / spur gear at a US Cement Plant

- New gear set in circulation lubrication
- First fill and start-up done with CEPLATYN GT 3
- No problems after 6 months of operation



- **This technology is already available in Brazil.**
- **Further details, contact below:**

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