

PANOLIN biodegradable oils help to reduce carbon footprints



Since its introduction into the UK Rail Network in 1997 PANOLIN HLP SYNTH biodegradable oil has developed an enviable reputation for being extremely cost effective in service, although at the time of introduction the product was thought to be expensive.

Most bespoke track maintenance machinery now uses PANOLIN HLP SYNTH hydraulic oil, with some now in their ninth year of operation without an oil change. Machine reliability has been excellent and used oil disposal has been substantially reduced when compared to mineral oil equivalents.

Jarvis Fastline has enjoyed the benefits of PANOLIN biodegradable hydraulic oil since 1999, having either converted or ordered as factory-fill their entire fleet of track maintenance machines. Reliability/Productivity data since then has given the company the confidence to look at other applications for PANOLIN bio oils in order to improve productivity still further.

Alan Chamberlain, (Principle Technical Officer) was tasked to investigate the benefit of using a PANOLIN oil in Powershift gearboxes fitted into the companies tamping machines for:

- Waste reduction
- Performance increase

Currently oil is changed three times a year and gearbox durability is estimated at between 18 to 24 months.

In January 2006 Alan Chamberlain set the twin goals of achieving a reduction in the number of oil changes and improving gearbox durability.

Before any trial could begin, however, LH Group Services were asked to evaluate the oil on one of their test beds. The oil, PANOLIN BIOFLUID ZFH, passed with flying colours and either met or exceeded all of the criteria required by LH Group for their «No Quibble Guarantee», even at elevated temperatures.

LH Group MD Graham Lee sanctioned the trial which commenced on March 29th 2006. Since then the machine has completed 2,700 hours of operation and has tamped 125'000 yards of track.

To date the trial has completed over eighteen months of reliable operation without an oil change; both independent and PANOLIN oil analysis show that both oil and gearbox are still in good condition.

PANOLIN BIOFLUID ZFH has been formulated using the tried and tested base oil technology used in PANOLIN HLP SYNTH biodegradable hydraulic oil and is blended to a unique recipe which is the result of over 20 years of experience. By utilising this superior technology Fastline are complying with their policy of continual environmental improvements in compliance with their ISO 14001 certification.

It is the hope that PANOLIN BIOFLUID ZFH will be able to remain in good condition so that it will be capable of at least 12 months of service life and possibly fulfil a fill for life concept. In the process FASTLINE are intending to reduce the logistics of oil deliveries and waste disposal, reduce the energy requirements for gearbox overhaul, improve machine productivity and above all enhance reliability.